



HEALTH AND SAFETY
AUTHORITY

SAFETY REPRESENTATIVES RESOURCE BOOK





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The publishers acknowledge the permission of the British Trade Unions Congress to adapt the model of their publication, Hazards at Work Organising for Safety and Healthy Workplaces and to use content in this publication.

This publication has also been published online and can be downloaded from the Health and Safety Authority's website www.hsa.ie.

This publication is a resource providing information for guidance in the overall context of health and safety in the workplace, but does not address specific issues which may arise at a given time on which specific advice may be required.

SAFETY REPRESENTATIVES RESOURCE BOOK

FOREWORD

When the Health and Safety Authority was established under the Safety Health and Welfare at Work Act 1989 one of the first advisory committees established was the Advisory Committee on Representation and Consultation. The establishment of the role of the safety representative was a vital element in the Barrington Report 1983 (*Report of the Commission of Inquiry on Safety Health and Welfare at Work*) which was the primary driver along with forthcoming EU legislation for the enactment of the 1989 Act.

The advisory committee developed guidelines for safety representation and consultation on safety and health at work which helped develop the role of safety representative in industry in Ireland. These guidelines worked well in support of workers, employers and all duty holders in the place of work.

The role of the safety representative was further reinforced in the Safety Health and Welfare at Work Act 2005 and in the various iterations of Construction (Safety, Health and Welfare at Work (Construction) Regulations up to and including the 2013 Regulations.

It can be reasonably be argued that the role of the safety representative was very important in the campaign in the late 1990's to drive down the tragic fatality rate in the construction sector. The Safety Representatives Facilitation Project was established and the employer and employee representative bodies, with the support of the Authority, established the Construction Safety Partnership.

During inspection programmes in recent years it has been found by inspectors that the level of compliance with the provision in relation to safety

representatives varied nationally between sectors and by enterprise size.

The role of the safety representative is also important in small and medium sized industry and this is reflected in the BeSmart (hazard identification, risk assessment, safety statement) Tool which facilitates safety representative input.

In many cases there are no safety representatives and the knowledge and understanding of the role appears to be diminishing. In some cases the safety representative is appointed by management contrary to the legislation and it is also found in some cases where safety representatives are appointed there is some lack of clarity on the role on behalf of all parties' viz. safety representatives, employees and employers.

The Authority hosted a conference targeted on safety representatives in 2009 which was heavily subscribed reaffirming the need for development opportunities for safety representatives. There is also concern that the safety representative role was further diminished during the economic bust cycle from 2007 to 2012.

Based on conversations held with the Irish Congress of Trade Unions (ICTU) safety committee chairman and former Authority board member (Eamon Devoy) it was considered timely to develop a resource to re-energise the role of the safety representative. This resource would act as a working guide for safety representatives and also support the development of appropriate training programmes for safety representatives. The British TUC (Trade Union Congress) resource, *Hazards at Work* was considered to be a suitable model on which to build the Irish resource. Through the collaboration between the TUC and the ICTU the TUC kindly gave access to their resource *Hazards at Work*,

Organising for Safety and Healthy Workplaces.

While the legislative base between the jurisdictions was similar it was found there were significant differences in transpositions of EU directives and regulations and court cases in the area to warrant adopting the model but to develop new material.

Herbert Mulligan was retained as author and editor of the resource. I'd like to acknowledge Herbert and the many contributors including the editorial team and authority inspectorate, staff and managers for their dedicated commitment to the project over the last year. While the model was borrowed from TUC and utilises best practice examples from international organisations, the content draws heavily on guidance material developed by the Authority over the years working through the partnership model or social dialogue.

This is the second edition of this book. The book has been revised and updated to have regard to legislative changes, legal precedents and policy changes in the two years since first published in April 2015.

I am hopeful that this resource book will facilitate the further development of the role of the safety representative and lead to more meaningful communication and consultation in the workplace which is one of the fundamental enablers of success.

Martin O'Halloran

Chief Executive Officer, Health and Safety Authority

28th April 2017

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ABBR. (Abbreviations)

British Trade Union Congress	TUC
Classification Labelling and Packaging	CLP
Electro-Technical Council of Ireland	ETCI
European Agency for Safety and Health at Work	EU-OSHA
European Court of Justice	CJEU
European Economic Community	EEC
European Union	EU
Health and Safety Authority	HSA
Health and Safety Executive Great Britain	HSE-GB
Institution of Occupational Safety and Health	IOSH
International Agency for Cancer Research	IARC
International Labour Organisation	ILO
Irish Bank Officials Association	IBOA
Irish Business and Employers Confederation	Ibec
Irish Congress of Trade Unions	ICTU
Irish Standards	IS
National Irish Safety Organisation	NISO
Occupational exposure limit values	OELVs
Occupational safety and health	OSH
Occupational Safety and Health Administration (United States)	US-OSHA
Power take off	PTO
Project Supervisor Construction Stage	PSCS
Project Supervisor Design Process	PSDP
Registration Evaluation Authorisation Restriction of Chemicals	REACH
Residual current devices	RDC
Safety, Health and Welfare at Work Act 1989	SHWW Act 1989
Safety, Health and Welfare at Work Act 2005	SHWW Act 2005
Services Industrial Professional and Technical Union	SIPTU
World Health Organisation	WHO
Work Related Upper Limb Disorders	WRULDs

SECTION 1

INTRODUCTION

A quote from the writings of the French author Victor Hugo, cited in the International Labour Organisation's *Encyclopaedia of Occupational Safety and Health*, "No cause can succeed without first making education its ally", encapsulates the vision behind this book. As the title of this book, the Safety Representatives Resource Book suggests this book is a resource in which the many aspects of occupational safety and health (OSH) are explored. It is a resource to be used for education, training and reference purposes.

In the introduction we look at the definition of OSH, we trace the history of OSH and outline the development of OSH law in Ireland. We look to the future when we mention some of the challenges facing OSH in the 21st century.

SECTION 1: INTRODUCTION

The purpose of this book is clear from the title: it is a resource book. It is specifically a resource book for safety representatives, but the hope and indeed the expectation is that it is a resource to which employers, their occupational health and safety advisors, employees and the self-employed will refer.

The genesis of the book or the inspiration which inspired it is a publication by the British Trade Union Congress (TUC). While the shape, in the sense of section and chapter headings has been to some extent borrowed from the TUC's *Hazards at Work Organisation for Safe and Healthy Workplaces*, as the book developed it took on a character of its own which is distinctly Irish.

Also as the book developed it became apparent that, while in some sectors there are significant numbers of safety representatives, in other sectors there is a paucity of safety representatives. The hope is that this book will encourage employees to volunteer for the safety representative role and that employers who do not already do so, realising that safety representative are a valuable resource in their businesses, will encourage workers to go forward for selection and when selected will support them with sufficient resources to enable them to perform the role for the benefit of their work colleagues and the organisation in which they work.

That explains the genesis of the book but to understand why the role of the safety representative is crucial it is important to trace the historical development and to examine current occupational safety and health (OSH) practice.

Defining OSH

Writing in *Fundamental Principles of Occupational Health and Safety*, a book published by the International Labour Organisation (ILO), Benjamin O. Alli writes, OSH "is generally defined as the science of the anticipation, recognition, evaluation and control of hazards arising in or from

the workplace that could impair the health and well-being of workers".

The World Health Organisation (WHO) defines health "as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity"

The ILO's constitution mandates the ILO to work for an improvement of working conditions by, for example, the regulation of working hours including the establishment of a maximum working day and the protection of the worker from sickness, disease and injury arising out of employment. At the end of the Philadelphia Conference in 1944 (held to re-establish the ILO as World War II drew to a close), it was declared that the conference recognised the obligation of the ILO to further among the nations of the world programmes to achieve the protection of the life and health of workers in all occupations.

Mr Alli writes that occupational and industrial accidents are all caused by preventative factors which could be eliminated by implementing already known and available measures and methods. He discusses the cost of occupational accidents, injuries and illness, which have been put in Ireland at €2.8bn.

A brief history of OSH

When one considers the penalties courts now impose for breaches of health and safety regulations, it is interesting to reflect on an incident from the 16th century, recalled by the former deputy director of the Health & Safety Executive – Great Britain (HSE-GB), David Eves. Mr Eves, the author of a *History of Occupational Safety and Health*, writes that in 1540 following an accident in a mill in which a child was killed, it was found that the mill wheel was the cause of death, whereupon the note from the 16th century records the mill "was forthwith defaced and pulled down".

In 1700 the Italian physician, Bernardino Ramazzini, who is regarded as the father of occupational medicine, published the book *Diseases of Workers*. He wrote about the impact diseases on workers in a wide variety of occupations.

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Then with the coming of the industrial revolution Governments started to enact laws to protect workers from the worst ravages of the workplaces of the times. In Britain in 1802 an Act for the Preservation of the Health and Morals of Apprentices was introduced. Sometimes known as the first Factory Act, it applied only to cotton mills. Mill owners were required to clean their premises twice a year and to ensure that there were sufficient windows to admit fresh air. They were also required to supply apprentices with suitable clothing and accommodation.

In 1833 the first Factory Act became law and the first factory inspectors were appointed. Throughout the 19th century more legislation, such as the Ten Hour Act 1850 was enacted. In Germany in 1883, Otto von Bismarck, the German chancellor of the time, introduced the first social insurance legislation. In the United States in 1893 Congress passed the Safety Appliance Act. The Act, which only applied to the railroads, required that work equipment be safe. Much of the legislation enacted was in response to specific concerns in specific sectors.

During the later years of the 19th century and the early years of the 20th century the courts developed the concept of the employers' duty of care and Workmen's Compensation Acts were passed into law. In the United States in 1910 Congress established the Bureau of Mines to conduct research into mine safety. However the Bureau had no power to regulate mines.

In 1922 the Irish Free State, comprising 26 of Ireland's 32 counties, left the United Kingdom. The new State formed its own factory inspectorate.

Post World War II: a progressive era

In the years after World War II the political wind favoured occupational health and safety. In France, the first post-war Government, a multi-party coalition, led by General Charles de Gaulle, introduced reforms and brought in legislation to provide greater health and safety protection to workers.

In America production increased significantly during the War and industrial accidents soared. In

the two years preceding the establishment of the US Occupational Safety and Health Administration (US-OSHA), 28,000 workers died because of workplace hazards.

In Ireland the Government brought in the Factories Act 1955.

In Britain in the 1970s a committee, under the chairmanship of Lord Robens was established. The Robens Report led to the enactment of the Health and Safety at Work Act 1974 and the establishment of the Health and Safety Commission and the HSE-GB.

In 1974 the European Economic Community (EEC) established an Advisory Committee on Safety, Hygiene and Health at Work. In 1984 the European Commission published an action programme on safety and health at work

Barrington and the establishment of the HSA

The Barrington Commission, named after its chairman, Mr Justice Donal Barrington, was established in 1980 and reported in 1983. In its report the Commission, which expressed a distrust of legalism, stated that:

- Health and safety is a management responsibility, from the managing director down.
- That the health and safety system must be preventive.
- And that workplaces must be safe.

As a management responsibility safety must, the Commission said, be an integral part of the management process. Safety should be managed in the same way as productive efficiency. The Commission stated, "Workers have an interest in, and responsibilities in relation to health and safety". They are entitled to information concerning hazards and to be involved in decisions which affect their working environment. While recognising that co-operation was desirable, the Commission acknowledged that there can be a divergence of interest between management and workers.

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Saying that several major and urgent initiatives were necessary, the Commission proposed:

- A new framework Act which would be an expression of the general principles applicable to all (that became the Safety, Health and Welfare at Work Act 1989).
- The establishment of a national authority which would have responsibility for OSH matters (that became the Health & Safety Authority – the HSA).
- That there would be a massive and sustained exercise in training, education and information at every level.
- That health and safety regulation, which up to then applied only to 20% of workplaces would apply to all workplaces.
- That inspections carried out by the inspectorate would not simply look at hardware (guards on machines) but would keep alert the internal responsibility system in organisations.

The OSH system now in place in Ireland is firmly based on the recommendations of the Barrington Commission

The European influence: past and future

As we have seen in the post War era measures were put in place to better protect the health and safety of workers. Ireland joined the then European Economic Community (EEC) in 1973. In the years that followed, particularly under presidency of Jacques Delors, the Community (now the European Union) developed a comprehensive body of OSH legislation.

The Framework Directive on Measures to Encourage Improvements in Safety and Health at Work was adopted. All member States including Ireland were required to transpose it in to national law. Effectively the SHWW Act 1989 transposed the principles of the Framework Directive in to Irish national law. The ‘daughter directives’ adopted under the Framework Directive were transposed into Irish law in the years that followed.

Currently at Commission level in Europe and at national level Governments are looking at reducing

what some call “the administrative burden”. This is seen by others as an attack on standards. This book is not the place for a debate on the merits of either contention, but all readers should be aware of the debate.

Health and safety law – an overview

There is an extensive body of statutory health and safety law: there are 16 Acts and over 200 statutory instruments or regulations. There is also the common law.

There are two forms of statutory law:

- Acts of the Oireachtas. Acts of the Oireachtas are known as primary legislation.
- Statutory instruments or regulations. Regulations are known as secondary legislation. Regulations are made under powers granted to the Government in primary legislation.

Some Acts, such as the Fire Services Act 1981 or the Personal Injuries Assessment Board Act 2003, are not strictly health and safety legislation and have a wider application. Nonetheless the Acts are relevant to occupational health and safety. Fire safety is a major workplace safety issue.

In this book we are concerned with present day health and safety law and its application and the practice of health and safety management in the workplace.

The recommendation for the enactment of a framework Act bore fruit when the Safety, Health and Welfare at Work Act 1989 (SHWW Act 1989) was passed by the Oireachtas. The Act, as well as setting out the general principles of health and safety law, provided for the establishment of the HSA. Since its establishment the Authority has undertaken the recommended “massive” programme of training, education and the provision of information. Some years ago the SHWW Act 1989 was repealed and replaced by the Safety, Health and Welfare at Work Act 2005 (SHWW Act 2005) and in general, unless specifically mentioned, references to the SHHW Act, will in this book be to the SHWW Act 2005.

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At the same time, in the 1980s, the European Community was developing a transnational body of health and safety law, based on a Framework Directive and a series of daughter directives:

- Directive concerning the minimum health and safety requirements for the workplace, commonly known as the Framework Directive (Directive 89/654/EEC).
- Directive concerning the minimum requirements for safety and health for the use of work equipment by workers at work (Directive 89/655/EEC).
- Directive concerning the minimum requirements for safety and health for the use of personal protective equipment (Directive 89/656/EEC).
- Directive on the minimum health and safety requirements for the handling of loads (Directive 90/269/EEC).
- Directive on the minimum health and safety requirements for work with display screen equipment (Directive 90/270/EEC).
- Directive on the minimum requirements for provision of safety and health signs at work (Directive 92/58/EEC).
- Directive on the introduction of measures to encourage improvements in the safety and health at work of pregnant workers and workers who have recently given birth (Directive 92/85/EEC).

These Directives are the basis of the General Application Regulations, originally the Safety, Health and Welfare at Work (General Application) Regulations 1993, now replaced by the Safety, Health and Welfare at Work (General Application) Regulations 2007. The regulations are commonly referred to as the General Application Regulations and unless indicated otherwise, references in this book to the General Application Regulations will be to the 2007 Regulations.

The principal Acts and Regulations, which have cross-sectoral relevances or even if sector specific, like the Construction Regulations, have wide application, are reviewed in section 2, while regulations which deal with specific hazards or

impact on particular workplaces are considered in more detail in the sections on the hazards of the workplace (Section 6), vulnerable workers (Section 7) and workplaces (Section 8).

While the SHWW Act 1989, now repealed by the SHWW Act 2005, was based on the recommendations of the Barrington Commission, the majority of Irish health and safety regulations are derived from European Directives.

There are two other sources of what is sometimes called 'quasi-statutory law'. They are:

- Codes of Practice published by the HSA, which are intended to provide practical guidance on how to comply with statutory provisions.
- Technical standards, drawn up in Ireland by the National Standards Authority of Ireland (NSAI).

The Common Law

As Raymond Byrne writes in *Safety, Health and Welfare at Work Law in Ireland* (second edition), common law rules are rules laid down by the courts over the years in litigated cases. They are judge-made rules.

The common law originated in England and over the centuries was exported to Ireland, the United States of America and other countries, such as Australia, Canada and New Zealand, which were part of the British Empire.

Common law is based on precedent. The rule is that the higher the court that lays down a rule the more binding the rule is. In Ireland the Supreme Court is the highest court in the land and its decisions are binding on lower courts. Just recently a new court, the Court of Appeal, has been established in Ireland and if the Supreme Court has not set a precedent for a particular set of circumstances, then a judgment of the new court will set precedent, unless appealed to the Supreme Court. Judgments of the High Court rank next in terms of setting precedent.

Though not bound by decisions setting precedents in other common law jurisdictions, Irish courts will have regard to such judgments. As we will see in

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the chapter on compensation for injury and illness, judges applying the common law established that employers owed a duty of reasonable care to their employees. If they failed to take reasonable care, employees would be entitled to sue their employers for negligence and if the employer was found to have been negligent, to recover damages for injuries suffered, whether the injury was a physical injury or an occupationally-related illness.

The application of statutory law

As we will also see in the chapter on compensation, injured employees can sue employers for breaching statutory provisions.

The HSA's enforcement powers are derived from statutory law. Under the SHWW Act the Authority can prosecute an employer or serve an improvement notice or prohibition notice on an employer it believes is in breach of a provision of the Act or a regulation made under the Act for the alleged offence. The Authority has similar powers under the Chemicals Acts 2008-2010 and other Acts.

It should be noted that the Authority can prosecute workers, whom it believes have breached regulations. The Authority may also prosecute the manufacturers, suppliers and designers of goods and the owners or occupiers of premises for breaches of health and safety regulations.

The role of the Safety Representative

As we have seen the Barrington Commission recognised the rights of workers to be consulted and informed. Indeed the Barrington Commission recognised the right of workers to be "involved" in decisions which affect their working environment.

That right was given statutory recognition in the SHWW Act 1989. Those rights have been re-enacted in the SHWW Act 2005. In law the safety representative is described as having a function.

The safety representative's role or as it is described in the HSA's *Safety Representatives and Safety Consultation Guidelines* the safety representative's "function" is to consult and make representations to the employer on safety, health and welfare matters relating to employees in the place of work.

The safety representative's function is to represent the employees who have selected him/her by making their concerns about health and safety issues known to the employer and by ensuring that the employer takes action to address the concerns expressed by eliminating the risks to employees' health, safety and welfare. The overall aim of the safety representative has been described as being, "To help achieve and influence safe and healthy workplaces to protect workers' health and safety".

Employers are required to consider representations made by safety representatives and act upon them if necessary.

The right of employees to be consulted and make representations and the role of the safety representative, which is at the heart of what this book is about are considered in detail in Section 4.

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INTRODUCTION

SECTION 2

THE LAW

There is an extensive body of health and safety law. In this section we examine in some detail the legal framework around occupational safety and health (OSH), the Safety, Health and Welfare at Work Act 2005 and the principal legislative enactments, Acts of the Oireachtas and Statutory Instruments (Regulations), underpinning the practice of OSH in the workplace. We also look at the Common Law and the system for compensating workers who are injured or made ill in the course of their work.

CHAPTER 1: SAFETY, HEALTH AND WELFARE AT WORK ACT 2005

INTRODUCTION

While there are over 200 Acts and Statutory Instruments concerned with occupational health and safety, the principal legislative instrument is the *Safety, Health and Welfare at Work Act 2005*. It is the Act under which the Health and Safety Authority derives its powers. It is the Act which imposes duties and obligations on employers and employees and confers employees' rights. It is based on the principles of hazard identification, risk assessment and putting in place control measures.

The Act, which came into force on September 1st 2005, repealed and replaced the similarly entitled Safety, Health and Welfare at Work Act 1989, which established the modern occupational health and safety framework.

Before considering the application of the provisions of the Act in the workplace and the role of the safety representative under the Act, one should become familiar with the geography of the Act. The Act is set out in eight parts and seven schedules. There are 89 sections.

Part 1: Preliminary and General (sections 1-7)

This part of the Act sets out definitions and deals with the service of notices (section 3) and the application of the Act to the Defence Forces (section 6) and the self-employed (section 7).

Part 2: General Duties (sections 8-17)

This part of the Act sets out the duties of employers, employees and other persons, such as the owners of property, designers, manufacturers and suppliers. Broadly speaking all are required, in so far as their function is concerned, to ensure,

in so far as reasonably practicable, the safety, health and welfare of persons at work or persons who may be affected by work, such as passers-by, neighbours, contractors and suppliers.

General Duties of Employer (sections 8-12)

In this section the general duties of the employer are set out. While the duties are described as general duties they are quite specific. The duties set out in sections 8 to 12 are subject to the 'reasonably practicable' doctrine (see *Definitions, pg24*).

Section 8

Every employer is required to ensure, in so far as reasonably practicable, the safety, health and welfare at work of his/her employees. The employer is required to:

- Manage and conduct work activities so as to ensure the safety, health and welfare of employees (8.2.a).
- Manage and conduct work activities so as to prevent improper conduct or behaviour likely to put the safety, health and welfare of employees at work at risk. The most frequently cited examples of improper conduct or behaviour are bullying and horseplay (8.2.b).
- Ensure that the workplace, access and egress, and plant and equipment are designed and maintained to be safe and without risk to health (8.2.c).
- Ensure the safety and the prevention of risks to health of employees from the use of articles and substances or exposure to noise, vibration, ionising or other radiation or other physical agents (8.2.d).
- Provide systems of work that are planned, organised, maintained and performed so as to be safe and without risk to health and if necessary, are revised (8.2.e).
- Provide and maintain welfare facilities (8.2.f).
- Provide information, training, instruction and supervision (8.2.g).
- Carry out hazard identification and risk assessments and put in place preventative measures (8.2.h).

- Where risks cannot be prevented or otherwise adequately controlled, provide personal protective equipment (PPE) (8.2.i).
- Prepare emergency plans (8.2.j).
- Report accidents (involving over three days' absence) and dangerous occurrences to the HSA (8.2.k).
- Where necessary obtain the services of a competent person to advise on safety, health and welfare (8.2.l).

A competent person is a person who, having regard to the task he or she is required to perform and taking account of the size or hazards (or both of them) of the undertaking or establishment in which he or she undertakes work, possesses sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken. Account shall be taken, as appropriate, of the framework of qualifications referred to in the Qualifications (Education and Training) Act 1999.

Section 9: Information for employees

Employers are required to provide information on matters relating to safety, health and welfare to their employees, including employees on fixed-term or temporary contracts. The information must be provided in a form, manner and language likely to be understood by employees. If employees are non-English speakers the information must be provided in a language the employees understand.

The information must include hazards identified by the risk assessment and the protective and preventative measures put in place. The information must include the names of persons designated to deal with emergencies and safety representatives. Safety representatives, for the purpose of carrying out their role, have access to information on risk assessments, accidents and dangerous occurrences and protective and preventative measures.

Where employees of another employer are working in an employer's workplace, the employer must also ensure they receive information on safety, health and welfare.

Section 10: Information, training and supervision of employees

Employers are required to provide instruction, training and supervision to employees. The instruction, training and supervision must be provided in a form, manner and language which the employees understand.

In general, unless it is appropriate to train the employee while working, employees must receive time off for training without loss of remuneration. In relation to specific tasks employers are required to take into account the employee's capabilities.

Training should be provided on recruitment, on the introduction of new work equipment and technology and if there are changes to work equipment or systems of work. Training should be repeated periodically and adapted to take account of new or changed risks.

Section 11: Emergencies and serious and imminent dangers

Employers are required to draw up plans to deal with emergencies and serious and imminent dangers. When drawing up or revising such plans, employers should set out measures to be taken for first aid, fire-fighting and evacuation. The plan should also designate the employees who are required to implement it.

In the event of a serious or imminent danger, an employer is required to inform all employees of the risks and the steps taken to protect them and, save in exceptional circumstances, refrain from requiring employees to carry out or resume work. The employer shall in such an event take action and give instructions to enable employees to stop work and immediately leave the place of work and proceed to a safe place. The employer shall ensure that the employee is not penalised because of stopping and/or leaving a place of work.

Section 12: General duty of employers to persons other than employees

Employers are required to manage and conduct their undertaking to ensure that individuals who are not employees (for example: contractors, employees of others, members of the public) are not exposed to risks to their health and safety.

General Duties of Employees and Persons in Control of Places of Work (sections 13-15)

Section 13: Duties of employee

Employees are required, while at work, to:

- Comply with statutory provisions.
- Take reasonable care to protect their own safety, health and welfare and that of others who may be affected by their acts or omissions at work (13.a).
- Not to be under the influence of an intoxicant to the extent that he/she endangers his/her own safety, health and welfare or that of any other person (13.b).
- If required, to submit to appropriate, reasonable and proportionate tests for intoxicants by or under the supervision of a registered medical practitioner who is a competent person (13.c). Regulations to give effect to this provision have yet to be enacted.
- Co-operate with his/her employer or other persons to enable the employer or other person to comply with statutory provisions (13.d).
- Not to engage in any improper conduct or behaviour likely to endanger his/her own safety, health and welfare or that of any other person (13.e).
- Attend training and, as appropriate, undergo such assessment as may reasonably be required (13.f).
- Having regard to his/her training and the instructions given by his/her employer, make correct use of any article or substance (including PPE) provided for his/her use or protection (13.g).
- Report any defects of which he/she is aware of in the place of work, or systems of work. Report any articles or substances which might endanger the employee or others (13.h).
- When entering into a contract of employment, not to misrepresent his/her level of training (13.i).

Section 14: Interference or misuse

No person may, recklessly or without reasonable cause, interfere with, misuse or damage anything

provided for securing the safety, health and welfare of persons at work nor place at risk the safety, health and welfare of others in connection with work activities.

Section 15: Duty of persons in control of a place of work

A person who is in control of a non-domestic place of work shall ensure, in so far as reasonably practicable, that the place of work, the means of access or egress or any article or substance provided for use at the place of work, are safe and without risk to health. Where a person has by virtue of any contract, tenancy, licence or other interest an obligation to maintain or repair the place or access or egress or has an obligation as regards articles or substances, this section applies to that person.

General Duties of Other Persons (sections 16-17)

Section 16: Duties of designers, manufacturers, importers and suppliers

A person who designs, manufactures, imports or supplies any article or substance is under a duty to ensure, in so far as reasonably practicable, that it is safe and without risk to health when properly used. They are required to ensure the article or substance complies with relevant statutory provisions and European Directives, has been tested to ensure compliance, to provide adequate information on its safe use and, if dangers become known, to inform those to whom the article or substance has been supplied.

If the person erects, assembles or installs an article for use at a place of work they shall, in so far as reasonably practicable, ensure that it is assembled or installed so as not to be unsafe or a risk to health.

Section 17: Duties relating to construction work

A person who commissions or procures a project for construction work shall appoint competent persons to ensure, in so far as reasonably practicable, that the project is designed, constructed and maintained to be safe and without risk to health and to comply with relevant statutory provisions. Those who design or construct a project are required, in so far as

reasonably practicable, to ensure that it is safe and without risk to health.

Part 3: Protective and Preventive Measures (sections 18-24)

In order to comply with their duties, employers are required to take measures to protect employees and prevent accidents and ill-health. Employers are required to identify the hazards of the workplace, assess the risks presented by the hazards and put in place measures to, if possible, eliminate the hazard, and if not, to reduce the risk to the lowest practicable level. The hazards identified, the risk assessment and the measures being taken should be set out in the employer's safety statement, which should be specific to the place of work.

Section 18: Protective and preventive measures

Employers are required to appoint one or more competent persons to perform the functions, specified by the employer, relating to protection from and prevention of risks to safety, health and welfare at work. The employer shall ensure that the number of persons appointed and the time and means available to them are adequate, having regard to the size of the place of work and the risks to which employees are exposed and the distribution of those risks in the place of work. The employer shall also arrange to ensure adequate co-operation between the competent persons appointed and safety representatives.

Section 19: Hazard identification and risk assessment

Employers are required to identify the hazards of the place of work and to assess the risks, including the risk to any employee who may be exposed to any unusual risks. Employers must be in possession of a written risk assessment.

Risk assessments must be reviewed where there has been a 'significant' change in the matters to which the risk assessment relates - or if there is another reason to believe it is no longer valid. Following the review, the risk assessment should be amended.

Section 20: Safety statement

Employers are required to have a safety statement. The safety statement should be brought to employees' attention on commencement of employment, following any amendments and, at least annually, should be brought to the attention of other people at the place of work who may be exposed to risks to which it applies.

Employers are required to prepare a safety statement, which should be based on the hazard identification and risk assessment process, and which should specify the manner in which employees' health and safety is to be secured and managed.

Where there are specific tasks that pose a serious risk, the employer should bring the relevant extracts (parts) - identifying the risk, giving the assessment and setting out the protective/prevention measures taken - in the safety statement to the attention of those affected.

The safety statement should set out the protective and preventive measures taken and the resources provided to protect employees' health and safety. It should include details of the plans and procedures to be followed in the event of an emergency or serious and imminent danger. Also, it should set out the duties of employees and names and job titles (if applicable) of persons with health and safety responsibilities.

If an employer contracts with another employer to provide services, that employer shall require the employer providing the services to be in possession of an up-to-date safety statement.

If there is a code of practice for a type of work activity, an employer who employs three or fewer people and is engaged in that type of activity need not have a safety statement and shall be deemed to be compliant if he/she observes the code.

Section 21: Duty of employers to co-operate

Where employers share a place of work, they are required to co-operate on complying with and implementing health and safety legislation. In doing so, they should take into account the nature of the work carried on and co-ordinate their activities and inform each other and their respective employees/

safety representatives of risks from their work activities. They should exchange safety statements or relevant extracts relating to hazards and risks.

Section 22: Health surveillance

Employers are under a duty to make sure health surveillance appropriate to the risks that may be present in the place of work is available to employees.

Section 23: Medical fitness to work

This section has yet to be brought into force. However, when it is, employers will be able to require employees of a class or classes that are prescribed to undergo assessment by a registered medical practitioner for their fitness to carry out work which gives rise to serious risks. The section specifically provides that where there are more specific health surveillance provisions in regulations, this section does not affect them.

Section 24: Joint safety and health agreements

Joint health and safety agreements were a new concept introduced by the SHWW Act 2005. Joint health and safety agreements allow trade unions representing employees and employers to enter into agreements providing practical guidance for employers and employees on health and safety issues.

Where such trade unions reach an agreement, they may apply to the HSA to approve the agreement. If the Authority approves an agreement, inspectors shall take account of it when assessing an employer's compliance with legislation.

Part 4: Safety Representatives and Safety Consultation (sections 25-31)

Section 25: Safety representatives

Employees have a right to select a safety representative - or more than one, if the employer agrees.

Safety representatives are given the right, on giving reasonable notice to their employer, to inspect the place of work and immediately if there is an accident, dangerous occurrence or imminent danger or risk to safety and to investigate accidents and dangerous occurrences.

Safety representatives may:

- After giving notice to the employer, investigate complaints relating to health and safety.
- Make representations to HSA inspectors.
- Consult and liaise with other safety representatives in the undertaking concerned, whether or not they work in the same place of work or in different places under the control of the same employer.

They also have the right to accompany HSA inspectors carrying out inspections (except following an accident, although in such circumstances an inspector has discretion to allow a safety representative to accompany him/her), make representations to employers and to HSA inspectors.

Employers and safety representatives shall agree, having regard to the nature and extent of the hazards of the place of work, on the frequency of inspections and employers are bound to consider representations made by safety representatives.

Safety representatives are entitled to time off work, without loss of remuneration, to discharge their functions and to be trained for the role. If an HSA inspector is carrying out an inspection, employers must inform the safety representatives.

Safety representatives are entitled to copies of notices issued by inspectors.

Section 26: Consultation and participation of employees, safety committees

Employers are required to consult with their employees for the purpose of making and maintaining arrangements to co-operate on health and safety matters. Employees may, with the agreement of the employer, appoint a safety committee, which may make representations and engage in consultation on behalf of the workers it represents.

Employees engaged in consultation shall be given, without loss of remuneration, the time necessary, both to gain the knowledge and training necessary and to discharge their functions.

Employers are obliged to consider any representations made.

Sections 27: Protection against dismissal and penalisation

Employers are prohibited from penalising (defined as dismissal, demotion, transfer, imposition of duties, coercion/intimidation) or threatening to penalise employees who are performing any duty, exercising rights or who make complaints relating to health and safety, or who give evidence in enforcement proceedings.

Section 28: Complaints to the Workplace Relations Commission

An employee who claims he/she is being penalised may make a complaint to the Director General of the Workplace Relations Commission, who will refer the complaint for adjudication by an adjudication officer of the Commission. The adjudication officer shall inquire into the complaint and having given the parties an opportunity to be heard make a decision, which may include compensation. Complaints must be made within six months of the event giving rise to the complaint.

Section 29: Appeals and enforcement of Adjudication Officer decisions

A party who disagrees with an Adjudication Officer's decision may appeal to the Labour Court. Appeals must be initiated within 42 days of the Adjudication Officer's decision being communicated.

A determination of the Labour Court is legally binding.

Part 5: The Health and Safety Authority

This part (sections 32 to 56) is concerned with the functions and running of the Authority and, while of interest to employers and practitioners, is not central to day-to-day safety management.

The Authority's functions are to:

- Advise the Government on health and safety issues and legislation.
- Enforce health and safety legislation.
- Promote awareness of health and safety.

The Board of the Authority is appointed by the Government Minister with responsibility for employment and labour affairs. The Board includes representatives of the three social partners: Government, employers and trade unions. The Board comprises 12 members: a chairperson and five other persons nominated by the Minister, one of whom represents the Department under whose auspices the Authority operates; three persons appointed by organisations representing employers; and three by organisations representing employees (trade unions). The Board holds office for three years.

The Board is required to:

- Appoint a chief executive.
- Every three years prepare a strategy statement for approval by the Minister.
- Every year prepare a work programme for approval by the Minister.
- Present an annual report to the Minister.

The Board is funded by a Government grant but it has powers to borrow and charge fees for services.

The number of staff appointed by the Authority is subject to ministerial approval. The Authority is, in regard to pay, obliged to abide by Government or nationally-agreed guidelines.

Part 6: Regulations, Codes of Practice and Enforcement

This part (sections 57 to 76) deals with the power of the HSA to give guidance on regulations and to issue codes of practice, as well as specifying the enforcement powers available to the Authority. Of most concern to practitioners are the Authority's powers of enforcement.

Section 64: Powers of inspectors

The Act confers a wide range of powers on inspectors, as the 1989 Act did, including the powers to enter premises, examine records, require people to give information, take measurements, photos and samples.

Section 65: Directions for improvement plan

Where an inspector is of the opinion that there is or is likely to occur an activity which involves or is likely to involve risk to health and safety, he/she may require an employer to submit an improvement plan. A copy of the direction requiring the improvement plan must be given to a safety representative.

An inspector must, within one month of receipt of the improvement plan, confirm whether he/she is satisfied or not satisfied that it is adequate, or direct that it be revised.

Section 66: Improvement notice

If an inspector is of the opinion that a person is contravening a statutory provision or has failed to comply with a direction for an improvement plan, he/she may serve an improvement notice, requiring the person to take measures to remedy the contravention. The inspector should give a copy of the improvement notice to the safety representative (if any). A person who is aggrieved has 14 days to appeal to the District Court.

Where a person on whom a notice has been served is of the opinion that he/she has complied with the notice, he/she shall let the inspector know in writing and give a copy of the response to the safety representative. The inspector then has one month to either confirm (in writing) that he/she is or is not satisfied with the measures taken.

Where there is a safety representative at a place of work, the inspector must give a copy of the improvement notice to the safety representative.

Section 67: Prohibition notice

An inspector may, if he/she forms the opinion that an activity is, or is likely to, result in serious injury, serve a prohibition notice. A person upon whom a prohibition notice is served should stop the activity specified immediately, even if he/she disputes the validity of the notice. If he/she disputes the validity of the notice, he/she may apply to court to have the operation of the notice suspended. Alternatively, the aggrieved person may appeal to the District Court within seven days of the notice.

Section 71: High Court closure order

The HSA may, if it considers there is a risk to

safety, health and welfare that is so serious that a place of work or a part of a place of work should be closed, apply ex-parte (orally to the court and without notice to the party against whom the order is sought) to the High Court to prohibit or restrict work until specified remedial measures to reduce the risk are taken. The court may grant what is in effect a closure order, on such terms as it sees fit.

Part 7: Offences and Penalties

Section 77: Offences

While they are not classified as categories of offences, the Act effectively breaks offences down into two categories: serious and less serious offences.

Among the less serious offences are failing to discharge duties, such as hazard identification and risk assessment; failing to consider representations made by safety representatives; failing to inform a safety representative that an inspector is carrying out an inspection; failing to consult with employees on safety arrangements; or failing to allow safety representatives time off to acquire the knowledge and training to perform their duties and the time off to discharge their duties.

Among the offences classified as serious are failure by an employer to discharge section 8 general duties and in providing information, instruction, training and supervision for employees. Other serious offences include obstructing an HSA inspector and recklessly or knowingly making false statements to an HSA inspector.

Section 78: Penalties

Charges for less serious offences shall be brought in the District Court by way of summary proceedings and if convicted, the person charged shall be fined a sum not exceeding €5,000.

In relation to serious offences, if summary charges are brought in the District Court, a person convicted may be fined up to €5,000 and/or imprisoned for a period not exceeding 12 months. If the charges are brought on indictment in the Circuit Court, a person convicted may be fined up

to €3m and/or sentenced to imprisonment for a period not exceeding two years.

Section 79: Provisions regarding certain offences (on-the-spot fines)

As it stands, this section is an enabling section, which will allow the Minister to introduce regulations prescribing a range of offences (yet to be decided upon) as being liable for on-the-spot fines. These fines will require the person on whom a notice specifying such an offence is served to pay a fine not exceeding €1,000 within 21 days.

Section 80: Liability of directors and officers

Where an offence is proved to have been committed with the consent or connivance of - or can be attributed to any neglect on the part of a director or manager or other officer of the company - that person, as well as the company, will be guilty of an offence and be liable to be proceeded against.

Section 81: Onus of proof

As is now common in many statutes, the onus of proof is shifted on to the defendant. It is up to a person charged with failure to comply with a duty to prove that it was not practicable for him/her/ it to do more than was in fact done to satisfy the duty or requirement. This section has been tested

in court cases and the Court of Criminal Appeal has held that the prosecution must first establish a *prima facie* case.

Section 85: Publication of names

The Authority has the power to publish the names of persons on whom fines or other penalties have been imposed by the courts, or on whom a prohibition notice has been served.

Schedule 4: Safety Committees

If employees decide to do so, they can select, with the agreement of the employer, a safety committee. A number of members shall be not less than three and shall not exceed one for every 20 persons employed or ten, whichever is the less. Where there are four or less members, one may be appointed by the employer and if there are not more than eight members, two may be appointed by the employer. If there are more than eight members, three may be appointed by the employer. At least one safety representative shall be selected and appointed to the committee by the employees. The quorum for committee meetings shall be not less than three. The employer is obliged to consult with the safety committee in relation to the facilities to be provided and the frequency, duration and time of meetings.

TABLE 1.1: Definitions

Reasonably practicable

Means, in relation to the duties of an employer, that an employer has exercised all due care by putting in place the necessary protective and preventative measures, having identified the hazards and assessed the risks to safety and health likely to result in accidents or injury to health at the place of work and where the putting in place of any further measures is grossly disproportionate, having regard to the unusual, unforeseeable and exceptional nature of any circumstances or occurrence that may result in an accident at work or injury to health at that place of work.

Competent person

A person is deemed to be competent where, having regard to the task he or she is required to perform and taking account of the size or hazards (or both of them) of the undertaking or establishment in which he or she undertakes work, the person possess sufficient training, experience and knowledge appropriate to the nature of the work to be undertaken. Account shall be taken, as appropriate of the framework of qualifications referred to in the Qualifications (Education and Training) Act 1999.

CHAPTER 2: SAFETY, HEALTH AND WELFARE AT WORK (GENERAL APPLICATION) REGULATIONS 2007

Apart from the Safety, Health and Welfare at Work Act 2005, the *Safety, Health and Welfare at Work (General Application) Regulations 2007* are the most significant set of rules governing the management of workplace and work-related health and safety.

Commonly referred to as the General Application Regulations 2007, the regulations bring together in one statutory instrument the rules governing the workplace, work equipment, personal protective equipment (PPE), manual handling, display screen equipment (VDUs), electricity, work at height, noise, vibration, the protection of sensitive risk groups (children and young persons; pregnant and post-natal employees; and night workers and shift workers), safety signs, first aid and explosive atmospheres.

The regulations were drafted so that when new regulations, which have broad cross-sectoral application, were proposed, they could be incorporated into the General Application Regulations. Since the General Application Regulations were adopted eight amending regulations have been enacted. Four of these bring the health and safety issues of artificial optical radiation, pressure systems, woodworking machinery, abrasive wheels, abrasive wheels blasting and the reporting of accidents and dangerous occurrences within the General Application Regulations.

While the Artificial Optical Radiation Regulations and the Pressure Systems Regulations were published as two new statutory instruments, the HSA has published a consolidated set of regulations on its website, www.hsa.ie. The consolidated regulations can be accessed at http://www.hsa.ie/eng/Legislation/Regulations_and_Orders/General_Application_Regulations_2007/unofficial.pdf

The regulations are set out in ten parts and 12 schedules.

Part 1: Interpretation and General

The interpretation or definitions section of the Regulations includes a definition of lifting equipment, public road, road authority and work equipment. While the interpretation section in most Acts and statutory instruments sets out all the interpretations that apply throughout the Act or statutory instrument, interpretations applicable to particular parts are set out at the start of each part.

Part 2: Workplace and Work Equipment

The Workplace Regulations are concerned with the condition of workplaces, while the Work Equipment Regulations deal with the selection, use and maintenance of a wide variety of types of work equipment, including lifting equipment.

Chapter 1: Workplace (regs 4-26)

The Workplace Regulations are concerned with the condition of workplaces, such as stability and solidity and the conditions in workplaces, such as room temperature.

The general thrust of the regulations is that workplaces should be in good condition and kept clean and tidy, be maintained and comfortable to work in, with good ventilation and lighting and room temperatures appropriate to the work being carried on.

Ventilation (reg 6)

Systems of ventilation for enclosed places of work shall ensure that there is sufficient fresh air, having regard to the working and physical demands on employees. A fixed ventilation system shall be maintained in working order and any defect likely to cause a danger to health shall be removed. Break areas shall be indicated and air conditioning or mechanical ventilation systems should not cause employees discomfort from draughts. Deposits or dirt that create an immediate danger must be removed without delay.

Room temperature (reg 7)

During working hours, temperature should be appropriate, having regard to the working methods being used and the physical demands on employees. For sedentary office work, the minimum temperature after one hour should be 17.5 degrees centigrade and for other sedentary work it should be 16 degrees. Where, due to process requirements, a temperature of below 16 degrees is necessary, the employer must assess the risks and take measures to ensure the safety, health and welfare of employees.

Lighting (reg 8)

Lighting may be natural or artificial. It should be adequate to protect employees' safety and health. Installations should be fitted in such a way that they cause no risk of accident. Emergency lighting should be fitted where special risks arise if the artificial light was to fail.

Floors, walls, ceilings and roofs of rooms (reg 9)

There should be no dangerous bumps, holes and slopes on floors and they should not be slippery. Transparent and translucent walls, in particular all-glass partitions, should be clearly indicated and made of safety materials. Access to ceilings and roofs which are of insufficient strength is not permitted, unless equipment to ensure work can be carried out safely is provided.

Windows and skylights (reg 10)

Windows, skylights and ventilators should be able to be opened and closed safely and be capable of being cleaned without risk to health and safety.

Doors and gates (reg 11)

The positions, numbers, dimensions and the materials used in doors and gates should be appropriate for the safety, health and welfare of employees. Swing doors and gates should be translucent (these should be marked and made of safety materials, so that employees are protected against injury) or have see-through panels. There should be safety devices so that doors function without risk to safety.

Fire and fire-fighting and emergency routes and exits (reg 12 and reg 13)

These regulations specifically requires employers to ensure workplaces are equipped with fire-fighting equipment and, as appropriate, fire detectors and an alarm system. Account should be taken of dimensions and use of the buildings, equipment, the characteristics of chemical and physical substances present, the number of people present and ensure non-automatic fire-fighting equipment is easily accessible and simple to use. Its presence should be indicated by signs. Fire-fighting and detection equipment should be inspected and maintained as frequently as necessary and serviced, also as frequently as necessary, by a competent person.

The regulations governing emergency routes and exits are now linked by reference to the Fire Services Acts 1981 and 2003. Emergency routes and exits should be kept clear.

Movement of pedestrians and vehicles (reg 14)

Workplaces, both outdoor and indoor, should be organised so that pedestrians and vehicles can circulate safely. Pedestrian and traffic routes should be clearly identified for the protection of employees where the use and equipment of places of work so require. Where there is a risk of persons or objects falling, the areas should be indicated and equipped to prevent unauthorised persons from entering. Traffic routes should be designed to allow for safe and easy access, take account of the number of users and allow for sufficient clearance between vehicles and pedestrians.

Loading bays and ramps (Reg 16)

Loading bays and ramps should be of suitable dimensions for the loads to be carried, have at least one exit point and, if longer than the width of five vehicles, have an exit point at each end. They should be safe enough to prevent employees from falling off.

Room dimensions, air space and movement at workstation (reg 17)

The dimensions of workrooms and workstations should allow sufficient space for an employee to

perform his/her work safely and without risk to health.

General Welfare Requirements (Reg 18)

Workplaces should be kept clean, with waste being removed as frequently as necessary to maintain health and safety standards. There should be an adequate supply of drinking water, facilities for boiling water and taking meals. Provided it is not detrimental to work, facilities for sitting should be provided.

Rest rooms and rest areas (reg 19)

This provision requires employers to provide rest rooms where the type of activity (work) carried out or the number of workers or the safety, health and welfare of workers demands it. The HSA's guide to the Workplace Regulations advises that rest rooms should be provided where work involves arduous physical activity or takes place in a hostile environment, such as exposing employees to dust, fumes and/or excessive heat or cold. Rooms should be large enough for the numbers and equipped with tables and chairs with backs. Where no rest room is available and there are frequent interruptions, other rooms should be provided.

Sanitary and washing facilities (reg 20)

Employers are required to provide adequate and suitable sanitary facilities, an adequate number of lavatories and washbasins, and adequate and suitable showers. Separate facilities should be provided for men and women.

The HSA's guidance to the Workplace Regulations includes tables setting out the numbers of water closets, washbasins and urinals. (see *Tables across*)

TABLE 2.1: Number of water closets and washbasins in the workplace

No. of people at work	Number of water closets	Number of washbasins
1 to 5	1	1
6 to 15	2	2
16 to 30	3	3
31 to 45	4	4
46 to 60	5	5
61 to 75	6	6
76 to 90	7	7
91 to 100	8	8
Above 100	8 + 1 WC and washbasin per 25 persons or fraction thereof	

TABLE 2.2: Number of male water closets, washbasins and urinals in the workplace

No. of men at work	Number of water closets	Number of urinals	Number of washbasins
1 to 15	1	1	1
16 to 30	2	1	2
31 to 45	2	2	2
46 to 60	3	2	3
61 to 75	3	3	3
76 to 90	4	3	4
91 to 100	4	4	
Above 100	4 + 1 WC and washbasin per 50 males or fraction thereof		

Changing rooms and lockers (reg 21)

Where workers have to wear special work clothes, and if for reasons of health or propriety they cannot be expected to change in another area, the employer is required to provide changing rooms that are easily accessible and have adequate provision for drying wet or damp work clothes. The employer should provide separate changing rooms for men and

women, or at least for the separate use of changing rooms. If workers are likely to be contaminated by dangerous substances, atmospheric conditions or the conditions of the place of work, the employer is required to provide facilities to keep work clothes separate from personal clothing.

Accommodation area at a place of work (Reg 22)

This provision requires employers to ensure that fixed living accommodation provided for employees is safe and without risk to health and, unless used in exceptional circumstances, has sufficient sanitary equipment and is equipped with beds, cupboards, tables and seats. Account should be taken of the number of persons at work and accommodation should be allocated taking account of the presence of both sexes.

Outdoor places of work (reg 23)

Where employees are employed at outdoor workstations, employers are required, as far as possible, to arrange for them to be protected against inclement weather conditions, and ensure they are not exposed to harmful gases, vapours or dusts and cannot slip or fall.

Pregnant, postnatal and breastfeeding employees (reg 24)

Employers are required to provide rest facilities for pregnant, postnatal and breastfeeding employees.

Employees with disabilities (reg 25)

Places of work should be organised, in particular as regards doors, passageways, stairs, workstations and washing and sanitary facilities, to take account of people at work with disabilities. (*Employees with Disabilities: an employer's guide to implementing inclusive health and safety practices for employees with disabilities*)

Part 2 – Chapter 2: Use of Work Equipment (regs 27-61)

Work equipment SI 299/07, (Part 2, Chapter 2, Regs 27-41)

Employers are under a duty to ensure work equipment is suitable to use, or properly adapted for the work to be carried out, so that it may be

used without risk to employees' health and safety. In selecting work equipment, employers must take account of the work conditions and the hazards of the workplace. If the risk cannot be eliminated, it must be minimised. Employees must be instructed in the safe use of equipment and be given such information as is necessary to use it safely. If the equipment presents a specific risk, its use should be restricted to those employees required to use it - and where repairs and/or maintenance work are being carried out, only competent people should carry out such work. Information and instructions should be understandable.

Control devices must be visible and identifiable and if possible located outside danger areas. Ideally it should be possible to ensure nobody is in a danger area, but if this is impracticable, audible or visible warning signs should operate whenever machinery is about to start. An exposed employee should be able to avoid the hazard by either starting or stopping the equipment. All equipment and work stations should be fitted with stop controls. Where there is a risk of physical contact, guards and protection devices should be fitted. It should be possible to isolate equipment from its energy sources.

Warning devices should be clear and easily understood. When maintenance work is being carried out, the equipment should - if possible - be shut down. If this is not possible, the work should be carried on outside the danger area or protection measures should be taken.

If there is a maintenance log, it should be kept up to date. Account should be taken of risks such as falling, projecting, heat and cold, dust, gas, vapours, liquids or fumes and the risks of overheating, fire or explosion.

Employees must be made aware of health and safety risks. Also, post-installation inspections and inspections before use must be carried out. If equipment is exposed to conditions which may cause deterioration, inspections are required. The results of inspections must be recorded and kept for five years. Inspections must be carried out by competent persons.

Lifting equipment (SI 299/07, Part 2, Chapter 2, Regs 42-61)

The General Application (Use of Work Equipment) Regulations are concerned with mobile equipment and the lifting and non-lifting aspects of work equipment. Regulations 42-61 are concerned with lifts and lifting equipment used in the factories, in the construction sector and now in all sectors. The regulations are also concerned with chains, cranes, ropes and hoists.

Equipment which is used for lifting purposes should be of good construction, sound materials, adequate strength and free from defect. Where appropriate there should be a gate; it should be fenced and marked to show safe load and when persons can be carried. All such equipment is subject to periodic examination (see Schedule 1 of General Application Regulations).

Where a person using a machine cannot see a load, a person over 18 shall give signals. No person under 18 shall be employed to operate a mechanical lifting machine unless adequately supervised and then only for training purposes. A register of examinations shall be kept, detailing date, machine identification, and defects.

The regulations are concerned with mobile equipment (that moves from site to site) and the lifting and non-lifting aspects of work equipment. Basically the effect of the regulations is that lifting equipment in all workplaces must be checked to see that it is safe and be monitored for deterioration. Inspections must be carried out by competent persons and records of inspections must be kept for five years. It is specifically stated that if the equipment is exposed to conditions which may cause deterioration, inspections are required.

New definitions (Reg 27)

A number of new definitions were introduced into the General Application Regulations by regulation 27. They are the definitions of carrier, EC declaration of conformity, fishing vessel, hoist or lift, lifting accessories, load, non-integrated cage or basket, selection installation and use of work equipment, and thorough examination.

Schedule 1

Sets out the requirements for exemptions from regulation 46 (hoists and lifts) and the periods between examinations of lifting equipment. The schedule also covers the circumstances requiring testing of lifting equipment as part of a thorough examination and the information to be contained in such a report.

Part 2 – Chapter 3: Personal Protective Equipment (regs 62-67)

Every employer, who cannot protect workers by avoiding certain tasks or by technical means, must provide PPE. The employer must pay the cost of providing PPE. All PPE should carry an EN marking. It must be suitable for the risks to which the employee is exposed, take account of the conditions of the workplace, ergonomics, the wearer's state of health and it must fit the wearer. The employer must maintain PPE in good condition. It shall normally only be worn by one person. Information about, and training in the use of, the PPE supplied shall be given.

The Regulations provide that certain PPE shall be worn to protect certain parts of the body. The requirement to wear such PPE is linked to certain work sectors. It should be noted that the listings of areas to be protected, the PPE to be provided and the work sectors are not exhaustive. The areas of the body listed as requiring protection are: the head, feet, eyes and face, ears, the body trunk, arms, legs, skin and the respiratory system.

Head: The head should be protected by helmets, bonnets, berets, and sou'westers. Such PPE may be required to be worn on building sites, in mines, slaughterhouses, ship building, furnaces, boiler plants, steel works and power stations.

Feet: Feet should be protected by safety shoes. Shoes may have to have pierce-proof soles, be insulated, heat resistant, thermal, anti-static, and able to unlace rapidly. They may require to be worn in abattoirs, on scaffolding, when erecting roof frameworks, on building sites, in quarries, mines, ceramic factories, when ship building, and when

working with hot or cold materials. Legs should be protected by wearing kneepads.

Eyes: The eyes and the face should be protected by goggles, screens, X-ray goggles, laser-beam goggles, radiation goggles, face shields, arc-welding masks and helmets. Work that involves welding, grinding, caulking, rock work, bolt driving, chiselling, drop forging, acids, liquid sprays, molten substances and radiant heat are amongst the types of work requiring such PPE.

Ears: To protect hearing, protectors such as plugs, muffs and acoustic helmets should be worn when working with metal presses, pneumatic drills, turbines, pipe-driving work, wood and textile working and by ground staff at airports.

Body: Body, arm and hand protection are linked together and connected to work that involves welding, forging and casting work with acids and caustic solutions, as well as working in abattoirs. It may be necessary to wear fire-resistant clothing, pierce-proof aprons, gloves, mittens, finger stalls, fingerless gloves, wrist protection, protective jackets, waistcoats and body belts.

Skin: Skin may need to be protected when using coating materials or tanning. Barrier creams and ointments should be used.

Lungs: To protect the lungs and respiratory system, it may be necessary to use respirators, including welding masks, dust filters, gas and radioactive dust filters, diving equipment, diving suits and insulating appliances with an air supply. The need may arise when doing container work, working in restricted areas, working on blast furnaces, gas converters, pipe ladles, or in restricted areas such as shafts, sewers, other underground areas or in refrigeration plants.

Part 2 – Chapter 4: Manual Handling of Loads (SI 299/07, Part 2, Chapter 4, Regs 68, 69, Schedule 3)

The legal rules regarding manual handling of loads: eliminate manual handling if possible and if this is not possible, do not require an employee

to lift, carry or move a load that is likely to cause injury. Employers should instead take measures to reduce the risk.

The above summary enshrines the principles of the Manual Handling Regulations. Manual handling of loads is defined as transporting or supporting a load - which includes lifting, putting down, pushing, pulling, carrying it or moving it - where risk, particularly of back injury, is involved, because of the characteristics of the load or unfavourable ergonomic conditions.

If it is not possible to eliminate manual handling, it should be reduced by organising work and work stations to take account of the characteristics of loads. Employees should receive information on the weight of each load and its centre of gravity on the heaviest side when eccentrically loaded. Employees at risk include those who are unsuited to the task, those wearing unsuitable clothing and those without adequate or appropriate knowledge or training.

Reference factors to be considered in relation to the manual handling of loads are:

- Characteristics of the load: too large, heavy, unwieldy, unstable.
- Physical effort: the effort required to move it may be too strenuous, achieved by twisting the body's trunk.
- Working environment: not enough room, uneven or slippery floors.
- Requirements: may require overfrequent or long activity, insufficient rest, excessive lifting.

Part 2 – Chapter 5: Display Screen Equipment (SI 299/07, Part 2, Chapter 5, Regs 70-73)

Visual Display Units (VDUs) are, in EU parlance and consequently in Irish national legislation, called Display Screen Equipment (DSE). The definition of DSE is comprehensive, in that the Regulations cover not only the display screen or computer but also the workstation, which is defined as including all that clutter of things or (as the Regulations

word it) the assembly that goes with computers: screens, keyboards, diskette drives, phones, modems, printers, work chairs, desks, document holders, the work surface and the immediate working environment.

The Regulations also make it clear that certain equipment is not covered, such as typewriters, computer systems on board a means of transport, computer systems for public use, calculators and cash registers, and portable DSE not in prolonged use at a workstation.

The Regulations impose a number of duties on employers. Workstations must be analysed in order to evaluate health and safety considerations and risks, particularly as to eyesight, physical problems or mental stress. Risks found must be remedied. Work must be organised so as to ensure break periods or changes of activity, and employers must provide information and training.

Every employer shall ensure that an appropriate eye and eyesight test is made available to every employee and carried out by a competent person. This should be done before commencing VDU work, at regular intervals thereafter, and if the employee experiences visual difficulties which may be due to VDU work. If the tests show that an ophthalmologic examination is necessary, it shall be provided. If the tests show that corrective or special corrective appliances are needed, the employer must provide them.

Display screens must have characters that are well defined and of an adequate size. The image on the screen must be adjustable and the screen must be free of glare and reflection. It must swivel and tilt and it should be possible to use a separate base or an adjustable table on which to place the screen. Keyboards must have a matt surface; a layout that facilitates use; symbols that are legible; and be tiltable and separate from the screen, with space in front to support the user's hands and arms.

Work desks or surfaces shall be large enough to allow flexible arrangements of equipment and documents and document holders shall be adjustable and positioned to minimise the need for uncomfortable head and eye movements.

Work chairs must be stable, adjustable in height and have a seat back that is adjustable in height and tilt. A user who requires a foot rest must be provided with one. The work environment must be designed so as to control reflections, glare, noise, heat and humidity. Radiation must be reduced to negligible levels.

The interface between the employee and the computer shall apply principles which ensure that the software used is suitable for the task, adaptable to the employee's level of knowledge, able to provide employees with feedback on their performance and display information at a pace adaptable to the employee. The principles of software ergonomics shall apply. The software may not incorporate a checking for quality or quantity that may be used without the employee's knowledge.

Part 3: Electricity (regs 74-93)

The electrical safety regulations might be described as being codified in the General Application Regulations.

Electrical equipment is defined as including any conductor, cable, machine, appliance, apparatus used or intended to be used for generation and transformation of electrical energy. Employers have a duty to ensure electrical installations are designed and constructed to prevent danger. Danger means a risk of death or personal injury or danger to health from electric shock, burn, explosion, arching, or fire caused by the use of electricity or the mechanical movement of electrically-driven equipment.

All electrical equipment and installations shall be constructed, installed, maintained, protected and used so as to prevent danger (Reg 76), exposure to adverse or hazardous environments (Reg 77) and shall be identified so as to prevent danger, display ratings, showing it is suitable for the purposes used and showing the maker's name (Reg 78).

Work activity should be carried out in such a manner as not to cause danger (Reg 86). Where danger may be caused, only persons with the

necessary knowledge or experience or persons under such a person's supervision may work. They may only work near live parts in restricted circumstances, reasonableness being the criteria (Reg 86). They must have adequate space, light, and means of access and egress (Reg 87). Only competent people or those working under the supervision of competent people shall work on any activity where technical knowledge or experience is necessary to prevent danger (Reg 88).

To protect against shock, in normal conditions all live parts should be covered with insulating material and protected, including being suitably placed so as to prevent danger (Reg 79) and in faulty conditions where an exposed conductive part may become live, earthing or automatic disconnecting precautions should be taken (Reg 80).

A circuit or a socket outlet supplying portable equipment, in which current is at a voltage exceeding 125 volts but not 1,000, should be protected by one or more current devices having a tripping current not exceeding 30 milliamperes. Portable equipment (other than transformers or generators) supplied at a voltage exceeding 125 volts alternating current shall not be used in building operations, engineering construction, damp or confined locations unless the rating exceeds 2 kilovolt amperes. Neither in such operations shall portable handlamps be used at a voltage exceeding 25 alternating current 50 volts direct. If a transformer is supplied at a voltage not exceeding 125 volts alternating current to portable equipment or 25 volts to a handlamp, it shall be double wound and the centrepoint of the lower voltage or secondary winding shall be connected to earth (Reg 81).

In order to avoid danger:

- Electrical joints and connections shall be of adequate strength.
- Effective means shall be provided to protect against overcurrent.
- Means shall be provided to isolate and cut off electrical supply.
- Precautions shall be taken against dead electrical equipment becoming live.

- Effective provision shall be taken against leakage from currents to earth.

Substations shall be erected so that they cannot be interfered with and only authorised persons can enter. They should be under the control of an authorised person (Reg 91). Fences 2.4 metres high should protect transformers or switchgear placed outdoors, in which high voltage is used, unless they are covered by metal or suitable non-metal casting (Reg 92). The most publicised danger, overhead wires, should be well clear of the clear of the ground or otherwise guarded so as to prevent contact with people or objects. There should be provision to prevent danger in the event of an accidental fall (Reg 93). All new installations and major alterations or extensions shall be tested by a competent person, who shall, if the Regulations have been complied with, issue a verifying certificate.

Though not part of the regulations, the HSA/ESB *Code of Practice for Avoiding the Danger from Overhead Power Lines*, which offers guidance on avoiding the dangers from overhead electricity lines, should be complied with.

Part 4 Work at Height (SI 299/07, Part 4, Regs 94-119)

The Work at Height Regulations, which originally became law during 2006 and were re-enacted in the General Application Regulations 2007, radically altered the law relating to work at heights. For one thing, work at height regulations are no longer confined to construction, but apply to all sectors. The second key point is that the old two metre rule was abolished.

Work at height is defined in the regulations as meaning: "work in any place, including a place: (a) in the course of obtaining access to or egress from any place, except a staircase in a permanent place of work; or (b) at or below ground from which, if measures required by these Regulations were not taken, an employee could fall a distance liable to cause personal injury, and any reference to carrying out work at height includes obtaining access to or egress from such place while at work".

The regulations require employers to avoid risks from work at heights, by not carrying out work at height unless it is reasonably safe to do so. Also, employers must take account of weather conditions and fragile surfaces. They must also take steps to prevent objects falling. The regulations set out requirements regarding the selection and inspection of work equipment.

Regulation 94: Interpretation

This is the definitions section. The definition of work at height is the key definition. Two other significant definitions are the definitions of fragile roofs and ladders. Other terms defined include lifting equipment, personal fall protection system, PPE, scaffold, work equipment, and working platform. When using equipment, consider definitions carefully.

Regulation 95: Organisation, planning and risk assessment

Employers are under a duty to ensure that work at height is properly planned, appropriately supervised and carried out in a manner that is, so far as reasonably practicable, safe and without risk to health. Planning includes selection of work equipment, risk assessment and planning for emergencies and rescues. In identifying measures, employers shall take account of risk assessments.

Regulation 96: Checking of places of work at height

Employers shall ensure that the surface and every parapet, permanent rail or other fall protection measure is checked visually prior to use and at appropriate intervals.

Regulation 97: Weather conditions

Employers are under a duty to ensure work at height is only carried out when weather conditions do not jeopardise employees' health and safety. The HSA guidance mentions that work equipment should be suitable, sufficient lighting should be provided, bulky clothing could make access/egress difficult and warn about the build up of mud and that extreme heat can cause exhaustion.

Regulation 98: Avoidance of risks from work at height

Employers are under a duty not to carry out work at a height, if it is reasonably practicable to carry

it out otherwise. The HSA guidance cites cleaning windows using a pole cleaning system, as an example.

If work must be carried out at a height, it shall not be carried out, unless it is reasonably practicable to do so safely and without risk to health. And if work at height is being carried out, the employer must take suitable and sufficient measures to prevent employees from falling a distance liable to cause personal injury. As even a fall on a flat ground level surface could cause an injury, this effectively means measures to prevent falls on flat ground must be taken.

The HSA guidance sets out the work at height hierarchy: avoid, prevent, mitigate, and give collective measures priority.

Regulation 100: Selection of work equipment

When selecting work equipment, an employer shall give priority to collective protection measures over personal protection measures and take account of work conditions, risks at the place of work, the distance and height to be negotiated (in relation to access and egress), the distance of the potential fall and risk of personal injury, duration and frequency of use of equipment, the need for easy and timely evacuation and rescue in the event of an emergency and additional risks. The equipment selected should be appropriate to the nature of the work and foreseeable loadings and allow safe passage.

Regulations 103-114

These regulations deal with the very practical issues of guard-rails, toe-boards, working platforms, scaffolding, personal fall protection systems, working position systems, rope access, fall arrest, work restraint systems and ladders.

Regulation 115: Fragile surfaces

The HSA guidance highlights this regulation as introducing a major change in work at height rules. Employers are under a duty to ensure no employees pass across or near, or work on, from or near a fragile surface, where work can be carried out without having to do so. Where it is necessary to work on, near or from a fragile surface, the employer must take account of

the risk assessment and ensure, in so far as reasonably practicable, that suitable platforms, coverings, guardrails and other means of support and protection are provided. Where a risk of falling remains, measures must be taken to minimise the distance of the potential fall and the risk of personal injury. The HSA guidance specifies the use of fall arrest equipment. Prominent warning notices should be erected at the approach to fragile surfaces and if that is not practicable, other means of warning employees should be used.

Regulation 116: Falling objects

Employers are required to prevent, in so far as is reasonably practicable, the fall of any material or object. Where it is not possible to prevent the fall of materials or objects, employers are required to take measures to prevent people being struck by falling objects or materials. No material or object should be thrown or tipped from a height, if it is liable to cause injury to any person. Employers are required to ensure that materials and objects are stored in such a way as to prevent risk from collapse, overturning or unintended movement.

Regulation 117: Danger areas

If there is a risk of an employee suffering personal injury by falling a distance or being struck by a falling object, devices to prevent unauthorised employees from entering the danger area should be put in place. The danger area should be indicated by warning signs.

Regulation 119: Inspection of work equipment

This regulation only applies to work equipment to which regulation 7 and schedules 2 to 6 apply. An employer shall ensure that where the safety of work equipment depends on how it is installed or assembled, it is not used after installation or assembly, unless it has been inspected in that position. If work equipment is exposed to conditions causing deterioration that is liable to result in dangerous situations, it shall be inspected at suitable intervals or where exceptional circumstances have occurred that are likely to jeopardise its safety.

Where a working platform is used for construction work and an employee could fall more than two metres, an employer must ensure that it is not

used unless it has been inspected within the previous seven days or, in the case of a mobile working platform, inspected on site within the previous seven days. A person carrying out such an inspection must promptly prepare a report (see Schedule 7 of the regulations for details) and, within 24 hours, provide the report or a copy to the person on whose behalf it was carried out. Inspection records must be kept for five years.

The HSA guidance cautions that lifting equipment may be subject to examinations specified in other regulations. Also, the HSA warn that inspection is not a substitute for proper maintenance.

Part 5 Physical Agents: (Regs 120-142)

These regulations set out the rules governing the control of noise and vibration at work.

Chapter 1: Control of noise (Regs 120-132)

Employers are required to assess the risks to employees from noise at work, take action to reduce noise exposure that produces those risks, provide employees with hearing protection if noise exposure cannot be reduced enough by other means, make sure legal limits on noise levels are not exceeded, consult with employees and/or their representatives and provide information and training and make health surveillance available where there is a risk to employees' health.

The regulations set out the action which must be taken to control noise. The upper exposure action value is LEX.8h = 85dB(A) and peak = 137dB(C) in relation to 20, uPa. The lower exposure action value is LEX.8h = 80dB(A) and peak = 135dB(C) in relation to 20, uPa. Exposure is calculated by reference to a nominal eight-hour time-weighted average working day, as defined by ISO 1999:1990. In relation to exposure limit values, an employer shall take account of the attenuation provided by individual hearing protectors worn by employees, but shall not take account of such protectors in relation to the exposure action values. Where daily noise exposure varies markedly from day to day, an employer may measure the exposure level over a period of a week, provided that the weekly

noise exposure level does not exceed 87dBA and appropriate measures are taken to reduce the risk.

Where employees are liable to be exposed to noise above the lower action value, employers must carry out a risk assessment. If exposure cannot be reduced by other means, employers are required to provide properly fitted hearing protectors, which should be made available if the lower action value (80dBA) is exceeded. If the upper action value (85dBA) is exceeded, employees are obliged to use individual hearing protectors. Employers are required to make health surveillance available and to keep an individual record of each employee who undergoes health surveillance.

Chapter 2: Control of vibration (Regs 133-142)

As a result of the enactment of the Vibration Regulations, which are concerned with both hand-arm and whole-body vibration, employers are required to assess the risk of vibration to employees, and decide if they are likely to be exposed to levels above the daily action limits. If they are, employers are required to put in place a programme of controls to eliminate the risk or at least reduce it to the lowest level reasonably practicable; decide if employees are likely to be exposed above the daily limit value and if they are, to take immediate action to reduce exposure below the limit value; to consult with employees and/or their representatives and to provide information and training on health risks and controls and to review and update risk assessments regularly and to keep a record of risk assessments.

The Vibration Regulations set exposure action and exposure limit values in respect of both hand-arm and whole body vibration. For hand-arm vibration the daily exposure limit value standardised to an eight-hour reference period is 5m/s^2 and the daily exposure action value standardised to an eight-hour reference period is 2.5m/s^2 . For whole-body vibration, the daily exposure limit value standardised to an eight-hour reference period is 1.15m/s^2 . The daily exposure action value standardised to an eight-hour reference period is 0.5m/s^2 .

Employers are required to carry out a risk assessment. The risk assessment must be carried out competently, which effectively means it must be carried out by a competent person. The risk assessment findings must be recorded and if required, measures must be taken to comply with the regulations. Employers are required to make health surveillance available and to keep a record of any employee who undergoes health surveillance.

Part 6 Sensitive Risk Groups (Regs 143-158)

The choice of the words "sensitive risk groups" created a new phrase in the health and safety lexicon. The sensitive risk groups are young persons and children, pregnant employees and night workers and shift workers as defined by the Organisation of Working Time Act.

Apart from the rules governing the protection of young workers, children and pregnant, post natal and breastfeeding employees in the General Applications Regulations, there are numerous regulations concerning the hours such workers may work and their conditions of employment, which are dealt with in chapter 34. The employers' duties in relation to shift workers and night workers are set out in the General Application Regulations.

Chapter 1: Protection of children and young persons

A child is defined as a person under the age of 16, while a young person is a person aged either 16 or 17.

Employers are required, before employing a child or young person, to carry out a risk assessment. The risk assessment should take account of lack of experience, absence of awareness of risks, lack of maturity, and harmful exposure to physical, biological and chemical agents.

When carrying out the risk assessment, one has to take account of the fit-out and layout of the workplace; exposure to physical, biological and chemical agents; the use of work equipment; the

arrangement of work processes and operations and the training and supervision of the child or young person. Parents or guardians of children should be informed of risks.

A child or young person shall not be employed where a risk assessment reveals risk that the work is beyond the capacity of a child or young person or involves exposure to harmful agents or radiation or involves exposure to accidents which it may be assumed a child or young person would not recognise. Health surveillance must be made available if the risk assessment reveals a risk to safety and health and before assignment to nightwork.

Chapter 2: Protection of pregnant, post natal and breastfeeding employees

An employee is required, as soon as practicable after she knows she is pregnant, to notify her employer and to give her employer a medical certificate confirming her condition. The employer is then required to assess any risk to the employee and any possible effect on the pregnancy or breastfeeding.

If the risk assessment reveals a risk and it is not practicable to ensure the health and safety of the employee through preventive or protective measures, the employer is required to temporarily adjust the working conditions or working hours, or both, so that the exposure to such risk is avoided. If that is not possible, the employer is required to take other measures to provide other work which does not present a risk.

Apart from the specific regulations governing night work (see below), in relation to pregnant, post-natal and breastfeeding employees night work is defined as work between the hours of 11pm on any day and 6am the next day, where the employee normally works at least three hours in that period or at least 25% of the employee's monthly working time is worked during that period. If a registered medical practitioner certifies that it is necessary for the health and safety of the employee that she should not be required to perform night work, during the pregnancy or, for the 14 weeks following childbirth, not to oblige her to perform such work, the employer shall transfer her to day work or, if

that is not possible, grant the employee leave or extend the period of maternity leave.

Chapter 3: Night work and shift work (Regs 153-157)

Employers are required to take appropriate steps to protect the safety and health of nightworkers and shiftworkers and to carry out a health assessment of the health and safety risks that attach to nightwork, to determine if the work involves special hazards or heavy physical or mental strain.

Before employing a person as a nightworker, the employer is to make available an assessment of the health effects of such work. Such assessments must also be made available at regular intervals while a person is doing night work. The assessment must be carried out by a registered medical practitioner or a person operating under his/her supervision.

If an employee becomes ill or exhibits symptoms of ill-health that are recognised as being connected with nightwork, the employee must, if it is possible, be transferred to day work.

Nightwork is defined as meaning work between the hours of midnight and 7am. A nightworker is one who normally works at least three hours of his/her time during these hours and for whom the number of hours worked at night is at least 50% or more of the annual hours worked. Night work should not exceed eight hours a night on average over a two month period. If the worker is a special category worker – one whose work involves special hazards or heavy physical strain – the working period shall not exceed eight hours in any 24-hour period. Special hazards are not specifically defined but are deemed to be those identified in collective agreements or by practice.

Part 7 Safety Signs and First-Aid

Chapter 1: Safety Signs

Safety signs at work can be viewed on the HSA's *Guide to the General Application (Safety Signs at a Place of Work)* <http://www.hsa.ie/>

[eng/Publications and Forms/Publications/General Application Regulations/Safety Signs at Places of Work.pdf](#)

There are many forms of safety signs: acoustic, hand signals or signboards. Employers are required to provide safety or health signs where hazards cannot be avoided or adequately reduced by techniques for collective protection, or work organisation methods or procedures. Signs may no longer contain words. Employers are obliged to ensure that signs only include information authorised by the regulations.

Chapter 2: First Aid (Regs 163-166)

First aid is defined as a case where a person requires treatment from a registered medical practitioner or a registered general nurse for the purpose of preserving life or minimising the consequences of injury or illness, until the services of such a person are available, or treatment for a minor injury which would not require the services of such a person.

Those who give first aid should be recognised occupational first aiders. An occupational first aider is a person trained and qualified in occupational first aid. An employer is under a duty to have such number of occupational first aiders at each place of work under his/her/their control as is necessary, taking into account the size and/or the hazards of the undertaking.

Employers are under a duty to maintain such first aid facilities as are appropriate, taking working conditions into account. This may, if the size of the undertaking requires it, mean having a first aid room which should be fitted with all essential equipment and which should be easily accessible for stretchers. The regulations regarding first aid rooms do not apply to work taking place in a means of transport, a fishing vessel or a field/wood attached to, but away from, farm buildings/buildings. Details of the arrangements made for first aid, including the names of occupational first aiders and the location of equipment, rooms and facilities shall be included in the safety statement.

Employers are required to designate at each place of work such number of occupational first aiders as

are necessary to render first aid at the workplace and to ensure that the training given and equipment available to the first aiders is adequate.

Part 8 – Explosive Atmospheres at Places of Work (Regs 167-175)

Employers are required, where there is, or is likely to be, an explosive atmosphere, to carry out a risk assessment. The risk assessment should have regard to:

- The likelihood that explosive atmospheres will occur and their persistence.
- Ignition sources.
- Installations, substances, work processes and their likely interaction.
- The scale of anticipated effects.
- Places which are connected to places where explosive atmospheres may occur.
- Additional information that the employer may need.

Having regard to the risk assessment, the employer is required to prepare an explosion protection document, revise that document where necessary and include or make reference to it in the employer's safety statement. The employer is required to make the explosion protection document available to employees.

In the explosion protection document, the employer is required to specify the measures that have been and will be taken, having regard to the risks, the places classified into zones.

Having carried out an assessment of explosion risk, the employer is required to include that document, or make reference to it, in the employer's safety statement (Reg 169.2.c, pg74).

Part 9 – Control of Artificial Optical Radiation

The overriding duty on employers is to ensure that employees are not exposed to artificial optical radiation above exposure limit values. Employers

are required to identify the hazards, assess the risks, eliminate or, if that is not possible, reduce the risks to the lowest practicable level, providing information and training and, where appropriate, health surveillance.

Employers are required to record in the safety statement the findings of the risk assessment and the steps taken to:

- Avoid/reduce exposure.
- Provide information/training.
- Provide health surveillance.

Employers are required to obtain information from health surveillance, including published sources. Safety professionals will be well aware of the duty to keep up to date with published information, but it is unusual to see the requirement spelled out so clearly in legislation.

Perhaps the most important point to remember is that the duties are framed in absolute terms. The duties are not qualified by the 'as far as reasonably practicable' principle.

If a risk assessment indicates that exposure limit values may be exceeded, the employer is required to devise and implement a plan to prevent exposure exceeding the limit values. If a risk assessment indicates that there are workstations within a workplace where employees are likely to be exposed to levels above the limit values, employers are required to display mandatory signs and ensure that unauthorised access to such areas is blocked off.

Where exposure limit values are exceeded, despite measures taken to comply with the requirement not to exceed them, employers must take immediate action to reduce exposure to below the limits; identify the reasons for limit values being exceeded; and, either by technical and/or organisational methods; prevent ELVs being exceeded again.

Employers are required to provide employees and/or their representatives with information and training. Information and training must cover the technical and organisational measures taken to eliminate/reduce risk, ELVs, the results of risk

assessments, how to detect and report adverse health effects and safe working practices.

Employers are required to make health surveillance available to employees if a risk assessment reveals a risk to their health. Health records of employees who undergo health surveillance must be kept. If an employer ceases to trade, the employer must make the health records available to the HSA.

If an employee is exposed to artificial optical radiation or suffers an identifiable illness or suffers an adverse health effect, which in the opinion of a registered medical practitioner is the result of exposure to artificial optical radiation at work, then an employer must make available to the employee the services of a registered medical practitioner to carry out a medical examination. In such circumstances the employer must review the risk assessment; review the protection measures; take account of the advice of the registered medical practitioner; and arrange continued health surveillance.

While it is the employer's duty to make health surveillance and medical examinations available, once a registered medical practitioner is consulted he/she assumes obligations.

If an employee is exposed to artificial optical radiation or suffers an identifiable illness or suffers an adverse health effect, which in the opinion of a registered medical practitioner is the result of exposure to artificial optical radiation at work, then the registered medical practitioner must:

- Inform the employee of the result, including information and advice regarding health surveillance which the employee should undergo at the end of the exposure.
- Inform the employer of any significant findings.

Part 10 – Pressure Systems

Employers are required to ensure:

- Pressure systems or parts are of good construction, sound material, adequate

strength, suitable quality and free from patent defect.

- Pressure systems are properly installed and maintained.
- Safe operating limits have been established and adequate information on the limits is available.
- Vessels are marked with information, such as the manufacturer's name, serial number, date of manufacture, the standard to which it was built, the maximum allowable pressure, the minimum allowable pressure where it is other than atmospheric and, if relevant to safe operation, the maximum or minimal allowable pressure or both, or if applicable and if different to the operating limits set by the manufacturer, safe operating limits set by a competent person following an examination.
- Employees have adequate information and, if appropriate, written instructions on the conditions of use, safe operation, foreseeable abnormal situations, action to be taken in an emergency and the conclusions to be drawn from the experience of using equipment.
- Pressure equipment or systems are not operated except in accordance with information or instructions.

Even if employees do not use equipment, if a pressure system is located near them, they must be made aware of the health and safety risks.

When maintenance operations are being carried out and there is a hazard from pressure equipment, employers are required, in so far as reasonably practicable, to ensure that the operations are carried out when the pressure system is depressurised. If this is not practicable, appropriate protection measures must be taken.

Employers must, where appropriate, keep a maintenance file. It must be kept up to date. If repairs, which are significant in relation to the system being able to withstand pressure, are required, a competent person should be consulted.

In broad terms pressure equipment and systems must be inspected:

- If new and being installed for the first time.
- If it has previously being used and is installed at a new location.
- At intervals of 14 months and 26 months, depending on the type of equipment.

When pressure equipment is installed for the first time at a location, the employer shall, if it is new fixed equipment or a pressure system, ensure it is inspected by a competent person. Where appropriate, safety devices should be tested before first commission and in the case of pressure vessels, a certificate of commission and test (if appropriate) should be provided by a competent person. This should specify the safe operating limits.

If fixed pressure equipment has been previously used or a pressure system is installed at a new location, it should be inspected and any vessel examined in accordance with whichever of the 14 or 26 month periods apply. In determining test periods in general, the period is determined by when the equipment was first taken into use.

The employer shall ensure that a pressure vessel of the types specified in Schedule 12, Part B, of the regulations and associated devices and accessories are not used unless they have been examined by a competent person at least once during whichever of the 14 or 26 months periods is relevant or a different period if specified by the manufacturer. If a pressure vessel has been modified or a significant repair carried out, it must be examined by a competent person. The examination must, if the equipment is heated, be carried out when it is cold and also when under normal pressure.

The competent person carrying out the examination is required to prepare a report and give a copy to the owner and user. If a competent person requires the immediate cessation of use of a pressure vessel, he/she shall within 20 days send a copy of the report to the HSA. If the

report requires immediate cessation of use of a pressure vessel, the employer, user or owner shall immediately ensure it is not used until the repairs or modifications have been carried out. If a competent person specifies in a report either a shorter or longer period between examinations than set out in Schedule 12, Part B, he/she shall give his/her reason in writing to the owner or user of the vessel.

Part 11- Woodworking Machines

The new Woodworking Machines Regulations broadly re-enact the repealed regulations. A woodworking machine is defined as being any one of 12 types of machine listed in Schedule 13 of the regulations which is intended for use on all or any one of the following: wood, cork, fibre board, and material composed partly of any of those materials. The definitions of the individual types of machine are the same as in the 1972 regulations. There are however two new definitions, a CNC machine and a high risk woodworking machines. The regulations apply to the use of any woodworking machine at a place of work for which an employer has responsibility.

The regulations set out the employer's duties in relation to space around machines, providing training, instruction and information, guarding and protection, maintenance and the emission of dust. The provisions relating to circular sawing machines, multiple rip sawing machines, straight line edging machines, band sawing machines and vertical spindle moulding machines are largely similar to provisions of the 1972 Regulations but are more detailed

Part 12 – Abrasive Wheels

The 2016 Abrasive Wheels Regulations repealed and replaced the 1982 Regulations. The new regulations broadly re-enacted the repealed regulations. The regulations set out the employer's duties in relation to speed of revolution, mounting, authorisation, training, guarding and rests. Abrasive wheels must be suitable for the work, be used in accordance with the manufacturer's instructions

on speed, be mounted properly, not be used by an employee unless he/she has been trained. The names of authorised persons must be entered in the employer's safety statement. When wheels are in motion guards must be provided and kept in place.

Part 13- Abrasive Blasting of Surfaces

Employers are required to ensure blasting apparatus, enclosures and ventilating plant is installed, equipped and maintained so as to minimise the risk of injury to employees and other persons. No sand or substance containing silica should be introduced as an abrasive, all reasonably practicable measures should be undertaken to prevent employees/other persons inhaling dust, persons under 18 must not be employed (except for training) in blasting operations, and employers must ensure PPE must be provided and worn. Blasting must only be carried out in a blasting enclosure. Employers are required to take all reasonably practicable measures to prevent inhalation of dust. Vacuum cleaners with HEPA filters must be used for removing dust.

Part 14 –Reporting of Accidents and Dangerous Occurrences

With the enactment of the Safety, Health and Welfare at Work (General Application) (Amendment No 3) Regulations 2016 one of the long standing policy objectives of the HSA, the final repeal of the 1993 General Application Regulations was achieved. The new reporting regulations came into force on November 1st 2016.

The main provision of the 1993 regulations, that fatal accidents, accidents involving four days or more absence from work and dangerous occurrences must be reported to the HSA, remains in place in the new regulations. The following must be reported to the HSA

- Fatal accidents in which employees die either at the workplace or while carrying out work at another location

- Accidents at places of work or in the course of work, where an employee is out of work for more than three consecutive days (four days), excluding the date of the accident but including any days which would not have been working days
- Accidents involving persons who are not at work but as a result of an accident related to a place of work or work activity die within one year of the accident
- Accidents involving persons not at work but who as a result of an accident related to a place of work or work activity suffer any injury or condition that results in the person being taken to receive medical treatment in a hospital or medical facility
- There is a dangerous occurrence. A list of dangerous occurrences is set out in a Schedule to the Regulations.

Fatal accidents should be reported as soon as possible by the quickest practical means and within five days a written report should be sent to the HSA. Non-fatal accidents should be reported within ten days. The Regulations remove the requirement for a family member to report fatal accidents involving self-employed persons.

A list of dangerous occurrences that must be reported to the HSA is set out in the General Application (Accident and Dangerous Occurrences Reporting) Regulations (SI 370/2016). Collapses, overturning, failure of load bearing parts, overturning explosions, uncontrolled releases and escapes of substances are dangerous occurrences, if they are on a list 15 items/events listed (see schedule 15 of the regulations). The items include vehicles, lifting equipment, pressure vessels, explosions of fire, escape of flammable substances, collapse of scaffolding, escape of a substance, explosives, freight containers, pipelines, breathing apparatus, overhead electric wires, locomotives, bursting vessels and a new entry on the list wind turbines. Dangerous occurrences must be reported as soon as practicable and in any event not later than ten days after the occurrence.

**CHAPTER 3:
THE CONSTRUCTION
REGULATIONS 2013**

The *Construction Regulations 2013* could be described as the fourth edition of the regulations which were first enacted in 1995. The regulations are set out in 14 parts and seven schedules (see *Table 3.1*). The 14 parts fall into three broad categories:

- 1) Management duties: set out in Parts 1, 2 and 3; which deal with definitions, design

and management, and the general duties of contractors and others.

- 2) General safety: general safety provisions (Part 4); general health hazards (Part 9); and welfare facilities (Part 14).
- 3) Technical safety provisions: (Parts 5-8 and 9-13).

Management Duties

Before considering the detail of the regulations, a number of key definitions should be noted (see *Table 3.2*).

TABLE 3.1: Structure of the SHWW (Construction) Regulations 2013

Part 1	Interpretation and General: Regs 1-5
Part 2	Design and Management: Regs 6-23
Part 3	General Duties of Contractors and others: Regs 24-29
Part 4	General Safety Provisions: Regs 30-50
Part 5	Excavations, shafts, earthworks, underground works and tunnels: Regs 51-56
Part 6	Cofferdams and Caissons: Regs 57-60
Part 7	Compressed Air: Regs 61-72
Part 8	Explosives: Regs 73-78
Part 9	General Health Hazards: Regs 79-84
Part 10	Construction Work On or Adjacent to Water: Regs 85-86
Part 11	Transport, Earthmoving and Materials Handling, Machinery and Locomotives: Regs 87-92
Part 12	Demolition: Regs 93-96
Part 13	Roads, Etc: Reg 97
Part 14	Construction Site Welfare Facilities: Regs 98-105
Sch 1	Non-Exhaustive List of Works Involving Particular Risk
Sch 2	Non-Exhaustive List in Relation to General Principles of Prevention
Sch 3	Minimum particulars to be notified by the PSCS to the HSA before construction work begins
Sch 4	Safety Awareness Scheme (Safe Pass)
Sch 5	Construction Skills Certification Scheme
Sch 6	Procedure for Selection of Site Safety Representatives
Sch 7	List of Vehicles Requiring Auxiliary Devices/Visual Aids

TABLE 3.2: Definitions (Reg 2)

Client: a person for whom a project is carried out.

Construction site: any site where construction work in relation to a project is carried out.

Construction stage: means the period of time starting when preparation of the construction site begins and ending when work in the project is completed.

Construction work: means the carrying out of any building, civil engineering or engineering work, other than drilling and extraction in the extractive industries, and includes but is not limited to the following: the doing of one or more of the following with respect to a structure – construction, alteration, conversion, fitting out, commissioning, renovation, repair, upkeep and redecoration or other maintenance. Other maintenance includes cleaning, which involves the use of water or an abrasive at high pressure or the use of substances classified under the Classification, Packaging and Labelling of Dangerous Perperations Regulations 2004, the CPL Regulations.

Contractor: means a contractor or employer whose employees carry out or manage construction work or a person who carries out or manages construction work and supplies labour and/or materials.

Designer: means a person engaged in work related to the design of a project.

Design process: is the process of preparing and designing a project, including alterations to the design and the design of temporary work to facilitate construction of a project.

Footpath, road, footway and cycle track: a road means a road over which there is a public right of way and footpath means a road over which there is a public right of way for pedestrians only. A footway means that portion of a roadway which is provided for use by pedestrians. A cycle track means a road, including part of a footway, which is reserved for pedal cyclists.

Project: means an activity which includes, or is intended to include, construction work.

Project supervisor: a project supervisor is an individual or a body corporate, appointed under Reg 6 (1) for carrying out duties assigned by the regulations and duties assigned by the client at the time of the appointment and necessary to comply with section 17(1) of the SHWW Act 2005, which requires those who commission or procure construction projects to appoint competent persons in relation to the design and safe construction of the project.

Part 2: Design and Management

Client's duties

PSDP, PSCS and contractors: Regulations 6 & 7

A client is required to appoint a project supervisor for the design process (PSDP) and for the construction stage (PSCS). The persons appointed must be competent, must be appointed in writing and must confirm acceptance of their appointments in writing. The PSDP must be appointed at or before the design process

begins and the PSCS before construction work commences. Prior to any work commencing, the client must reasonably satisfy himself/herself that those appointed as PSDP, PSCS, designers and contractors have or will allocate adequate resources to perform their duties.

Project supervisors must be appointed if the work involves particular risk, more than one contractor is involved or if the construction work is planned to last longer than 30 days or is scheduled to exceed 500 working days (*see regulation 10 below*).

A non-exhaustive list of particular risks is set out in Schedule 1 of the General Application Regulations 2007. They include:

- Falling from a height.
- Burial under earthfalls.
- Engulfment in swampland.
- Work near high voltage power lines.
- Exposure to risk of drowning.
- Work on underground earthworks and tunnels.
- Work carried out in a cassion.

Safety file: Regulation 8

Clients must keep safety files available and when disposing of a structure, deliver the safety file to the person acquiring it. They must co-operate with the PSDP and PSCS in relation to the time required for completion of the project and by providing information (including information on the state or condition of the structure) to enable project supervisors to comply with the regulations.

Safety and Health Plan: Regulation 9

Clients are required to provide a copy of the safety and health plan to every person being considered or tendering for the role of PSCS. This requirement does not apply to domestic dwelling projects but when a PSCS is appointed, then he/she must be given a copy of the plan.

Notify HSA: Regulation 10

If construction work is planned to last longer than 30 working days or is scheduled to exceed 500 person days, clients are required to notify the HSA with details of what is known about those appointed as project supervisors.

PSDP duties

Co-ordination and co-operation: Regulation 11

The PSDP is required take account of the general principles of prevention during the various stages of design and construction (including estimating the time for completion of a project) and of any safety and health plan or safety file. The PSDP is required to organise co-operation amongst designers. He/she may appoint a competent person as health and safety co-ordinator to assist.

Safety and Health Plan/Safety and Health File: Regulations 12 & 13

The PSDP is required to prepare a written safety and health plan, giving a general description of the project and specifying the timeframe for completion and giving information on other work activities on the site. A requirement to take account of the location of electricity, water and sewage connections and to facilitate adequate welfare facilities is specified. The safety and health plan must be prepared in time to provide it to every person being considered or tendering for the role of PSCS. He/she is required to keep a copy of the safety and health plan.

The PSDP shall prepare a safety file, containing relevant health and safety information, to be taken into account during future construction work, and on completion of the project, deliver it to the client.

Issue directions: Regulation 14

The PSDP may issue directions to designers, contractors and others, which will enable the PSDP to comply with the duties imposed by the regulations and he/she may notify the HSA if he/she concludes the directions are not being carried out by the designer, contractor or other person.

Designers' duties

Regulation 15

If the designer is not aware of the appointment of a PSDP, the designer is required to inform the client of his/her duties in relation to appointments under regulation 6: in particular, to appoint a PSDP.

Designers must take account of the general principles of prevention, the safety and health plan and the safety file. They must co-operate with the PSDP and comply with directions from the PSDP.

PSCS duties

Safety and Health Plan and Safety File: Regulations 16 and 21

The PSCS stage is required, as the PSDP will already have commenced preparing it, to "further" develop the safety and health plan and to make adjustments where required.

Co-ordination and co-operation: Regulation 17

The PSCS is required, in a project, where more than one contractor is involved or if the work is scheduled to last for more than 30 days or 500 person days or if the work involves particular risk, to co-ordinate the implementation of the general principles of prevention and organise and monitor co-operation on site. He/she is required to provide safety representatives with access to information regarding safety, health and welfare. Where necessary he/she must take corrective action.

The PSCS is required to keep records and documents for the duration of the project. In relation to vehicles, the PSCS shall ensure safe and suitable access and that traffic and pedestrian routes are organised as required by Regulation 87(2).

Safety adviser: Regulation 18

If normally there are more than 100 people engaged in construction work on a construction site at any one time, the PSCS shall appoint in writing a full-time competent safety adviser to advise him/her as to compliance with statutory requirements and to exercise general supervision of the requirements and promotion of the safe conduct of work.

Safety awareness: Regulation 19

General construction workers, craft workers and security personnel are required to hold a card showing that they have successfully completed the SOLAS Safe Pass or an equivalent safety awareness training course approved by SOLAS, or equivalent safety awareness schemes approved by other EU member states, provided they are approved by SOLAS.

Issue directions: Regulations 20

The PSCS may issue directions to designers, contractors and others, which will enable the PSCS to comply with the duties imposed by the regulations and he/she may notify the HSA if he/she concludes the directions are not being carried out by the designer, contractor or other person.

Notification to HSA: Regulation 22

Where a project is planned to last for longer than 30 working days or exceed 500 person days, the

PSCS must notify the HSA before work begins and must display a notice on site setting out particulars of the work being undertaken.

Site safety representative: Regulation 23

The PSCS is required to co-ordinate arrangements made by contractors, made in consultation with employees, to enable the contractors and their employees to co-operate in promoting safety, health and welfare on site. He/she will, where more than 20 people are normally employed at any one time, facilitate the appointment of a site safety representative.

He/she will ensure that the site safety representative has access to the risk assessment, information on accidents and dangerous occurrences, information on protective and prevention measures, is informed when a HSA inspector enters the site and when site safety meetings are being held. He/she will facilitate the site safety representatives' attendance at such meetings.

The site safety representative may, on giving reasonable notice to the PSCS and his employer or, in the event of an accident or dangerous occurrence or if there is an imminent danger, inspect the whole or any part of the site. Site safety representatives may investigate accidents and dangerous occurrences, provided they do not interfere with or obstruct the performance of any statutory obligation. They may also, after giving reasonable notice to the PSCS and the contractor, investigate complaints relating to health and safety.

A site safety representative may accompany an inspector who is inspecting a site, but if the inspection is in connection with an investigation of an accident or dangerous occurrence, only at the discretion of the inspector. Again, at the inspector's discretion, where an employee is being interviewed concerning an accident or dangerous occurrence the site safety representative may, if the employee requests, attend the interview.

Site safety representatives are entitled to make representations to HSA inspectors, to receive advice and information from inspectors and to consult with other safety representatives at the site.

Project supervisors and contractors are required to take account of representations made by site safety representatives. Employers are required to afford them time off, without loss of remuneration, to enable them to acquire the skills and knowledge they need to discharge their functions.

Part 3: General Duties of Contractors and others

General duties: Regulations 24

Contractors, if they are aware that a client has not appointed project supervisors, must inform clients of their duty to do so. Contractors must co-operate with the PSCS to enable the project supervisor to comply with statutory provisions and must promptly give the PSCS site-specific information; including relevant extracts from their safety statements that is likely to affect safety, health and welfare on site or might justify a review of the safety and health plan.

Contractors are required to provide copies of reports of accidents or dangerous occurrences to the PSCS. Also, contractors must promptly provide the PSCS, in writing, with all relevant information necessary to prepare the safety file.

Contractors must also:

- comply with directions given by either the PSDP or the PSCS.
- bring to the attention of its employees any rules applicable to them in the safety and health plan.
- comply with any rules in the safety and health plan which are applicable to the contractor or its employees.
- in so far as is reasonably practicable, ensure its employees comply with the rules.
- facilitate the performance by the site safety representative of his/her functions.

Safety awareness and skills certification: Regulation 25

Workers are required to hold a valid safety awareness registration card (Safe Pass) and, if applicable, a valid construction skills registration

card (CSCS). Contractors are required to ensure workers possess such cards. When the worker commences work, the contractor must ask to see the card/s and confirm in writing to the PSCS that the worker is in possession of a valid card.

Safety officer: Regulation 26

Every contractor who normally has under his/her direct control at any one time more than 20 persons on a construction site or 30 persons engaged in construction work shall appoint in writing a safety officer. The safety officer's role is to advise and exercise general supervision in relation to statutory provisions and the promotion of safe conduct.

Though a safety adviser and a safety officer could be one and the same person, advising both the PSCS and the contractor, if they are separate persons the safety officer must co-operate with the safety adviser.

Erection and installation of plant and equipment: Regulation 27

Contractors are required to erect and install plant and equipment, including scaffolding, in a manner that complies with statutory provisions.

Consultation: Regulation 28

The contractor is required, with a view to promoting safety, health and welfare on site, to ensure consultation with his/her employees, their safety representative and the site safety representative, taking account of the need for co-operation and co-ordination among different employees, safety representatives of different contractors and the site safety representative.

Duties of employees and others: Regulation 29

Everybody working on a site is required to: comply with the Construction Regulations; co-operate, report defects in plant and equipment; comply with the rules in the safety and health plan; make proper use of equipment and PPE; and show Safe Pass and CSCS cards when requested.

When applying for Safe Pass or CSCS cards, it is an offence to make false statements or to forge or alter a registration card.

GENERAL SAFETY

The general safety provisions are set out in Part 4 of the Construction Regulations, in regulations 30 to 50. These regulations deal with the day to day safety issues that apply to all workplaces: matters such as access and egress, traffic routes and lighting, amongst others. The issues of general health hazards (Part 9) and welfare (Part 14) might also be considered general safety issues, when compared with the regulations on excavations, cofferdams and the like, which are very specific technical issues.

Part 4: General Safety Provisions – regulations 30-50

All but one of the regulations; in this part of the Construction Regulations; impose absolute duties on contractors.

The exception is the regulation concerning site safety and access. The contractor responsible for the construction site is required, in “so far as is reasonably practicable”, to ensure the site is safe and without risk to safety, health and welfare and is required to ensure that the perimeter of the site is clearly visible and identifiable and that safe means of access and egress are provided and maintained.

All the other regulations, with two exceptions, start off with the words “the contractor shall ensure”. One of those exceptions, regulation 45, concerns fire and fire-fighting equipment and requires the contractor responsible for the site to provide fire-fighting equipment, detectors and alarms. The other is regulation 38, which is concerned with wet paint.

Part 9: General Health Hazards – regulations 79-84

The contractor responsible for a construction site is required, where persons might be exposed to chemical, physical or biological hazards, to take appropriate preventative measures. In so far as is reasonably practicable, a hazardous substance should be replaced by a harmless or less hazardous substance. In relation to plant and equipment, technical measures should be taken. Other measures to be taken might include the use of PPE.

Contractors responsible for sites are required to ensure that outdoor workers are protected from atmospheric influences that could affect their safety and health and ensure the temperature is appropriate, having regard to the working methods used and the physical demands placed on workers. In indoor workstations, temperatures should be appropriate. Where a forced ventilation is used, it should not expose persons to draughts harmful to health.

Waste should be destroyed or disposed of in a manner not liable to be injurious to health.

Part 14: Construction Site Welfare Facilities – regulations 98-105

Contractors responsible for construction sites are required to provide:

- Adequate suitable enclosed accommodation for taking shelter during bad weather and for depositing clothing not worn during working hours. This accommodation should be equipped so that workers can keep warm, dry clothes, boil water and prepare meals.
- Changing rooms where workers wear special clothes and they cannot, for reasons of health and propriety, be expected to change in another area and, where work clothes may be contaminated by dangerous substances, atmospheric conditions or the atmosphere at the place of work, facilities to keep working clothes separate from personal clothes. If changing rooms are not required, lockers should be provided.
- Washing facilities that are adequate and suitable, given the numbers working and the nature of the work.
- Sanitary conveniences that are under cover and partitioned off to ensure privacy. Sanitary conveniences should be accessible at all times and maintained in a clean and hygienic condition. Separate conveniences should be provided for men and women.

Where there is fixed living accommodation on a site, the responsible contractor should ensure that

it includes a rest room, a leisure room, sanitary equipment and takes into account the numbers on site, beds, cupboards, tables and seats (with backs). Accommodation should be allocated taking account of both sexes.

Contractors responsible for sites are required to ensure that that pregnant women and nursing mothers are provided with rest facilities and that places of work are organised to take account of people with disabilities, with particular regard paid to doors, passageways, staircases, showers, wash-handbasins, lavatories and work-stations.

TECHNICAL SAFETY PROVISIONS

Apart from the management regulations and the general safety provisions, the Construction Regulations include specific rules relating to a range of technical tasks, from excavations to demolition.

Part 5: Excavations, Shafts, Earthworks, Underground Works and Tunnels – regulations 51-56

Adequate precautions shall be taken in any excavation, shaft, earthwork, underground works or tunnel to guard against: danger from a fall or dislodgment of earth, rock or material; the fall of people, materials, objects; or the inrush of water. Also, adequate precautions shall be taken: to secure ventilation; to maintain an atmosphere fit for respiration; to limit fumes, gases, vapours, and dust to levels not injurious to health; to enable workers to reach safety in the event of fire or inrush of water or materials; and to avoid dangers from underground cables, fluids or gases by seeking to locate them before excavation begins.

Excavations, shafts, earthworks, underground works and tunnels are required to be inspected by a competent person prior to anyone working in them and then at least once every day. The face of every tunnel and the working end of every trench more than two metres deep must be inspected by a competent person at the commencement of every shift. Before a person shall be permitted to

work in such areas, a competent person should inspect particularly the areas in which blast explosives were used or where shoring or support has been damaged and every part within the immediately preceding seven days. A report of every such examination shall be made on the day of the examination. If a fall or dislodgment from more than a height of 1.25 metres is not likely, this regulation shall not apply, nor, provided adequate precautions are taken, does it apply when inspections/examinations are being carried out. Shoring and other support work shall be carried out by experienced workers under the direction of a competent person and such work shall be of good construction, adequate strength and free from patent defect.

Such work areas shall be fenced off if people are at risk of a fall liable to cause personal injury.

Part 6: Cofferdams and Caissons – regulations 57-60

Cofferdams/caissons shall be of good construction, strong, made from sound materials, be free from patent defects. They shall be properly maintained. In the event of flooding, workers should be able to reach safety. Cofferdams/caissons are required to be built under the supervision of a competent and ideally an experienced person. Materials to be used in building shall be examined. When work is being done, the cofferdam/caisson must be inspected at least once a day and examined at least once a week by a competent person. A report of the examination shall be made in the approved form.

Part 7: Compressed Air – regulations 61-72

Compressed air means air compressed above atmospheric pressure measured in kg/cm². Work in compressed air shall be planned and supervised by a competent person and undertaken subject to the appropriate precautions. Equipment provided for use in relation to work in compressed air shall be of good design and construction; be strong; be

made from sound materials; be free from patent defects; be properly maintained and suitable for the purpose used.

Workers in compressed air shall be medically examined, fit for the work, trained and informed of the precautions to be taken. In certain cases the doctor carrying out the medical examination must be familiar with compressed air work. A doctor, nurse or trained first aider familiar with such work shall be available.

Identification badges may be required. Working chambers, medical locks, man-locks and air supply shall have the appropriate pressure measurements and the appropriate pressure shall be maintained at all times.

Part 8: Explosives – regulations 73-78

The contractor responsible for the construction site is required to ensure, in so far as reasonably practicable, that all explosives used on site are stored, transported, used and disposed of safely. The contractor is required to appoint an explosives supervisor and to appoint competent persons as shotfirers and storekeepers. The contractor must also ensure that the shotfirers hold valid CSCS cards and that trainee shotfirers are under the supervision and direction of a competent shotfirer. The contractor must draw up shotfiring rules. If there has been a misfire, the contractor should take steps to determine the cause. Only shotfirers or trainee shotfirers shall detonate explosives.

Part 10: Construction Work Adjacent on or to Water – regulations 85-86

If there is a risk on a construction site that a person could fall into water and drown, then suitable rescue equipment must be provided and kept ready. Also, fencing should be erected in order to prevent such a fall. If a person is transported to work on water, the method of transport provided should be safe.

Part 11: Transport, Earthmoving and Materials Handling, Machinery and Locomotives – regulations 97-92

On all construction sites on which transport vehicles are used, safe and suitable access shall be provided and traffic shall be organised so as to secure operational safety.

Part 12: Demolition – regulations 93-96

Contractors are required to, when demolition may present a danger, to take precautions and ensure that work is planned and undertaken only under the supervision of a competent person. Steps must be taken to prevent fire, explosion or flooding.

Part 13: Roads – regulation 97

Contractors are required to provide adequate lighting and guarding and that works are supervised by a competent person and that at least one person at a roadworks site holds a CSCS registration card.

CHAPTER 4: CHEMICALS LEGISLATION

The European Commission points out that while modern society needs chemicals and the EU chemicals industry is an important sector of the EU's economy, "the production and wide-spread use of substances may pose risks to human health and the environment". The hazards, the risks and how to control the risks are considered in chapter 21.

This chapter examines the legal framework and summarises the main provisions of European and Irish chemicals legislation:

- The Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (REACH).
- Classification, Labelling and Packaging (CLP) Regulation (EC 1272/2008).
- Chemicals Acts 2008-2010.
- Safety, Health and Welfare at Work (Carcinogens) Regulations 2001.
- Safety, Health and Welfare at Work (Chemicals Agents) Regulations 2001.
- Detergents Regulation (EC 648/2004).

REACH

The Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) Regulation 1907/2006 is an EU regulation which applies directly in Ireland. REACH is concerned with the protection of human health and the environment from chemicals and substances that are harmful to health and the environment. It is an extremely complex regulation – 849 pages long – and places duties on manufacturers, importers and downstream users of chemicals.

REACH is a regulation which falls into three categories of legislation: health and safety; environment; and single market. While the stated purpose of the regulation is the protection of human health and the environment. It is also a single market measure, placing duties

on manufacturers, importers, suppliers and downstream users of chemicals to register and seek authorisation to place chemicals on the market.

Companies manufacturing chemical substances or importing them into the EU in volumes of one tonne or more per annum are obliged to register with the European Chemicals Agency (ECHA), in accordance with REACH. Companies may also be required to seek authorisation (a licence) to use or to place chemical substances of very high concern (such as carcinogens, mutagens or reproductive toxins) on the market for a stated use.

Chemicals which have been deemed as posing unacceptable risk to human health or the environment may be limited or banned from being placed on the market or used.

CLP Regulation

The *Classification, Labelling and Packaging Regulation* is a European regulation that applies directly in member states, including Ireland. The CLP Regulation adopts the UN Globally Harmonised System on the Classification and Labelling of Chemicals. It provides a basis for communicating information on hazards in a uniform way throughout the world. CLP aims to protect workers, consumers and the environment by communicating physical, human health and environmental hazards through classification and labelling. The regulation places duties on manufacturers, importers, downstream users and distributors or producers of articles to ensure that hazard information is communicated by the information on the label.

Chemicals Acts 2008-2010

The main purpose of the *Chemicals Act 2008* was to confer power on the HSA to enforce the provisions of the EU REACH Regulation, the CLP Regulation, the Rotterdam Regulation and the Detergents Regulation. Under the Act, the Authority is given a wide range of enforcement powers, similar to those granted to the Authority under the SHWW Act 2005. The Authority may serve improvement notices and prohibition notices. It is also given power to serve a contravention notice on a person who contravenes statutory

provisions or fails to comply with directions to submit an improvement plan. A contravention notice may be served on a person “who has or may reasonably be presumed to have control of the activity concerned”. The Authority may also apply to the High Court where a prohibition notice is contravened or where it believes an activity involving serious risk should be restricted or prohibited.

Persons or organisations, which the HSA believes have committed an offence, may be prosecuted in either the Circuit Court or the District Court. A person or organisation found guilty of an offence by the Circuit Court can be fined up to €3m and/or be given a two-year jail sentence. If convicted by the District Court, an organisation may be fined up to €5,000 and a person may be fined and imprisoned for up to 12 months.

The Act includes a section similar to section 80 in the SHWW Act 2005. Section 30 provides that if an offence has been committed with the connivance, consent or is attributable to the neglect of a director or manager, that person, as well as the organisation, shall be guilty of the offence and may be charged with the offence.

The *Chemicals (Amendment) Act 2010* brought the EU Classification Labelling and Packaging Regulations (EU CLP Regulation) within the scope of the Chemicals Act 2008. Most of the changes brought about by the Act are of a technical nature but the following should be noted: the HSA is a competent body for the purposes of the EU CLP Regulation; the Act allows the HSA to serve prohibition notices in relation to major accident hazards relating to dangerous substances; and District Courts are empowered to impose prison sentences of up to 12 months and fines of up to €5,000 for health and safety offences.

Carcinogens Regulations 2001

Carcinogens are substances which may cause cancer. The *Safety, Health and Welfare at Work (Carcinogens) Regulations 2001* define carcinogens by reference to EU legislation. Carcinogens include medicinal, veterinary and cosmetic products as well as pesticides. The definition also includes agents which have not

formally been designated as carcinogens in EU legislation, where the manufacturer has information indicating that the substance is a category 1 or category 2 carcinogen.

Employers must protect workers from exposure to carcinogens and also from exposure to mutagens and hardwood dust. The regulations also set out limit values for benzene, vinyl chloride monomer and hardwood dusts.

Employers are required to assess the risk to employee's health and safety from any activity that may expose an employee to carcinogens, mutagens or hardwood dust. They must determine the nature, extent and duration of the exposure and set out protection measures. All routes of risk and prevention and reduction measures must be considered and in particular, measures to ensure that exposure does not exceed the limit values must be taken.

Limit values for benzene are set at 1 ppm, vinyl chloride monomer 3ppm, and hardwood dust at 5.0 mg/m³.

Employers are obliged to keep records of employees engaged in activities that may have exposed them to asbestos, and records of health surveillance. Individual confidential records must be kept by a medical practitioner. Records must be kept for at least 40 years following the relevant exposure.

Employees have a right to be consulted and informed about the use of carcinogens, mutagens and foreseen and unforeseen exposures. They are entitled to training and health surveillance.

The *Safety, Health and Welfare at Work (Carcinogens) (Amendment) Regulations 2015* (SI 622/2015) amends a number of regulations in order to align them with the EU CLP Regulation and to transpose article 5 of the Chemicals Handling Directive (2014/27/EU).

The Regulation substitutes new definitions of carcinogens, and mutagens, in place of the definitions in the Carcinogens Regulations 2001. The regulations also apply to asbestos. The word

mixtures is substituted for the word preparations in the earlier regulations.

Chemical Agents Regulations 2001

The *Chemicals Agents Regulations 2001* are concerned with the protection of workers from exposure to chemical agents. Employers are required by the regulations to protect workers from the risks related to chemical agents at work. The regulations set out the measures employers must take and deal with risk assessment, prevention and control measures, health surveillance, record keeping and employee's duties. The regulations apply in situations where hazardous chemical agents, including lead and carcinogens, are present or likely to be present in the workplace.

Hazardous chemical agents are defined as those meeting classifications for dangerous substances in Directive 67/548/EEC and for dangerous preparations in Directive 99/45/EC and any chemical agents which may, because of physio-chemical properties, chemical or toxicological properties and the way they are used or are present in the workplace, present a danger to the health and safety of employees. The definition covers chemical agents assigned an occupational exposure limit value in the Code of Practice to the regulations.

When carrying out a risk assessment, employers must take account of: the hazardous properties of chemical agents and information available from suppliers, on safety data sheets. Also take account of the type and duration of exposure work, circumstances and quantities stored; occupational exposure limit values and biological limit values in the Code of Practice; the effects of preventative measures, conclusions from health surveillance and activities including the maintenance and accidental release in respect of which it is foreseeable that there is potential for significant exposures.

Risk assessments should be recorded in writing and reviewed regularly, or if there are reasons to suspect that the risk assessment is no longer valid, there have been changes in work practice, health surveillance results show it is necessary, or exposure limits have been exceeded.

When the risk assessment reveals a risk, employers must, in so far as reasonably practicable, reduce the risk by:

- The provision of suitable equipment.
- Reducing the minimum number of employees exposed.
- Reducing the duration and intensity of exposure.
- Putting in place hygiene measures.
- Reducing the quantity of chemicals to a minimum.
- Having in place safe handling, storage and transport arrangements.

Employers may also require to take specific protection measures, by applying in order of priority: avoidance of the use of hazardous chemical agents or processes; design of work processes; engineering controls; use of extraction systems at source and in conjunction with these methods, if they do not work on their own, PPE.

Employers must draw up action plans to deal with emergencies/accidents/incidents. Action plans must include arrangements for regular safety drills, first aid facilities, warning and communications systems, and the provision of protective clothing and PPE.

Employers are required to make health surveillance available when employees' exposure to a hazardous chemical is such that an identifiable disease or adverse health effect may be related to the exposure; there is a reasonable likelihood of disease or effect under the particular working conditions; or there are valid low risk techniques for detecting indications of disease or effect.

Health surveillance is compulsory when a biological limit value is listed in the second schedule of the regulations or an approved code of practice. Employees exposed must be informed of this requirement if they are being assigned to work involving risk of exposure.

Employers are obliged to keep individual health records. Occupational healthcare professionals

must, in respect of employees who receive health surveillance, keep records of health surveillance, biological and other monitoring. If the health surveillance shows that an employee has an identifiable disease or is suffering an adverse effect, the healthcare professional must inform the employee and give information and advice on the health surveillance to be undergone following exposure. Employers are required, if ceasing business, to make records available to the HSA.

The *Chemicals Agents Code of Practice 2016* transposes into Irish national law Directive 2009/161/EU, which establishes a third indicative list of occupational exposure limit values. To assist readers of the Code, the HSA has set out the list in part 2 of Schedule 2 of the Code. The list, which is at page 39 of the Codes, is short – just one page.

In a foreword to the Code, the HSA advises that some OELVs have been withdrawn because insufficient scientific data is currently available. However, the Authority cautions that this does not imply any change in the hazardous aspects of these chemicals. In Schedule 3 of the Code the Authority provides a list of substances which were under review during the period 2011 to 2013.

In Schedule 2, Part 1 of the Code, the chemical agents for which OELVs have been changed since the 2010 Code are listed.

The Code is published to provide practical guidance on the Chemical Agents Regulations. Apart from the schedules, the Code includes a definitions/glossary section.

The *Safety, Health and Welfare at Work (Chemical Agents) (Amendment) Regulations 2015* (SI 623/2015) amends the Chemical Agents Regulation 2001 (SI 609/2001) in order to align it with the EU CLP Regulation. The Regulation also transposes article 4 of the Chemicals Handling Directive (2014/27/EU).

The Regulations amend the Chemical Agents Regulation 2001 (SI 609/2001). Among the changes to the 2001 Regulation is the substitution of a new definition for the definition hazardous chemical agent. Other changes include substituting

the words SHWW Act 2005 for the Chemical Agents Regulations and the substitution of a paragraph concerning the information that shall be provided by a supplier in place of regulation 4(h) of the 2001 Regulations, which states any activity including maintenance and accidental release in respect of which it is foreseeable that there is a potential for significant exposures.

Detergents Regulation

The Detergents Regulation (EC 648/2004) as amended covers the manufacture, sale and use of detergent products. Any person placing a detergent on the market must comply with the regulation. The regulation applies to persons changing the characteristics or labelling of a detergent and to packagers working on their own account. The regulation sets out specific requirements for labelling and packaging of detergent products. Those responsible for labelling and packaging must also ensure an ingredient data sheet containing the name of the manufacturer is made available to all medical personnel.

CHAPTER 5: DANGEROUS GOODS ACT AND REGULATIONS

The law relating to the carriage of dangerous goods by road is set out in the *Carriage of Dangerous Goods by Road Act 1999* and the *Carriage of Dangerous Goods by Road Regulations 2007*. The Act should be read in conjunction with *Carriage of Dangerous Goods by Road and Transportable Pressure Equipment Regulations 2011* and *2017* and various regulations governing the transporting of scheduled substances by road and with reference to the *Dangerous Goods Safety Advisors Regulations*. The Act gives force to EU Directives, which themselves implement the international ADR (The European Agreement Concerning the International Carriage of Dangerous Goods by Road) and RID (The International Agreement on the International Carriage of Dangerous Goods by Rail)

The Act itself is short, yet it has a wide scope. The Act makes reference to two annexes (A and B) to the ADR Directive, which list over 700 pages of goods classified as dangerous goods. There is also a supplemental 200 page list. The 900 pages are grouped under class headings, which are:

- Class 1: explosive substances and articles.
- Class 2: gases – compressed, liquefied or dissolved under pressure.
- Class 3: flammable liquids.
- Class 4.1: flammable solids.
- Class 4.2: substances liable to spontaneous combustion.
- Class 4.3: substances which, in contact with water, emit flammable gases.
- Class 5.1: oxidising substances.
- Class 5.2: organic peroxides.

- Class 6.1: toxic substances.
- Class 6.2: infectious substances.
- Class 7: radioactive material.
- Class 8: corrosive substances.
- Class 9: miscellaneous dangerous substances and articles.

Under the Act, the Minister has wide powers to introduce regulations governing the carriage of goods, driver training, examinations, labelling and the notification of accidents and dangerous occurrences.

The 2011 *Carriage of Dangerous Goods by Road and Use of Transportable Pressure Equipment Regulations* give effect to the 2011 ADR and transpose the Transportable Pressure Equipment Directive 2010 into Irish national law. The Regulations recast the earlier set of regulations governing the carriage of dangerous goods by road. The set of five regulations, dealing with competent authorities, fees and miscellaneous provisions, are now consolidated into one regulation.

The 2011 regulations also move away from the detailed prescriptive model of the earlier regulations, in favour of direct referencing of the ADR. In relation to transportable pressure equipment, the Regulations introduce the concept of economic operators in relation to transportable pressure equipment. The Regulations also introduce three categories of fixed penalty fines, ranging from €100 to €500.

The *European Communities (Carriage of Dangerous Goods by Road and Use of Transportable Pressure Equipment) (Amendment) (No 2) Regulations 2015* (SI 288/2015), transpose the EU Directive 2014/103, which adopts the European ADR into national law.

The *Carriage of Dangerous Goods by Rail Regulations 2010* set out the duties of participants and deal with the suitability of

containers and tanks and the role of inspection bodies. The regulations also deal with examinations.

In 2005 the HSA was appointed as one of the competent bodies to perform functions under the Carriage of Dangerous Goods by Road Act. This appointment was reaffirmed by the subsequent Regulations.

Dangerous Goods: safety advisor

The advent of the Dangerous Goods Safety Adviser (DGSA) marked the development of a new safety specialism. Organisations who carry dangerous goods by road or rail are required to appoint a DGSA. The DGSA is required to advise the undertaking on health, safety and environmental issues relating to the transport of dangerous goods. He must also advise the company on preparing accident reports arising from the carriage of dangerous goods and on preparing an annual performance report.

DGSAs must hold a vocational training certificate, appropriate to the modes of transport used by the undertaking and to the type of goods transported. To obtain a vocational training certificate an aspiring DGSA must follow a course of training approved by a competent authority (in Ireland, the HSA for road transport, and the Minister for Transport, Tourism and Sport in relation to rail transport) and pass an examination approved by the competent authority. Certificates issued in one EU member state must be recognised in others. Certificates are valid for five years.

Among the specific duties of a DGSA, in addition to the advisory/report role, are to monitor practices and procedures for compliance: when purchasing transport; checking equipment; training and maintenance of training records; emergency procedures in event of an accident; accident investigation; measures to prevent recurrence; measures to increase risk awareness; and verification procedures to ensure on the means of transport required documents and equipment and compliance with legislation governing loading and unloading.

Under the Regulations, inspectors (HSA and others who are specifically appointed) are empowered to check transport and transport equipment, enter premises, take samples, require production of reports and other documents and if they consider the transport of dangerous goods by the undertaking may pose a serious risk to persons, to serve a prohibition notice.

CHAPTER 6: **ORGANISATION OF WORKING TIME**

Whether working time is a health and safety matter or not was put beyond any doubt by the Court of Justice of the European Union (CJEU), when it rejected the arguments of the British Government that the Organisation of Working Time Directive could not be considered a health and safety measure.

Why working time should be considered to be a health and safety issue is well illustrated by the finding of the Marine Casualty Investigation Board, which concluded that the single overriding causal factor in the sinking of the fishing vessel, the 'Tit Bohomme', in which five fishermen lost their lives, was insufficient rest for the crew and that regulations on hours of work and rest periods appeared not to have been complied with.

The working time legislation, which was enacted in Ireland by the Organisation of Working Time Act 1997 and subsequent regulations can be considered under three headings: holidays, hours, and specific safety regulations.

More recent regulations specify minimum rest periods for seafarers in the merchant shipping sector. Still more recent regulations deal with the contentious issue of junior doctors' (doctors in training) working hours, transport workers and off-shore workers. Regulations enacted in 2006 specify road transport workers' hours and provide for the introduction of digital tachographs.

Apart from the challenge by the British Government, the Directive has been one of the most politically controversial directives. The Working Time Directive has been the subject of numerous cases heard by the CJEU, whose judgments, while clarifying the application of the Directive, have not resolved political and administrative concerns. The European Commission, which has twice failed to secure agreement on reforming the Directive, at the end of 2014 launched yet another review with the aim of resolving the questions raised by the Court

cases in a manner satisfactory to politicians and administrators.

At national level the Irish High Court has interpreted the provisions of the Organisation of Working Time Act and regulations made under the Act.

THE PROVISIONS OF THE ACT

Holidays

Employees are now entitled to 20 days annual leave. Regular part-time employees are entitled to annual leave at the rate of eight hours for every 100 hours worked or proportionally less where fewer hours are worked. Employees are entitled to nine public holidays a year.

Hours

The Act imposes a maximum average working week. The average is worked out over periods of time known as "reference periods". The working week is averaged over a four-month reference period, or in certain sectors over a six-month period. The sectors are security, health, communications, utilities, agriculture, tourism, postal services, prisons, airports/docks, industries where production cannot be interrupted on technical grounds and where research and development activities are being carried on. The reference period can be extended to 12 months by a collective agreement between employers and employee representatives.

A worker must not work more than an average maximum of 48 hours a week. Working time does not include break periods but does include time when the employee is on-call but may not actually be working.

As well as the limit on the hours an employee may work, employees are entitled to weekly and daily rest periods. Employees are entitled to a weekly consecutive rest period of 35 hours and a daily rest period of 11 hours in any 24-hour work period. During the working period employees are entitled to a 15-minute break after four hours and to a 30-minute break during a six-hour work period. The break periods are not cumulative.

Shop workers, whose hours of work include the period from 11.30am to 2.30pm are, after six hours work, entitled to a one-hour lunch break during those hours.

There are particular limits on the hours a night worker can work (see definition of night worker below). Night work shall not exceed eight hours a night on average over a two-month period and if the night worker is one whose job involves special hazards or heavy physical strain, the working period shall not exceed eight hours in any 24-hour period.

Most of the challenges to the Directive have been on working hours. The CJEU has held:

- On call time is working time (*Simap* and *Jaegar* cases).
- Emergency service workers are entitled to the protection of the Working Time Directive (*Pfeiffea* case).
- Time taken by bus drivers to reach a bus is working time, when the driver is expected to transfer from one location to another during his lunch break. (*Skills Coaches* case).
- Holiday pay must be paid during holiday periods and not rolled up. (*Steele* case).
- For workers who have no fixed or habitual workplace, time spent travelling to the first customer of the day and travelling home from the last customer of the day is working time. (*Tyco* case).

However, in Ireland, the High Court, in the case of *Stasaitis v Noonan Services Group*, has held that a security guard, who was able to take rest breaks during periods of inactivity, was provided with enough breaks under the Working Time Regulations.

A very significant case *Carroll v Stobart*, while brought as a penalisation claim under section 27 of the SHWW Act 2005, arose as an issue over working hours. Mr Carroll, a driver with the transport company Stobart, claimed that he had been penalised by being dismissed after he refused to work a shift on the grounds that he was fatigued.

The facts were that the driver had completed a long distance shift that involved 15.5 hours driving, inclusive of breaks of 1.75 hours. Before departing on the 15.5 hours shift, the driver was told by his manager that his next shift would be on the following day, starting at 11.55pm. The driver requested not to be put on the shift, as he believed he had worked excessive hours. On his return from the 15.5 hour trip, he spoke to another manager and was told to go home and get some rest and report for duty at 11.55pm. He went home to rest.

During the day he missed phone calls from a manager and when he picked them up he spoke to another manager. He said he was too tired to drive. Later, fearing his job was at risk, he phoned to say he would do the shift, but was told alternative arrangements had been made. The following day he was dismissed, on the grounds that his withdrawal of labour was deemed to be a refusal of a reasonable management request and under the employer's disciplinary code amounted to gross misconduct.

He appealed to a Rights Commissioner, claiming that he had been penalised and that he was under a duty by virtue of section 13(1)(a) of the SHWW Act 2005 to take reasonable care to protect his own health and safety and that of others who might be affected by his acts or omissions. The Rights Commissioner held that the driver had been unfairly dismissed and the Labour Court, upholding that finding, held that there was a causal connection between the driver's complaint of fatigue and his dismissal.

Bringing the appeal, the employer denied that the driver made a health and safety complaint and that his view that he had worked excessive hours could not be construed as a complaint which would be protected under section 27. The employer argued that the Labour Court erred in its analysis of the law and that the driver's notification of tiredness to management could not be deemed to fall within the scope of section 27(3)(c): making a complaint to his employer as regards a matter relating to health and safety. The employer also argued that the driver's statement that he was tired could not be deemed to be a complaint and that the driver failed to show he suffered a detriment.

Delivering judgment in the High Court appeal, the President of the High Court, Mr Justice Nicholas Kearns, citing precedent judgments, said the courts owed curial deference to specialist tribunals which heard and assessed evidence. He said the court may only interfere with the findings of such expert tribunals where there is no evidence to support a finding.

Having noted that the Rights Commissioner and the Labour Court found that the driver had been penalised, Mr Justice Kearns, noting the EU Framework Health and Safety Directive and the SHWW Acts 1989 and 2005, said the ethos behind the Acts “is to ensure the health and safety of employees and those they encounter in the course of their work”.

Applying section 13 of the 2005 Act, Mr Justice Kearns held that the driver acted appropriately in reporting his fatigue. He made a complaint of the risk to his safety and that of others if he were to drive in a fatigued state. He was dismissed and he was, Mr Justice Kearns held, penalised. The case was remitted back to the Labour Court to decide on the level of damages Mr Carroll was entitled to. The court awarded him €61,633.

The provisions of the Working Time Directive, which limits the working week to 48 hours, were applied to offshore workers by the Organisation of Working Time Offshore Work Regulations 2004 (SI 819/2004).

Records

Employers are obliged to record the number of hours (excluding meals and rest breaks) worked by employees on a daily and weekly basis. They must also record leave and starting and finishing times. Where an employer does not have a clock in system, records must be kept on form OWT 1.

SECTOR-SPECIFIC REGULATIONS

Road transport workers

Apart from the restrictions on working time imposed by the Working Time Act and Regulations, the hours drivers of lorries can work are regulated by the Road Transport Act. Drivers of transport

lorries and the like must not drive for more than 11 hours in a 24-hour period. Continuous driving is limited to five and a half hours. Drivers must have 10 hours consecutive rest.

The *European Communities (Road Transport) (Organisation of Working Time of Persons Performing Mobile Road Transport Activities) Regulations 2012* repealed the earlier, similarly titled, 2005 regulations. The regulations provide mobile transport workers must:

- Not work more than 60 hours in a week in any reference period.
- Not work more than an average of 48 hours over the number of weeks in the reference period.
- Not work more than six consecutive hours without a break.
- Where work activities exceed six hours but not nine hours, be entitled to a break of at least 30 minutes and where the work activities exceed nine hours, be entitled to a break lasting at least 45 minutes.
- Be given a break period, which may be made up of breaks of not less than 15 minutes each.
- In the case of a worker who performs night work in any period of 24 hours, the working time shall not exceed 10 hours during that period.

As well as daily rest periods, workers are entitled to a weekly rest periods. These are not set out in the Irish Regulations and employers and advisors have to look up the European Regulations (561/2006). The weekly rest period is a period during which a driver may freely dispose of his or her time. A regular rest period should be for at least 45 hours, while a reduced rest period may be for as little as 24 hours. Any shortfall in a regular rest period in one week must be compensated for the next week.

The regulations specify two reference periods: 17 weeks and 26 weeks. The reference periods may be set out in an employment regulation order or in a collective agreement or, failing that, may be by reference to a table in the regulations, which sets

the starting dates for reference periods as January 1st, May 1st and September 1st. The regulations set out a formula, which takes account of excluded hours, to calculate working hours. Excluded hours are absences due to sickness, holiday leave or leave under maternity, paternity or carers' leave legislation. Periods of availability, break times and rest times are not included when calculating working hours.

Night work is defined in the regulations as work involving the use of motor vehicles for the carriage of goods between the hours of 12 midnight and 4am and in relation to the carriage of passengers as between 12 midnight and 5am.

Further regulations, also introduced in 2006, which apply to drivers and crews of vehicles exceeding 3.5 tonnes in weight, provide that daily driving periods should not exceed nine hours, though it may twice in one week be extended to 10 hours. After no more than six daily driving periods, a driver must take a weekly rest period. This should normally be 45 consecutive hours but may be reduced to 36 consecutive hours if taken at a place where the vehicle or driver is based or 24 consecutive hours if taken elsewhere. Where rest periods are reduced, compensatory rest must be given within three weeks. The total period of driving in a fortnight must not exceed 90 hours. The daily rest period may be taken in a vehicle, provided it is stationary and fitted with a bunk. And after four-and-a-half hours' driving, a driver should take a 45-minute break. This may be replaced with a series of 15 minute breaks distributed over the driving period or immediately after the period. In each 24-hour period drivers are entitled to daily rest periods of at least 11 hours, which may be reduced to a minimum of nine consecutive hours not more than three times in a week, on condition that compensatory rest is granted before the end of the following week.

The additional duties in relation to tachographs which employers are required to comply with are: to fit tachographs to such vehicles; to supply drivers with sufficient paper for recording purposes; to keep records; and to give drivers copies of records if requested.

Seafarers and fishermen

The hours seafarers can work are controlled by the *Organisation of Working Time on Sea-Going Fishing Vessels Regulations (SI 709/2003)*.

Seafarers are entitled to minimum rest periods of not less than 10 hours in any 24-hour period and 72 hours in a seven-day period. Hours of rest may be divided into no more than two periods, one of which shall be at least six hours in length. The interval between the consecutive rest periods shall not exceed 14 hours.

The Organisation of Working Time for Workers on Sea-Going Fishing Vessels Regulations provides that fishermen should not work in excess of 14 hours in any 24-hour period and 72 hours in any seven-day period. Fishermen are entitled to a minimum rest period of ten hours in any 24-hour period and 72 hours in any seven-day period.

Doctors

The European Commission is currently taking proceedings against Ireland for not implementing the Working Time Directive in respect of junior hospital non-consultants' hours. The *Organisation of Working Time (Doctors in Training) Regulations 2004 (SI 494/2004)* provide that the 48 hours per week maximum working week applies to junior hospital doctors from August 1st 2009 onwards. The Commission contends that while the law is in place, it has not been implemented in practice.

Shop workers

The *Organisation of Working Time Shop Workers Regulations (SI 57/1998)* provides that shop workers must, after six hours work, get a one hour break.

Working time in civil aviation

The *Organisation of Working Time Mobile Staff in Civil Aviation Regulations (SI 507/2006)* provide that all mobile staff working in the sector are entitled to four weeks paid annual leave, to 96 days local leave in each calendar and seven local days leave in each calendar month. Crew members must not work more than 2,000 hours in a year, with block flying time limited to 900 hours. Mobile

staff are entitled to health assessments before assignment and thereafter at regular intervals.

Night work and shift work

Special protection is afforded to night and shift workers, under the provisions of the General Application Regulations. Night work is defined as work between midnight and 7am. A night worker is one who normally works at least three hours of his/her time during those hours and for whom the number of hours worked during the night is 50% or more of the annual time worked.

Employers are required to: carry out assessments of the health and safety risks that attach to the work that night workers and shift workers do to see if it involves special hazards or heavy physical or mental strain; to make medical checks available before work commences and regularly while the person is doing night work, the assessment to be carried out by a medical practitioner or somebody operating under a medical practitioner's supervision. If the employee becomes ill or exhibits symptoms of ill-health connected with the work, the employer is required to transfer the employee to day work for which he/she is suited. The question of availability of day work may arise and will have to be dealt with on a case by case basis.

**CHAPTER 7:
COMPENSATION FOR INJURIES
AND ILLNESSES – THE COMMON
LAW AND THE INJURIES BOARD**

The purpose of both occupational health and safety legislation and occupational health and safety policies and practice is the prevention of work-related injuries and illnesses. However, the statistics show that accidents still occur and workers still contract illnesses connected with work.

Every year over 6,000 accidents, which result in workers being absent from work for more than three days, are reported to the HSA. It is believed that only about half of all four days-plus accidents are reported to the Authority. This led the Authority to ask the Central Statistics Office (CSO) to collect, as part of the National Quarterly Household Survey, data on occupational accidents and illnesses.

The figures, collected by the CSO, suggest that accidents are in fact under-reported by between 40% and 50%. The CSO also gathers information on work-related illnesses.

There are two other sources of information on occupational accidents:

- The Occupational Injuries Benefits (OIB) scheme administered by the Department of Social Protection.
- Employer liability claims figures from Insurance Ireland, the representative body for the insurance industry.

When workers are injured at work or contract a work-related illness they are entitled to be compensated provided negligence can be proved. As Raymond Byrne writes in *Safety, Health and Welfare at Work Law in Ireland* (second edition), civil liability, which arises after a work-related accident or illness has occurred and where reasonable precautions have not been taken to prevent the injury or ill-health, has a direct connection with occupational safety and health legislation.

The right to compensation was established in the courts and by legislation over a prolonged period. The common law developed and the right to sue an employer for negligence was established. The Workmen's Compensation Acts were repealed over fifty years ago.

As the common law developed, it was established that an employer owed employees a duty of care to ensure:

- A safe place of work.
- Safe plant and equipment.
- Safe systems of work.
- Safety-conscious (competent) staff were employed.

The duty of care is not an absolute duty. It is subject to the doctrine of what is reasonably practicable. The term was defined in the SHWW Act 2005 as meaning in relation to the duties of an employer, that the employer has exercised all due care by putting in place the necessary protective and preventative measures, having identified the hazards and assessed the risks to safety and health likely to

TABLE 7.1: Injuries/reported accidents (absence from work for more than three days)

	2013	2014	2015
HSA reported	6,598	7,431	7,775
OIB reported	11,428	9,768	10,182
CSO self-reported	18,448	18,796	n/a
Insurance Ireland EL claims	6,143	6,874	6,707
EL Applications to Injuries Board	4,040	4,368	4,843

n/a stands for not available

result in accidents or injury to health at the place of work and where the putting in place of any further measures is grossly disproportionate, having regard to the unusual, unforeseeable and exceptional nature of any circumstances or occurrence that may result in an accident at work or injury to health at that place of work.

As well as suing an employer for negligence at common law, an injured worker can sue for breach

of statutory duty. Some statutory duties are absolute. Most actions are now based on a claim of negligence under common law and a breach of statutory duty. Employers are of course entitled to defend claims and they can also plead that the injured employee was guilty of contributory negligence. The cases in Table B illustrate the meaning in practice of the concepts of negligence, contributory negligence, statutory duties and absolute duties.

TABLE 7.2: Case law illustrating concepts of negligence, contributory negligence and statutory and absolute duties

Negligence 100% liability

A worker who suffered a knee injury was awarded €38,661, as the President of the High Court, Mr Justice Nicholas Kearns, held that the equipment used to carry out a job was not suitable. The court heard that the accident occurred during the construction of a meandering channel in a river. The purpose of the channel was to facilitate spawning salmon, by maintaining a sufficient water flow in dry weather conditions.

Counsel for the injured worker told the court the river was diverted to build an underpass. When the work had been completed, the Southern Fisheries Board intervened and required that a meandering stream be put in place in the river. The worker was instructed to use a bobcat and a mini-digger without a cab, due to insufficient height under the bridge. Access was restricted and he was unable to reach in to smooth out some stones with the digger. He got off the digger and while walking on the stones in order to flatten them, his foot slipped and he twisted his right knee. He was unable to move for about 15 minutes but eventually he crawled out of the underpass.

The accident was reported and he was sent home. The following day (it was a Saturday) his knee seemed to be ok and he worked until 11.30, but on Monday he was unable to continue and was brought to the company doctor. The knee was swollen. Cartilage and ligament damage was diagnosed. He underwent surgery.

The worker's counsel claimed that insufficient thought had been given to the job. Because of the height restrictions, it should have been properly risk-assessed. An engineer giving evidence for the worker said the meander should have been put in place before the river bed was reinstated. The river bed was, he said, an unsafe place of work. Giving evidence, the employer's foreman told the court it was a simple task to make the meander channel.

Delivering judgment, Mr Justice Kearns noted that the worker had suffered a previous injury to the same knee and had been awarded damages of €36,500. Dealing with the issue of liability, he said, it was important to have suitable equipment for the job. He said the bobcat was unsuitable and the extension arm of the mini-digger was not long enough to fully level the stones, so the worker got off the digger and tried to level the stones by standing on them. The machinery used was not suitable and the problem encountered by the worker could have been anticipated. Holding the employer responsible for the accident, the judge said there was no contributory negligence. (*Shanahan v John Sisk and Son Ltd: High Court, June 2010*)

TABLE 7.2: Case law illustrating concepts of negligence, contributory negligence and statutory and absolute duties *continued***Contributory negligence**

A High Court judge, who awarded an injured worker €90,000 damages, reduced the award to €37,516 saying that the injured worker was 60% responsible for the accident by attempting to lift a box on her own. The judge heard that the worker, who worked in the employee gift store of a crystal manufacturer, suffered a back injury when moving a cardboard box, which contained ten carriage clocks and weighted 25 kilograms. As she was lifting the box, a handle broke while she was half way from a stooped to a standing position. She tried to save the box from falling by using her knee. In doing so she injured her back. Normally two employees were required to lift boxes, but when the accident occurred she was working on her own. Giving evidence, the store manager said staff were told not to lift anything beyond their ability and to get help when lifting. Under cross-examination, the injured worker acknowledged that seven months before the accident she had attended a manual handling course. She also said she could not remember if she had assessed the weight of the box to see if it was suitable to lift. Giving judgment in favour of the injured worker, the judge said her employer ought to have ensured a second worker was present. The weight of the box was too heavy. There was a breach of statutory duty. However, he held the worker was contributory negligent, to the extent of 60%, by attempting to lift the box on her own. (*Crotty v Waterford Crystal: High Court, 2008*)

Statutory duties

An employee lost an eye when struck by a flying nail after a nail gun misfired. The accident happened when the worker was firing nails from a machine into the head of timber door frames. The court heard evidence that the nail gun had misfired previously, but on the day of the accident the worker tested it and checked that the settings were correct. Counsel for the injured worker alleged that the employer was in breach of his statutory and common duty to provide a safe system of work. An engineer for the injured worker told the court that there was no guarding on the machine and that it was highly dangerous. The court held that the employer was in breach of its statutory duty to operate a safe system of work. When the employer knew of the earlier misfires the employer should have addressed the matter. Awarding the injured worker €440,000 damages, the High Court judge held that the designer of the machine was also negligent in failing to design a machine that prevented errant nails from flying around, and in failing to provide a guard to prevent flying nails. He ordered the designer to pay 25% of the damages awarded. (*Brett v Carrols Systems with Braid Systems joined as a third party: High Court 2008*)

Absolute duties

Mr Justice Quirke, who awarded an injured worker €45,000 damages after finding that his employer had provided an unsuitable heavy compression tool which caused or contributed to the worker's suffering tennis elbow (lateral epicondylitis), held that Regulation 19 of the General Application Regulations 1993, which required employers to ensure work equipment was suitable for the work to be carried out, created "virtually an absolute duty" to ensure that workers were provided with suitable tools. The court had heard that the worker could have been provided with an hydraulically operated and battery powered tool, which he could have used to do his job without risk to his health and safety. Mr Justice Quirke's comments on the duty under Regulation 19 of the General Application Regulations 1993 being "virtually absolute" are reflective of Mr Justice Kearns's comments in the *Everitt v Thorsman* case, when he said Regulation 19 "imposes virtually an absolute duty on employers in respect of the safety of equipment". (*Doyle v ESB: High Court, 2008*). In a recent case, *Thompson v Dublin Bus and another*, the Supreme Court held the duty is not absolute.

While the right for workers to claim compensation for injury was only established gradually in the nineteenth century, the procedures to be followed when bringing a personal injury claim were radically reformed in Ireland in the early years of the twenty-first century, with the establishment of the Personal Injuries Assessment Board (PIAB). What might be termed the PIAB era was established. The PIAB is now known as the Injuries Board and operates as injuriesboard.ie

CLAIMING COMPENSATION IN THE PIAB ERA

In 2003 the *Personal Injuries Assessment Board Act* was passed and the Board, now known as the Injuries Board or injuriesboard.ie, commenced operations in 2004.

In the same year the then Government reformed the system of court claims, with the passage of the *Civil Liability and Courts Act 2004*. The Civil Liability and Courts Act was, as the then Minister for Justice, Michael McDowell put it, designed to reduce the time taken and the costs associated with processing personal injury accidents. Both Acts were seen by the Government as a package designed to reduce costs and delays associated with personal injury claims.

The essence of the new system is that a person who is injured in an accident, be it at work, in a public place or a motor accident, must, before issuing court proceedings, bring his/her claim through the Injuries Board. While this book is concerned only with the occupational aspect, the procedures to be followed in relation to public liability and motor accident claims are the same. The procedures are intermeshed and are set out below on a step-by-step basis.

When an accident occurs or an occupational illness is reported to an employer, the employer will investigate to seek to establish what caused the accident or illness and to see what prevention measures can be taken to prevent similar occurrences in the future. The employer will also be concerned to establish if, in the event of a claim by the injured worker, that he has a defence to any claim.

Safety representatives have, under rights granted by section 25(2)(b) of the SHWW Act 2005, an important role to play after an accident occurs or an illness is reported. Safety representatives are entitled to investigate accidents and dangerous occurrences, provided they do not interfere with or obstruct the performance of any statutory obligation.

As noted, not all accidents result in claims. At its highest the ratio is one out of two, or if one takes the CSO figures, one out of every three accidents. Illness results in even fewer claims. However if the injured or ill worker decides to bring a claim, then the procedures laid down by the Personal Injuries Board Assessment Act and the Civil Liability and Courts Act and the rules of the Injuries Board and court rules have to be followed.

Procedures

While the two Acts are stand-alone enactments, the procedures to be followed are intermingled. Below we set out a step by step guide from the initial letter of claim to the court room door.

Step 1

The Civil Liability and Courts Act provides that a person claiming to have suffered a personal injury must serve a 'letter of claim' on the person/organisation he/she is claiming was responsible for the accident or illness. This must be served within two months of the accident which gives rise to the claim or within two months of a person becoming aware of a cause of claim (e.g. an illness). At this stage, the employer may settle the claim (which would be the end of the matter), or allow it to proceed to the Injuries Board.

Step 2

If an employer decides to let a claim proceed along the Injuries Board route that is not an admission of liability. The claimant, as the injured person will be referred to in Injuries Board proceedings, should at this stage contact the Injuries Board, obtain and complete a claims form and submit it to the Injuries Board. The claimant must, when submitting the claims form, submit a medical report in respect of his/her personal injuries and receipts/vouchers for special damages claimed (e.g. medical bills) and pay a €45 fee, which is recoverable if the claims succeeds.

The Injuries Board must deal with claims within nine months, unless they notify the parties that the claim is complex. If they do so, they have 15 months to deal with a claim. They can of course notify the parties that the claim is so complex or that there are inadequate precedents (cases/settlements) that the Board is unable to deal with the claim.

Step 3

The Injuries Board will then check the form. If it is not in order, they will return it to the claimant to amend it. If it is in order, the claim will be handed to an assessor to deal with. The Injuries Board will notify the employer, who in Injuries Board proceedings will be called the respondent, of the claim.

Step 5

The respondent must then decide whether or not to let the Injuries Board handle the claim. The respondent has ninety days within which to reply to the Injuries Board. If the respondent consents to the Injuries Board making an assessment, or if he/she fails to respond within the prescribed time limit, then the Injuries Board will proceed to make an assessment.

Step 6

If the respondent consents to the Injuries Board making an assessment, the assessor shall then proceed with the case. A respondent who consents to the Injuries Board making an assessment does not admit liability.

If the respondent refuses to consent to the Injuries Board making an assessment, then the Injuries Board will issue a document, referred to as an 'authorisation', which will entitle the claimant to proceed and take court action. The claimant has six months from the date of the 'authorisation' to institute court proceedings.

Step 7

When assessing a claim, the Injuries Board's assessor will not investigate liability. The assessor will, with reference to the *Book of Quantum* published by the Injuries Board and based on the medical report submitted by the claimant, assess the compensation due to the claimant for the injury

suffered. The assessor will deal with the claimant's special damages. The award to the claimant will be for the injuries suffered and special damages (out of pocket expenses and loss of wages incurred). The assessor may seek further information and may refer the claimant for medical examination by a doctor on the Injuries Board's panel.

Step 8

Having made its assessment, the Injuries Board will then notify both the claimant and the respondent. The claimant will have 28 days within which to write to the Injuries Board, saying whether he/she accepts the assessment or not. The respondent shall have 21 days to reply. If a claimant fails to respond to the notice of an assessment within 28 days, he/she shall be deemed to have rejected it. If a respondent fails to respond within 21 days, he/she shall be deemed to have accepted the assessment.

Step 9

If either the claimant or the respondent rejects the assessment, the Injuries Board will issue an 'authorisation' to the claimant, which will release him/her to take court proceedings. The claimant will have six months from the date of the 'authorisation' to institute court proceedings.

Step 10

At this stage, having exhausted the Injuries Board procedure, the claimant becomes a plaintiff. Unless he/she can reach a settlement with the respondent, who now becomes a defendant, the plaintiff must, within six months of the date of the 'authorisation', institute legal proceedings by issuing a 'personal injuries summons' in either the High, Circuit or District Court. The Court chosen will depend on the value the plaintiff and his/her advisors put on the claim. District Courts handle claims up to €15,000, the Circuit Court handles claims over that amount up to €60,000 and the High Court deals with claims for more than that amount.

Step 11

When the plaintiff's 'personal injuries summons' is served on the defendant, the plaintiff must, within seven days of service, lodge a 'verifying affidavit'

in court. This is a court document in which the plaintiff swears that the details of his/her claim are correct. If they are not, the plaintiff's claim may be dismissed by a court and the plaintiff may face prosecution.

Step 12

The Civil Liability and Courts Act envisages the defendant having the right to seek further information. The defendant can request details of previous injuries and actions.

Step 13

Having being served with a personal injuries summons, the defendant must enter a defence. The defence must set out the defendant's full defence and deal with any admissions and counterclaims. Within seven days of the service of the defence on the plaintiff, the defendant must lodge a verifying affidavit in court. This is a court document in which the defendant or, if the defendant is a corporation (a company) or undertaking, an officer of the company swears that the details of defence are correct. If they are not, the person swearing the affidavit may be prosecuted.

Step 14

Either party to a personal injuries action can apply to the court to convene a mediation conference. The purpose of a mediation conference is try and settle the case. A mediation conference will be chaired by a mediator. The mediator will report to the court on the outcome of the conference.

Step 15

Before the case goes to trial, each party shall have to make a final offer to the other, setting out their terms for settlement.

Step 16

Before a case goes to trial a court can, if it considers it appropriate, direct that a pre-trial hearing be held, to limit the issues to be dealt with a trial.

Step 17

The case goes to trial.

The Injuries Board's Book of Quantum

When the Personal Injuries Board was established the Board published a *Book of Quantum*. The book was compiled to provide guidelines on the compensation payable for injuries suffered in accidents at work, in a public place or in a motor crash. In the foreword to the Book, the Injuries Board wrote that it "should also encourage negotiated settlements between parties where it is accepted that the injured party has an entitlement to compensation".

As the years passed it was felt the Book should be updated and an updated edition was published in 2016. The 2016 edition, General Guidelines as to the amounts that may be awarded or assessed in Personal Injury Claims *Book of Quantum*, are as stated in the foreword to the Book "intended to provide an indication as to the potential compensation for a particular injury".

The Book is used by the Injuries Board's assessors when assessing the appropriate compensation award due in cases submitted to the Board for assessment. The 2016 edition is more detailed. Injuries are classified under six headings or categories: head; neck; back injuries and spinal fractures; upper limb injuries; lower limb and body and internal organs. Then within each of the six categories, injuries are classified in more detail into sub-categories and sub-sub categories and types of injury. For instance, upper limb injuries are divided into five sub categories, such as arm or hand amputations and wrist.

It should be borne in mind that the compensation levels set out in the *Book of Quantum* are the levels to compensate an injured person for pain and suffering. Other losses, such as wages and hospital expenses, are payable in addition. Beside each type of injury the range of compensation that might be awarded to an injured person is set out. The ranges of award are ranked by the severity of the injury.

In most instances there are four ranges:

- Minor: injuries from which the victim has substantially recovered
- Moderate: includes injuries from which a claimant has substantially recovered but there

are ongoing symptoms that interfere with carrying out full day to day activities. Recovery will be achieved from these types of injuries.

- Moderately severe: includes moderate injuries and in addition the injury has resulted in some permanent incapacity or limitation that impacts the body part which has been injured.
- Severe and permanent conditions: will apply if the injury is severe and has caused major disruption to a claimant's life in a number of areas or results in serious continuing pain and/or requires permanent medical attention.

It should be borne in mind that the values set are described by the PIAB as guidelines into which the majority of cases fall, but they are not rigid and are neither maximum nor minimum levels for individual cases.

Safety representatives and other others using the Book should bear in mind that the Book, while comprehensive, is not exhaustive. It does not set guidelines for a wide range of illnesses, such as: asthma, noise induced hearing loss; post-traumatic stress disorder; damage to the reproductive system; stress; and vibration (both white finger and whole body).

The fact that an injury is not listed in the Book does not mean the Injuries Board will not issue an assessment in such cases but the statement in the original Book that the Board can assess claims in cases for injury types "other than those that appear in this Book", is not repeated in the 2016 edition. To download a copy of the Book click on <http://www.injuriesboard.ie/eng/Forms-Guidelines/Book-of-quantum.pdf>

HAZARDS: SECTION 3

ENFORCEMENT

In this section we deal with the enforcement of health and safety legislation.

The philosophy underlying enforcement policy is discussed in detail in *Safety, Health and Welfare at Work Law in Ireland* (second edition), by barrister and director of research at the Law Reform Commission, Raymond Byrne, who is acknowledged to be one of the country's leading authorities on health and safety law.

Mr Byrne writes that the HSA's enforcement policy has been greatly influenced by the International Labour Organisation's Labour (ILO) Inspection Convention 1947, which states persons who violate or neglect to observe legal provisions enforceable by labour inspectors shall be liable to prompt legal proceedings without warning. However it is left to the discretion of inspectors to give a warning and advice instead of instituting or recommending proceedings. A later ILO convention, *The Occupational Safety and Health Convention 1981*, stipulates that the enforcement system should provide for adequate penalties for violations.

It is against this background that we look at enforcement in Ireland.

CHAPTER 8: **THE HSA'S ROLE**

Following the Barrington Commission Report the HSA was established to promote, encourage and foster the prevention of accidents in the workplace; to promote, encourage, foster and provide education and training; and to encourage and foster measures promoting safety, health and welfare in the workplace.

The Authority's functions to promote what might be described as an occupational safety and health culture are set out in the SHWW Act 2005, section 34. So is the Authority's function "to make adequate arrangements for the enforcement of the relevant statutory provisions". The HSA is also the lead authority responsible for enforcement of the provisions of the Chemicals Acts 2008-2010. The Authority's policy approach has been often described by its chief executive Martin O'Halloran as being one of promoting health and safety, offering advice and information, carrying out inspections and, where necessary, taking enforcement action.

As the Authority puts it: "The HSA has overall responsibility for the administration and enforcement of health and safety at work in Ireland. We monitor compliance with legislation at the workplace and can take enforcement action (up to and including prosecutions)". The Authority's powers of enforcement are set out in chapter 2, Part 6 of the SHWW Act 2005, sections 62 to 71.

Enforcement is based on inspection, whether an inspection is one of the Authority's planned inspections or is an inspection following an accident, dangerous occurrence or a complaint.

Inspections policy

The aim of the Authority's inspections policy, as declared in the Strategy Statement 2013-2015, is to reduce the toll of lives lost and people injured. To this end, the Authority focuses inspections on the areas of known highest risk.

The details are set out in Authority's annual programmes of work. For example, in the Programme of Work 2014 the Authority identified agriculture and the way vehicles are used for work as the areas which, when combined, account for the majority of work-related deaths. The programme states that during 2014 the Authority will target resources on those areas where the risk is greatest and where it believes it can achieve the greatest impact.

Every year in its programmes of work the Authority sets an overall inspections target. Inspections are carried out under safety, health and welfare legislation (OSH legislation) and chemicals legislation. The Authority carries out sector-specific inspections, as well as inspections in response to accidents, dangerous occurrences and complaints. The guiding principle is that the focus is on the areas and sectors of highest risk. The annual inspections programme reflects the Authority's current priorities and also reflects the resources available to the Authority at a given time.

Enforcement powers

When carrying out inspections, if the Authority's inspectors find that employers have failed to comply with safety, health and welfare at work or chemicals legislation, the Authority may take enforcement proceedings.

The Authority has a wide range of enforcement powers. It can issue:

- Directions for Improvement Plans.
- Improvement Notices.
- Prohibition Notices.
- Or seek High Court closure orders.
- Prosecute for breach of statutory regulations.

Improvement plans (section 65)

If during an inspection an inspector forms the opinion that there is an activity that is occurring or is likely to occur that involves risk to the safety, health or welfare of persons, the inspector may give a written direction to an employer, requiring the employer to submit an improvement plan. An improvement plan is a plan setting out the remedial measures the employer

proposes to take to comply with the improvement direction.

In the direction the inspector must:

- Identify the activity which is, or is likely to be, a risk.
- Require the submission of an improvement plan within one month, specifying the remedial measures proposed to be taken.
- Require the employer to implement the plan
- Include other requirements which the inspector considers necessary.

Where there is a safety representative at the place of work, the employer must give a copy of the safety direction to the safety representative.

Within one month of receipt of the plan, the inspector must confirm if he/she is satisfied that the plan is adequate or the inspector must direct that the plan be revised and be resubmitted.

Improvement notices (section 66)

An Improvement Notice is a notice from an inspector who is of the opinion that a person is contravening statutory provisions or has failed to submit or implement an improvement plan or, if required, a revised improvement plan.

The notice shall specify:

- The inspector's opinion.
- Give the reasons for the opinion.
- Identify the legal requirements to which the opinion relates.
- Direct the employer or other person to rectify the contravention within a specified period (which may not be earlier than the end of the 14 day period allowed for an appeal).
- Include information on appeal procedures.
- Refer to any other requirement the inspector considers appropriate.
- Be signed and dated by the inspector.

Where there is a safety representative in the workplace, the inspector must give him/her a copy of the notice.

When the person on whom the improvement notice has been served is satisfied that it has been complied with, he/she shall write to the inspector notifying him/her that the matters specified have been remedied. He/she should also give a copy of the notification to the safety representative.

A person who is aggrieved by a notice may appeal to the District Court within 14 days. While no details or figures relating to appeals are published, relatively few appeals are taken and even fewer receive publicity. Two appeals that have attracted public attention were one by Ryanair and one by Cork County Council.

The Ryanair case arose following the HSA's serving of an improvement notice on the airline, requiring them to use an automatic conveyor belt when loading and unloading baggage from planes, in order to remedy an alleged contravention of the Manual Handling Regulations. Ryanair appealed the improvement notice in the District Court, which upheld the notice. They then appealed the District Court judgment to the Circuit Court. Dismissing the appeal, Judge Elizabeth Dunne said the notice had been issued by the Authority to reduce the risk of injury in the handling of loads during aircraft baggage loading and unloading. The judge said it was accepted by both sides that manual handling was an activity with a high risk factor. Rejecting the essence of Ryanair's case, that the conveyor belt system exposed two people in the hold as opposed to one, she said she was satisfied that it did not amount to an increased risk and she felt that the elimination of risk for ground operatives outweighed the risk of injury by having two people in the hold. She added that she had come to the conclusion that the use of a conveyor belt system significantly reduces the risk for ground operatives.

The High Court judgment in the Cork County Council case clarified a number of significant legal points. The case arose following correspondence between the HSA and Cork County Council concerning the use of dense bitumen macadam (DBM) on roads outside the 50km or 60km speed limit zones, correspondence which ultimately resulted in the HSA serving an improvement notice on the Council.

The intermediate stages of the correspondence between the Authority and the Council involved

directions for an improvement plan, an interim proposal from the Council - which the HSA took to be an improvement plan, and which it deemed to be inadequate - and a direction from the HSA seeking a revised improvement plan. When the Council submitted its revised improvement plan, which took issue with some recommendations from the Authority, the HSA served an improvement notice.

The notice asserted that the County Council failed to comply with a direction for a revised improvement plan. The failings identified by the HSA were that the hazards had not been properly identified, and the control measures were inadequate and failed to adequately identify specific traffic management systems.

When the appeal came before the District Court, the District Judge sent a case stated to the High Court, seeking directions. Answering the questions on which the District Judge was seeking guidance, the High Court judge held that when the HSA serves an improvement notice, the notice must be precise and specific, it cannot be served because the contents of a revised improvement plan are inadequate and it must be served on the person who has control over the work activity.

He also held that while the HSA has the power to serve an improvement notice in respect of "an activity (in this case roadworks)", it is a necessary condition that the activity is occurring or is likely to occur. The judge held that where there are roadworks in progress, they constitute a workplace, and the HSA may give directions within the scope of the SHWW Act 2005.

Conversely, the Authority cannot serve directions "where there are no roadworks in train and the site has been mobilised and opened up to the unimpeded flow of traffic". The judge said "there must be some clear prospect of activity about to commence. The mere possibility of such activity is not enough."

Prohibition notices (section 67)

Where an inspector is of the opinion that an activity (whether by reference to any article, substance or otherwise) involves or is likely to

involve the risk of serious personal injury, he/she may serve a prohibition notice on the person in control of that activity. A prohibition notice prohibits the carrying on of the activity until the matters which give rise, or are likely to give rise to, the risk are remedied.

In the notice the inspector must:

- State his/her opinion.
- State the reasons for the opinion.
- Specify the activity in respect of which that opinion is held.
- Where in the opinion of the inspector the activity involves a contravention or likely contravention of a statutory provision, specify the statutory provision.
- Be signed by the inspector and dated.

The prohibition notice may include directions on the remedial measures to be taken.

Where there is a safety representative at the place of work, the inspector must give a copy of the notice to the safety representative. The employer or other person on whom the notice is served must bring it to the attention of the workforce and display a copy in a prominent place.

Subject to the right of appeal, the person upon whom the notice is served is required to stop the activity immediately. An aggrieved party on whom a notice is served may appeal to the District Court within seven days. An appeal does not automatically suspend the notice. The person appealing may ask the court to suspend the notice pending the outcome of the appeal. The court has discretion to suspend the notice pending the hearing of the appeal.

As with improvement notices, there have been few appeals against prohibition notices. In one case, where two appeal notices were served, the appeals were withdrawn after contact between the aggrieved party and the HSA and the matters were resolved.

In another case, in which the aggrieved party claimed that while there had been a risk, it had been remedied by the time the prohibition notice

was served, a District Court judge disallowed the appeal, even though both the Authority and the aggrieved party were agreeable to adjourn the matter. The company then took judicial review proceedings in the High Court, who remitted the case back to the District Court for hearing.

When the person on whom the prohibition notice has been served is satisfied that it has been complied with, he/she shall write to the inspector notifying him/her that the matters specified have been remedied. He/she should also give a copy of the notification to the safety representative. If the inspector is satisfied that the matters have been remedied, he/she shall, within one month, in writing confirm to the person on whom the notice was served that he/she is satisfied.

Where an employer or other person contravenes a prohibition notice, an inspector may apply to the High Court for an order prohibiting the continuance of the activities. The application may be made without notice (*ex parte*) to the offending party and the High Court may, if it thinks fit, make an order prohibiting the activities.

The HSA rarely makes such applications to the High Court. There was a case in Donegal some years ago when an inspector, who had served a prohibition notice, paid a return visit to a quarry and found machinery still in use. The Authority applied to the High Court, telling the judge that it had no faith in the quarry operator's ability to implement safety measures. The court ordered that the quarry be closed.

In another case, the Authority took a different course of action. A builder, on whom a prohibition notice had been served, was found to be in breach of the notice. The Authority prosecuted the builder, who was fined €27,500 and given a 12-month suspended prison sentence by the Circuit Criminal Court in Cork.

High Court closure orders (section 71)

If the HSA is concerned that if work continues that the risk is so serious that it should be restricted or stopped, it can apply to the High Court for an order to stop or restrict the work. The Court may grant the order, grant it subject to conditions, or refuse

it. In order to permit urgent speedy action the application may be made without notice (*ex parte*). The High Court may, if it thinks fit, make an order prohibiting the activities. If the person against whom the order is made applies to the court to have the order set aside or varied, the HSA is entitled to be heard by the court.

Such an order should be distinguished from an order obtained because an employer or other person has contravened a prohibition notice. Again, the number of cases is few.

Some years ago the Authority obtained an order closing a building site in Duleek. An inspector visited the site and observed a number of unsafe working practices. She agreed with the builders that they would voluntarily close the site. Later, after she heard from the builders that the site had been reopened, she again visited the site. She still observed unsafe working practices. On a later visit, which led to the application for the closure order, she found a worker working on a roof without any safety harness or equipment. The High Court granted the order against the company, a director of the company who was acting as the health and safety co-ordinator and against the project supervisor construction stage.

In another case a building site in Waterford was closed after High Court judge heard that, despite agreed voluntary cessation of work on three occasions, breaches of health and safety legislation continued.

Enforcement policy in operation

Inspections are the bedrock of the HSA's enforcement policy. Every year the Authority carries out thousands of inspections, as a result of which it may take enforcement action.

A look at a recent three-year period for which figures are available gives an insight into how the policy operates in practice (*see Table 8.1*).

Taking the average yearly figure over the period:

- About 90% of all inspections are planned inspections.
- About 10% are accident investigations or arise because of a dangerous occurrence or a complaint.

TABLE 8.1: Inspections/Enforcement

	2013	2014	2015
Inspection	10,912	8,347	9,731
Accident/complaint investigation	1,332	1,345	1,149
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Inspections + Investigations (total)	12,244	10,719	10,880
Prohibition Notices	338	373	488
Improvement Notices	485*	511	485
Written Advice**	4,477	4,121	4,386
Agreed prohibition***	7	7	22

* Improvement Notices only

** While classified as enforcement, in fact written advice letters/notes often are for guidance purposes and are not strictly an enforcement measure

*** As an alternative to a High Court closure order

- About 47% result in some form of enforcement action, including written advice.

The most common form of enforcement action, although strictly legally speaking it is not an enforcement action, is the issue of a written advice note. Improvement notices are issued in about 4% of inspections and prohibition notices in about 3%. The Authority takes about 30 prosecutions a year.

THE INSPECTOR'S ROLE

For many people, be they employers, employees or otherwise connected to a workplace, the HSA's inspectors are the public face of the Authority. It is, inspectors who speak to the family and colleagues of the fatally injured person, following a fatal accident. Inspectors enforce health and safety legislation.

For others the Workplace Contact Unit is the first point of contact with the Authority. It is the HSA unit to which employers report accidents and which employers, employees and members of the public contact when seeking information. The unit processes all notifications in connection with construction work.

How the Authority is perceived by the public depends to a large extent on inspectors. A rolling

survey shows that inspectors are well regarded, with over 90% of those responding to the survey saying they found inspectors polite, helpful and courteous. That is perhaps because, while inspectors will enforce legislation, they will try and help employers and others connected with the workplace to comply with legislation.

Inspectors do not give advice, but they do offer guidance. It may be that during an inspection an inspector will draw an employer's attention to HSA or other authoritative guidance. Inspectors regularly speak at seminars organised by the voluntary safety organisations and by employer and employee representative unions.

Formally, inspectors are appointed under section 62 of the SHWW Act 2005 for the purposes of enforcing all or any of the statutory provisions that fall under the Authority's remit. The Authority also has power under the Chemicals Acts 2008-2010 and the Carriage of Dangerous Goods by Road Act 1998 to appoint inspectors for the purposes of those Acts.

Inspectors are given a certificate of authorisation. When exercising powers conferred on them, inspectors must, if requested, produce their certificate of authorisation or a copy of it, together with a form of personal identification.

TABLE 8.2: Non-exhaustive list of Acts and Regulations under which inspectors have powers

ACTS

- Safety, Health and Welfare at Work Act 2005: section 64
- Chemicals Act 2008: section 12
- Mines and Quarries Act 1965: section 131
- Dangerous Substances Act 1972: sections 40, 41, 42
- Safety, Health and Welfare at Work (Offshore Installations) Act 1987, section 41

REGULATIONS

- European Communities (Protection of Workers) (Exposure to Chemical, Physical and Biological Agents) Regulations 1989 (SI 25/1989): reg 9
- European Communities (Classification, Packaging, Labelling and Notification of Dangerous Substances) Regulations 2003 (SI 116/2003): reg 28
- European Communities (Classification, Packaging, Labelling and Notification of Dangerous Preparations) Regulations 2004 (SI 68/2004): reg 22
- European Communities (Control of Major Accident Hazards Involving Dangerous Substances) Regulations 2006 (SI 74/2006): regs 30, 31
- European Communities (Carriage of Dangerous Goods by Road and Use of Transportable Pressure Equipment) Regulations 2011 (SI 349/2011): reg 12
- European Communities (Prevention of Sharps Injuries in the Healthcare Sector) Regulations 2014 (SI 135/2014): reg 11

Inspectors have a wide range of powers provided for by section 64 of the SHWW Act 2005. Inspectors also have powers under the Chemicals Acts 2008-2010 and a number of other Acts and regulations (*see Table 8.2*).

The powers under the three Acts and the Regulations are broadly similar. The powers relate to places of work; to the activities and processes at the places of work; to equipment, substances and articles at the place of work; to records relating to those matters and to transport used in connection with the carriage of dangerous goods.

An inspector has the power to:

- Enter a premises if the inspector believes a premises is a workplace or that articles or substances are being kept at a premises. The inspector must have the consent of the occupier to enter the premises or be acting in accordance with a warrant issued by the District Court.

- Inspect that place of work and any work activity, installation, process or procedure at the workplace.
- Direct that the place of work, any part of the place of work or anything in the place be left undisturbed as long as reasonably necessary for any investigation.
- Require the production of records.
- Inspect and take copies of records (including electronic information systems).
- Remove records for further examination or in connection with legal proceedings.
- Require records to be kept for a reasonable period of time.
- Require information and assistance from the employer, employees, the owner of the place of work.
- Summon, at a time and place specified, the employer, employees and the owner or person in charge of a place of work to give information.

- Examine any person whom the inspector believes may be able to give relevant information and, subject to the person's right not to incriminate themselves, to answer questions put by the inspector.
- Take measurements, photographs and recordings.
- Install and use monitoring instruments.
- Test, examine, analyse or to remove and retain articles or substances to examine them later.
- Take samples of the atmosphere at the place of work.
- Check transport equipment used in connection with the transport of dangerous goods (an inspector carrying out a roadside inspection must be accompanied by a Garda).
- Enforce the workplace smoking ban.

Inspectors can, where they consider there has been, or is likely to be, a breach of a statutory duty, require an employer to submit an improvement plan or the inspector can issue an improvement notice or a prohibition notice.

If an inspector decides to take away an article or substance for examination, the inspector shall ensure it is not tampered with before it is examined and that it is available for use in evidence in any proceedings. An employer must, if asked by an inspector, give the name and address of the person from whom the article was purchased or otherwise obtained. Where an inspector takes away an article or substance he/she shall, if it is practicable to do so, take a sample and give it to a responsible person at the place of work.

If an inspector has reasonable cause to believe that he/she might be obstructed in the course of an inspection, the inspector may be accompanied by a Garda or other person. Where an inspector has reasonable grounds for believing that that a person has committed an offence, the inspector can require the person to give his/her name and the address where he/she ordinarily resides.

How an inspection works

The Authority's online guide, *How an Inspection Works* (visit: http://www.hsa.ie/eng/Topics/enforcement/Inspections/HSA_Inspections/), provides an insight in how inspectors carry out inspections.

When an inspector calls, he/she will ask to speak to the person in charge of the workplace. In smaller workplaces, such as a farm, small shop, office or garage, that person may well be the owner of the business. In larger workplaces, the person may be a manager. In a factory it could be the production manager. In a large supermarket, distribution centre or bank, the person will be the senior manager at the workplace. Employers have a duty to inform the safety representative of the inspection.

Often in workplaces where there is a health and safety manager, the inspector will deal with him or her. The inspector will want to see the safety statement for the workplace. It will be the health and safety manager who produces it and who accompanies the inspector on the tour of inspection.

However, where the health and safety manager is deputed to deal with the inspector, the inspector will still want to see the person in charge of the workplace. He/she will be seeking to find out the extent to which employers, directors and senior managers are aware of their responsibilities under health and safety legislation.

The inspector will check the safety statement for the workplace and review other health and safety documents. The inspector will be considering if the safety statement identifies the hazards and risks of the workplace and whether or not adequate controls are in place.

The inspector may then inspect the workplace. Inspectors follow a sampling approach. Often in court cases, an employer defending a claim will put forward the defence that the workplace was inspected by the HSA and no enforcement action was taken. Witnesses will tell a court that the workplace has been audited by the Authority. Inspectors do not audit workplaces; they check aspects of the activities.

Inspectors may ask questions. The questions will be tailored to the size and complexity of

the organisation and the workplace. Questions will address key aspects of health and safety management, such as how health and safety is monitored and audited. Inspectors will also ask about specific issues, which could range from machine guarding to traffic movement. Those being interviewed will be asked about their responsibilities.

At the end of the inspection, the inspector will hold what the Authority describes as a “close out meeting”. This meeting is normally held with the most senior person in charge on the day (preferably the managing director, chief executive officer, plant or shop manager or the managing partner in a professional practice), in order to give a verbal or written report of the inspection. The inspector will review the inspection with the senior manager and, if it is necessary, serve notices on the manager as the duty holder. The inspector will discuss with the senior manager, the responsibilities of senior managers as provided for the SHWW Act 2005, section 80.

Inspectors and safety representatives

When an inspector calls to a workplace to carry out an inspection, the employer must inform the safety representative.

When carrying out inspections, inspectors will ask if there is a safety representative at the workplace. The inspector will seek to meet the safety representative or, if there is more than one safety representative, meet those safety representatives who are available. If no safety representative is available, the inspector will ask to meet members of the safety committee.

Safety representatives have the right to accompany an inspector carrying out an inspection. However, if the inspection is being carried out as part of an investigation into an accident or dangerous occurrence, this right is subject to the inspectors agreeing that the safety representative may accompany him/her.

Safety representatives have the right to make representations to inspectors. They may simply talk to the inspector or they may make the representation in writing.

Survey

The HSA monitors how inspections are perceived by the workplaces inspected. Using the Survey Monkey tool, a survey was carried out for the HSA on an anonymous basis. The findings present an interesting insight into the work of the Authority's inspectors.

Over 95% of those who responded to the survey said they found the Authority's inspectors to be helpful, polite and courteous, knowledgeable, experienced and approachable. That is a very high satisfaction rating and the sceptical might think, if it was not for the fact that the survey was anonymous, that those surveyed were anxious not to attract the Authority's attention. The sceptical might also think, maybe those surveyed had not suffered the wrath of the Authority's inspectors. They would be wrong.

Three months after an inspection, a questionnaire is sent those workplaces that have provided an email address, regardless of whether enforcement proceedings have or have not been taken. Given that some form of enforcement action is taken against 50% of workplaces, quite a number of those surveyed must have had some form of action taken against them. The survey finding that inspectors have the ability to insist on and enforce health and safety standards further confounds the sceptical view.

Those surveyed said that inspectors had the ability to help organisations tackle health and safety problems. Ranked in order of the survey findings, inspectors recommended that the workplace would:

- Improve workplace safety precautions.
- Prepare or make changes to the safety statement.
- Communicate information to employees.
- Prepare or make changes to a method statement or safety plan.
- Improve working methods.
- Improve the use of PPE (personal protective equipment).
- Provide training.
- Improve tidiness.
- Give new responsibilities to individuals.
- Allocate additional resources.
- Improve sanitary facilities.

CHAPTER 9: OTHER ENFORCEMENT AGENCIES

While the HSA is the national agency charged with task of promoting and enforcing and advising the Government on health and safety and related legislation, health and safety does not exist in a silo and the Authority has working relationships with a number of Government departments and State agencies.

With the Government departments and agencies listed in the table below, these arrangements are formalised in Memorandums of Understanding. Memorandums of Understanding are intended to assist and support both agencies that are parties to a memorandum in performing their functions. Memorandums of Understanding identify areas of mutual interest and potential operational overlaps based on each agency's regulatory function., They are intended to establish systems of mutual engagement.

TABLE 9.1: Government departments and State Agencies with whom the HSA has Memorandums of Understanding

Workplace Relations Commission
An Garda Síochána
Railway Safety Commission
Commission for Energy Regulation
Rail Accident Investigation Unit (DTTAS)
Environmental Protection Agency (EPA)
Health Information Quality Authority (HIQA)
National Consumer Agency
An Board Pleanála
Radiation Protection Institute of Ireland (now part of the EPA)
Department of Agriculture, Food and the Marine
European Chemicals Agency

Some aspects of the Authority's relations with other State agencies are governed by statute, such as its relations with An Garda Síochána and the Customs and Excise authorities in relation to specific functions. There are specific references to An Garda Síochána and the Customs and Excise in the SHWW Act 2005. Both have powers to assist the Authority when requested to do so.

The Gardai assist the Authority's inspectors when:

- Inspectors are carrying out roadside checks on the carriage of dangerous goods by road.
- An inspector has reasonable cause to fear serious obstruction in the execution of his/her duty.
- When a fatal accident occurs it is often, in the first instance, reported to the Gardai who then notify the HSA.
- The Authority and the Gardai often undertake joint investigations, which in some cases have led to prosecutions by both organisations.

A recent example of co-operation in an investigation is the case of the fatal monoxide poisoning at a hotel in Kinsale. A plumber, who carried out repairs on a central heating system in a hotel, was charged with manslaughter by the Gardai after a woman died from carbon monoxide fumes. The company was charged by the HSA with failing under section (2) of the SHWW Act 2005, to ensure the health and safety of the persons not in his employment. In this particular case, the plumber was acquitted.

Section 87 of the SHWW Act 2005 provides that where the Authority, for facilitating the exercise or performance of its statutory powers, requests the Revenue Commissioners in writing, a customs and excise officer may detain any article or substance, which is being imported. The article or substance may be retained for so long as reasonably necessary for an inspector to examine it. However, the period must not exceed 48 hours from the time the article or substance is detained.

The HSA is designated as the lead national authority for the purposes of the Chemicals Acts 2008-2010. Other national authorities

have specific functions under the Acts: the Environmental Protection Agency (EPA), the Minister for Health and Children, and the Minister for Agriculture, Food and the Marine. To facilitate working arrangements, the HSA has agreed memorandums of understanding, co-operation agreements and data sharing agreements with these and other organisations.

The Authority has a memorandum of understanding with the EPA, which covers shared areas of responsibility in relation to the European REACH and Detergent Regulations, the Chemicals Act and the Seveso II Major Accident Hazards Regulations. Apart from the statutory provision with the Customs and Excise Division of the Revenue Commissions, the Authority has a memorandum of understanding with the Revenue Commissioners on the export and import of dangerous chemicals and a data sharing agreement in relation to market surveillance. In relation to REACH, the Classification, Labelling and Packaging Regulation and the Chemicals Acts, the Authority has a memorandum of understanding with the Department of Agriculture, Food and the Marine.

There are a number of areas where the Authority may carry out inspections following an accident, such as rail, air and sea. However, other agencies may also, for their statutory purposes carry out investigations. To deal with issues which might arise where the Authority and other agencies are both carrying out inspections, the HSA has memorandums of understanding with the Railway Accident Investigation Unit, the Health Information and Quality Authority (HIQA), and the Radiological Protection Institute of Ireland (RPII) in relation to radon.

One of the quirks of health and safety legislation is that sometimes it falls to other agencies to enforce it. Examples are the Organisation of Working Time Act 1997 and the Protection of Young Persons (Employment) Act 1996. Both of these Acts are concerned with the hours people work. These provisions are now enforced by the Workplace Relations Commission.

THE WORKPLACE RELATIONS COMMISSION

The Workplace Relations Commission was established in October 2015, following the enactment of the Workplace Relations Act 2015. A number of bodies involved in industrial relations matters, including the National Employment Rights Authority (which was a non-statutory body) were incorporated into the Workplace Relations Commission.

As well as cases relating to working time, as mentioned above, penalisation claims are now in the first instance dealt with by adjudication officers from the Workplace Relations Commission. The Labour Court will continue to be the court of appeal.

HAZARDS: SECTION 4

CONSULTATION – SAFETY REPRESENTATIVES AND SAFETY COMMITTEES

The Barrington Commission recognised that while the primary responsibility for health and safety in the workplace rests with management, it also recognised that “every employee has an interest in decisions about his working environment”. Working from this premise, the Commission went on to recommend that companies should have in place a mechanism to involve workers in decisions on health and safety matters. In this section we review the consultation provisions in Irish OSH law and look at how consultation, with the right to be consulted and make representations, works.

CHAPTER 10: THE RIGHT TO BE CONSULTED AND MAKE REPRESENTATIONS

Employees have the right to be consulted about measures to ensure safety, health and welfare at work. Employees also have the right to consult and to make representations to their employer on matters concerning safety, health and welfare at work.

The right is conferred by law. Section 26 of the *Safety, Health and Welfare at Work Act 2005* (SHWW Act 2005) provides that every employer shall, for the purpose of promoting and developing measures to ensure the safety, health and welfare of his/her employees at work, consult with the employees and/or the employees' safety representatives or both, for the purpose of making arrangements which will enable employers and employees to co-operate effectively.

Employees should be consulted in advance and in good time in relation to:

- Measures which would substantially affect safety, health and welfare.
- The designation of employees to deal with emergencies.
- The preparation of the safety statement.
- Hazard identification and risk assessment.
- Information to be notified to the HSA in respect of accidents and dangerous occurrences.
- Appointment of competent persons to perform health and safety functions.
- The planning and organisation of training.
- The planning and introduction of new technologies.

Employers are required to consider any representations made by their employees. This requirement is specific as to the matters listed above but extends to any other matters relevant to the employees' health and safety. In so far as is reasonably practicable, employers are required to take such action as the employer considers necessary with regard to the representations.

Raymond Byrne commented in *Safety, Health and Welfare at Work Law in Ireland* (second edition) that under the equivalent section in the SHWW Act 1989, employers only had to consider the representations made. Under the 2005 Act the employer is obliged to consider the representations, and in so far as reasonably practicable, take any appropriate or necessary action.

Employers are required by section 26(5) of the SHWW Act 2005 to give employees involved in arrangements for consultations such time off from their duties as is reasonable to enable the employees to acquire the knowledge necessary to discharge their functions and such time off as is necessary to discharge those functions. Employees are entitled to the time off without loss of remuneration.

Apart from the rights to be consulted and make representations conferred by section 26, employees have rights to be consulted under the following Acts and regulations:

- Safety, Health and Welfare at Work (Offshore Installations) Act 1987, sections 23, 24 and 25.
- Carcinogens Regulations 2001, regulations 11.
- Quarries Regulations 2008 regulation 17.
- Construction Regulations 2013, regulation 28.

Employees have the right to select safety representatives.

CHAPTER 11: SAFETY REPRESENTATIVES AND SAFETY COMMITTEES

Safety representatives

Safety representatives are selected by their colleagues in the workplace. Employees may, if they agree with their employer, select more than one safety representative.

There are specific regulations regarding the selection of safety representatives on construction sites. The regulations reflect the unique characteristics of how work on construction sites is organised. The Construction Regulations (regulation 23) provide that the project supervisor construction stage shall, where more than 20 persons are normally employed on a site at any one time, facilitate the appointment of a site safety representative from among the employees of the contractors working on the project.

The procedures for the selection of the site safety representative are set out in Schedule 6 of the Construction Regulations (<http://www.irishstatutebook.ie/2013/en/si/0182.html>). The workers on the site may, after work has commenced, select the site safety representative. If a site safety representative has previously been selected, the views of all persons at work on the site must be taken into account when confirming that person as site safety representative.

However, if the workers on site are unwilling to organise the selection process, they may request the PSCS to do so. Ultimately, if nobody is selected as a site safety representative, it falls to the PSCS to nominate a provisional site safety representative.

When a site safety representative has been selected the PSCS must inform everybody working on the site.

Safety committees

While employees are entitled to select a safety representative from amongst their number, the establishment of a safety committee is a matter for agreement between employers and employees. Where agreement has been reached and a safety committee has been established, employees are

entitled to select and appoint members from amongst their colleagues.

Where there is a safety committee, the employer may agree with the employees that consultation with the committee fulfils the requirement to consult with employees on matters affecting safety, health and welfare.

Where it is agreed that there should be a safety committee, the rules governing the organisation and arrangements for meetings of the committee are detailed.

The number of members of a committee shall be not less than three and shall not exceed more than one member for every 20 persons employed in a workplace, provided that the maximum number of members shall not exceed ten. Where the committee consists of:

- Four or less members, the employer shall appoint one, the others being appointed by the employees.
- Between five and eight members, two shall be appointed by the employer and the remaining numbers by the employees.
- More than eight members, three shall be appointed by the employer and the remaining members shall be appointed by the employees.

Where there is a safety representative or there are safety representatives, at least one shall be selected and appointed to the safety committee by the employees.

In general, employers and employees agree on the facilities for holding meetings and on the frequency, duration (which shall not exceed an hour) and time of meetings. The committee is entitled to request that the employer consults with them on such arrangements. Subject to agreement with the employer, committee meetings should be held on the days decided by the committee and during normal working hours. The quorum for a meeting shall be not less than three, but may be greater if the committee so decides.

There is a provision that safety committees should not meet more frequently than once every three months.

CHAPTER 12: THE RIGHTS OF THE SAFETY REPRESENTATIVE

Safety representatives have rights and functions. As safety representatives they do not have duties, although as employees they do.

Safety representatives have the right:

- *To inspect workplaces (section 25.2.a of SHWW Act 2005)*: Safety representatives are entitled, after giving reasonable notice to their employer, to inspect the whole or any part of a workplace.
- *To investigate accidents/dangerous occurrences (section 25.2.a.ii.b)*: Immediately after an accident or a dangerous occurrence, or if there is an imminent danger or risk to safety, a safety representative is entitled to inspect a workplace. The safety representative is entitled to investigate accidents and dangerous occurrences, provided that he/she does not interfere with or obstruct the performance of any statutory obligation.
- *To investigate complaints (section 25.2.c)*: A safety representative has the right, after giving reasonable notice to the employer, to investigate complaints relating to safety, health and welfare at work made by any employee who he/she represents.
- *To make representations to employer (section 25.2.g)*: A safety representative has the right to make representations to the employer on any matter relating to safety, health and welfare at the workplace.
- *To be informed of an HSA inspection (section 25.6)*: When an inspector visits a workplace to carry out an inspection, the employer is required to inform the safety representative that the inspection is taking place.
- *To accompany an inspector (section 25.2.d&e)*: Unless an inspector is investigating an accident or a dangerous occurrence, a safety representative has the right to accompany an inspector who is carrying out an inspection. At the discretion of the inspector, a safety representative may accompany an inspector investigating an accident or dangerous occurrence.
- *To make representations to an inspector (section 25.2.h)*: A safety representative has the right to make representations to inspectors on matters relating to safety, health and welfare at a workplace.
- *To receive advice and information from an inspector (section 25.2.i)*: A safety representative may receive advice from inspectors on matters relating to safety, health and welfare at a workplace.
- *To consult and liaise with other safety representatives (section 25.2.j)*: Safety representatives have the right to consult and liaise on matters relating to safety, health and welfare at work with other safety representatives in the undertaking concerned, whether or not those safety representatives work in the same workplace, in different workplaces under the control of the employer or at different times at the place of work.
- *To time off work to learn role (section 25.5.a)*: A safety representative is entitled to have reasonable time off work, without loss of remuneration, to enable him/her to acquire the knowledge and training necessary to discharge his/her function.
- *To time off to discharge functions (section 25.5.b)*: A safety representative is entitled to have reasonable time off work, without loss of remuneration, to discharge his/her function.

Apart from rights, safety representatives have certain entitlements, such the entitlement to receive from an HSA inspector copies of improvement directions and notices and prohibition notices. (section 65)

CHAPTER 13: REPRESENTATION

The safety representative's role or, as it is described in the HSA's *Safety Representatives and Safety Consultation Guidelines* (http://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Guidelines_Safety_Representatives.pdf), the safety representative's "function", is to consult and make representations to the employer on safety, health and welfare matters relating to employees in the place of work.

In carrying out his/her functions, the safety representative will effectively be exercising the rights conferred by the Act. The safety representative's function is to represent the employees who have selected him/her by making their concerns about health and safety issues known to the employer and by ensuring that the employer takes action to address the concerns expressed by eliminating the risks to employees' health, safety and welfare or, if that is not possible, to reduce the risk to the lowest reasonably practicable level. The overall aim of the safety representative has been described as being: "To help achieve and influence safe and healthy workplaces to protect workers' health and safety".

The Services Industrial Professional and Technical Union (SIPTU) has published a pocket guide for safety representatives. The guide highlights two issues of particular concern to trade unions and safety representatives around the role of the safety representative.

The first concerns the tendency of some employers to equate the safety representative role with that of safety officer and to ask the safety representative to perform duties that would properly be the duty of a safety officer or advisor. The safety representative is elected by his/her colleagues to be their representative and to voice their concerns about matters that affect their safety, health and welfare. Safety representatives should not be asked to act as a safety advisor, and if they are asked, they should refuse to do so. This does not preclude a

safety representative from giving an opinion about safety, health and welfare matters.

The second is the concern of safety representatives that they are taking on a role that may impose a legal duty on them. This is not so, as is made clear in the HSA's Guidelines, which state: "A safety representative does not have any duties, as opposed to functions, under the 2005 Act other than those that apply to employees generally. Therefore, a safety representative who accepts a management proposal to deal with a safety or health issue could not be held legally accountable for putting that proposal into effect". The HSA Guidelines describe the safety representatives' role as being one of carrying out functions.

What safety representatives have are legal rights, not duties. However, having legal rights is one thing; exercising those rights is another. Safety representatives should ensure that they are provided with a copy of the organisation's grievance/disciplinary procedures. It has been trade union experience that where agreed procedures exist for the resolution of disputes or grievances that it is advantageous to use these procedures to the fullest extent possible. When raising an issue with an employer, always consult the procedural agreement. It is also useful to be aware of precedents. Safety representatives should keep a written record of agreements reached concerning issues and, through the safety representatives network, should inform other safety representatives of how issues were resolved in their workplace.

Making representations

The HSA's Guidelines state that the safety representative's overall function is to consult with the employer and make representations to the employer on safety, health and welfare matters relating to employees at the place of work. The employer must, the Guidelines state, consider these representations and act on them if necessary.

When making representations, safety representatives should:

- assemble the facts
- check the facts

- having assembled the facts, decide on the action to be taken.

Safety representatives should make notes and keep written records of representations made.

Where safety representatives make representations and employers fail to respond or respond inadequately, trade unions advise safety representatives that, if they are members of a trade union, they should refer the matter to their local branch for resolution.

A guide to health and safety in the workplace employees and safety representatives advises employees to first of all discuss their concerns at local level with their line manager or with the person in charge of health and safety in their workplace. The guide also recommends making the safety representative for the workplace aware of the concerns. If necessary, the guide suggests a formal safety inspection can be arranged. In this way the issue may be brought to the attention of the appropriate people and resolved at local level.

Safety, health and welfare at work should be of paramount importance to the employer and so it should be possible in many cases to resolve these issues speedily at local level. If this is not possible, you can refer the issue to the employee's trade union or representative organisation to raise the matter with your employer at a higher level.

If the matter remains unresolved contact the HSA, as the statutory body responsible for enforcing health and safety in your workplace. HSA inspectors have powers to enforce the law. If such action is necessary, your employer is not allowed to discipline you or take any discriminatory action against you - for example, by refusing to pay you for any time you declined to work because of unsafe conditions, or by passing you over for promotion.

Carrying out inspections

Safety representatives are entitled, on giving reasonable notice to their employer, to inspect workplaces. This provision gives safety representatives the right to make arrangements with employers to inspect workplaces. In

workplaces where employers adhere to good safety, health and welfare standards, employers and safety representatives often agree a schedule of regular inspections.

The HSA in the *Safety Representative and Safety Consultation Guidelines* (pages 14, 15 and 16) publish a very detailed suggested schedule setting out the frequency and duration of inspections. In lower risk environments, such as offices, it is suggested that the duration of inspections should be one hour. It is suggested that inspections might be carried out once a month, though in retail or service businesses it is suggested that the frequency might be fortnightly or even weekly.

In small manufacturing workplaces and construction, employing ten or fewer people, where the risks are medium or high risk, the suggested frequency of inspection is once a fortnight and the duration one or two hours. In high risk construction sites employing between ten and 50 people, inspections should be carried out once a week and take between one to two hours.

In high risk medium sized manufacturing plants or in medium sized healthcare institutions the suggested frequency of inspections is once a week or fortnightly and the duration is one or two hours. In high risk manufacturing plants, large construction sites and large hospitals employing more than 50 people, inspections might be fortnightly or monthly per unit or department and the duration might be between one and two hours.

The form the inspection takes may vary from time to time. The safety representative may inspect the entire workplace or a part of it. From the safety representative's perspective it may, in a workplace covering a large area, be helpful if inspections are broken up into inspections of sections of the workplace. This may be more manageable and as long as the safety representative is afforded the time and opportunity to inspect the entire workplace over a period, it may be a sensible approach.

The inspection may take the form of a safety tour or it could be an examination of certain aspects of the workplace, materials or equipment used,

systems of work practiced or a review of the safety statement and/or other documents.

These are matters for agreement with the employer.

Where it is proving difficult to reach agreement on inspections with employers, the safety representative might mention to the employer that the SHWW Act 2005 and the HSA Guidelines state that an employer must not unreasonably withhold agreement to the safety representative carrying out inspections. If the issue concerning the employer is the frequency of inspections, the HSA's Guidelines advise that the frequency of inspections depends on factors such as:

- the size of the workplace.
- the nature and range of work activities and locations.
- the nature and range of hazards.
- changing hazards and risks.

If it continues to prove difficult to reach agreement with employers on inspections, the safety representative should, if he/she is a member of a trade union, refer the dispute to his/her union branch for resolution.

Where there has been an accident, a dangerous occurrence or there is an imminent danger or risk to safety, health or welfare, the safety representative is entitled to carry out an inspection.

When carrying out inspections, safety representatives should record their findings in writing.

Apart from carrying out formal inspections, safety representatives should bear in mind trade union guidance that formal inspections are no substitute for daily observation.

Carrying out investigations

The safety representative is entitled to investigate accidents and dangerous occurrences, provided that he/she does not interfere with or obstruct the performance of any statutory obligation. When carrying out an accident investigation, a safety representative is entitled to speak to

people who have relevant information and to carry out visual inspections of the accident or dangerous occurrence scene. However, the safety representative must not interfere with the scene of an accident: he/she may only observe.

As well as keeping records of agreements reached, safety representatives should keep records of inspections. Safety representatives should make written notes and records and take photographs if that would be helpful.

Working with employers

The safety representative is selected to enable employees to voice their concerns over matters relating to safety, health and welfare at work. A guide for safety representatives, advises safety representatives to build a working relationship with the employer. The guide advises that it is easier to achieve improvements if the safety representative can relate to management in a constructive way and build mutual respect.

The safety representative is entitled to time off work, without loss of remuneration, to acquire the knowledge and skills necessary to perform the representative function. The HSA Guidelines state safety representatives should be knowledgeable enough to make a positive contribution to health and safety at work. According to the HSA Guidelines, safety representatives and members of safety committees have two distinct training needs:

- 1) training on the general safety representatives' function.
- 2) training on specific hazards and safe systems in their own workplaces.

The HSA Guidelines state that the whole organisation will benefit from the contribution a well-trained safety representative can make.

Safety representatives are entitled to reasonable time off for training and should suffer no loss of wages or any other remuneration, for example normal overtime or bonuses. Employers are obliged to pay the cost of training. Apart from attending training courses specifically designed for safety representatives, a number of best practice companies pay for and allow time off to safety

representatives to attend certificate and diploma courses in universities and institutes of technology.

Also, safety representatives are entitled to time off to discharge their functions. Again, they should not lose pay or other remuneration. However, while the HSA Guidelines advise that safety representatives need reasonable facilities – which the Guidelines say should include a meeting room and access to up-to-date information – the legislation does not require employers to provide any facilities.

SIPTU has carried out a survey of safety representatives to identify the facilities needed to fulfil the function. Safety representatives identified the need for:

- meeting rooms
- a private meeting area
- desk space
- access to a telephone
- access to the internet and email.

Safety representatives should be afforded these facilities and also be entitled to expect management co-operation. Examples of management co-operation include good communications, and access to information (safety statements, risk assessments, audits, Safety Data Sheets).

Working with inspectors

Safety representatives must be told by their employer, when an inspector visits a workplace, to carry out an inspection. They are, unless the inspection is an accident investigation or dangerous occurrence inspection, entitled to accompany the inspector carrying out the inspection. And they may make representations to inspectors and receive advice and information from them.

When an inspector visits a workplace to carry out an inspection, the inspector should ask the employer to let the safety representative know the inspector is there and proposes carrying out an inspection.

Liaising with other safety representatives

Safety representatives have the right to consult and liaise on matters relating to safety, health and welfare at work with other safety representatives,

whether or not those safety representatives work in the same workplace, in different workplaces under the control of the employer or at different times at the place of work. However, the safety representatives must work for the same organisation. For example, in an organisation with multiple workplaces, say a distribution company with depots throughout the country, a safety representative in Cork may consult with a safety representative in Donegal about matters of mutual concern. This however does not apply to construction sites, where different employers will have their own safety representatives. However on construction sites there will be a site safety representative, with whom other safety representatives can and should liaise.

Common workplace problems: checklist

While the issues will be different, across the range of workplaces, many of the problems facing safety representatives are similar. The checklist (*Table 13.1*) is just a sample list of common problems. This checklist can be used as an aide memoir when developing a checklist for your own workplace.

Negotiating with employers

Many of the representations a safety representative makes are unlikely to result in negotiation. For example, more often than not a word with the supervisor that a running board is loose, or that there is an oil spillage in the yard, is enough to ensure the problem is dealt with. However, even if the representation is informal, it is always best to keep a written record.

In most large companies there will be a safety officer and the safety representative will work closely with the safety officer. There will be regular meetings, both of a formal and informal nature, and the safety representative is often likely to accompany the safety officer on a safety inspection tour. It is also likely that there will be a safety committee and the safety representative is likely to be a member of that committee.

However, even in well-run companies with progressive safety policies, there will from time to time be differences about actions required to ensure the safety, health and welfare of

TABLE 13.1: Checklist of common problems

THE WORKPLACE	YES	NO
Is the housekeeping good: is the workplace clean and tidy?	<input type="checkbox"/>	<input type="checkbox"/>
Are temperatures reasonable?	<input type="checkbox"/>	<input type="checkbox"/>
Is the lighting adequate?	<input type="checkbox"/>	<input type="checkbox"/>
Are walkways clearly marked out?	<input type="checkbox"/>	<input type="checkbox"/>
Are floor surfaces even, or are there bumps or hollows?	<input type="checkbox"/>	<input type="checkbox"/>
Are there handrails on stairways and raised walkways?	<input type="checkbox"/>	<input type="checkbox"/>
Are passageways kept free of obstructions?	<input type="checkbox"/>	<input type="checkbox"/>
Are floors and passageways free of slippery surfaces?	<input type="checkbox"/>	<input type="checkbox"/>
Are there sufficient washing facilities and toilets?	<input type="checkbox"/>	<input type="checkbox"/>
Are there facilities to store personal belongings and clothing?	<input type="checkbox"/>	<input type="checkbox"/>
Is there excessive noise?	<input type="checkbox"/>	<input type="checkbox"/>
Could there be asbestos present?	<input type="checkbox"/>	<input type="checkbox"/>
Is there a canteen and/or a restroom?	<input type="checkbox"/>	<input type="checkbox"/>
MACHINERY, PLANT AND EQUIPMENT	YES	NO
Is all machinery, plant and equipment CE marked?	<input type="checkbox"/>	<input type="checkbox"/>
Is all machinery, plant and equipment properly guarded?	<input type="checkbox"/>	<input type="checkbox"/>
Is machinery, plant and equipment checked and serviced regularly?	<input type="checkbox"/>	<input type="checkbox"/>
What levels of noise are emitted by machinery, plant and equipment?	<input type="checkbox"/>	<input type="checkbox"/>
Does machinery, plant and equipment vibrate?	<input type="checkbox"/>	<input type="checkbox"/>
Are fire extinguishers checked regularly?	<input type="checkbox"/>	<input type="checkbox"/>
SYSTEMS OF WORK	YES	NO
Are systems organised to allow work to be done without risk of injury?	<input type="checkbox"/>	<input type="checkbox"/>
Has manual handling been eliminated or reduced to the least practicable level?	<input type="checkbox"/>	<input type="checkbox"/>
Are we exposed to dust, fumes or flying objects?	<input type="checkbox"/>	<input type="checkbox"/>
Are any substances or articles hazardous to health used in work processes?	<input type="checkbox"/>	<input type="checkbox"/>
Is PPE (earmuffs, goggles, masks, safety shoes) provided?	<input type="checkbox"/>	<input type="checkbox"/>
TRAINING	YES	NO
Are all new employees given induction training?	<input type="checkbox"/>	<input type="checkbox"/>
When new machinery, plant or equipment is brought into use, is training provided?	<input type="checkbox"/>	<input type="checkbox"/>
When systems of work are changed, is training provided?	<input type="checkbox"/>	<input type="checkbox"/>
FIRE	YES	NO
Are fire extinguishers checked regularly?	<input type="checkbox"/>	<input type="checkbox"/>
Has the fire alarm been tested recently?	<input type="checkbox"/>	<input type="checkbox"/>

TABLE 13.1: Checklist of common problems *continued*

FIRE	YES	NO
Has fire drill been carried out recently?	<input type="checkbox"/>	<input type="checkbox"/>
Have workers, including contractor/temporary workers, been told where assembly point is?	<input type="checkbox"/>	<input type="checkbox"/>
Are fire exits blocked?	<input type="checkbox"/>	<input type="checkbox"/>
VEHICLES	YES	NO
Are vehicles serviced regularly?	<input type="checkbox"/>	<input type="checkbox"/>
Are tyres in roadworthy condition?	<input type="checkbox"/>	<input type="checkbox"/>
Are lights focusing properly?	<input type="checkbox"/>	<input type="checkbox"/>
FIRST AID	YES	NO
Have we trained first-aiders in the workplace?	<input type="checkbox"/>	<input type="checkbox"/>
Is there a first aider on each shift?	<input type="checkbox"/>	<input type="checkbox"/>
Is there a first-aid at each work location?	<input type="checkbox"/>	<input type="checkbox"/>
Is the first aid box fully stocked and checked regularly?	<input type="checkbox"/>	<input type="checkbox"/>
Do we have a defibrillator at the workplace?	<input type="checkbox"/>	<input type="checkbox"/>
INFORMATION AND CONSULTATION	YES	NO
Has a safety representative been elected/selected?	<input type="checkbox"/>	<input type="checkbox"/>
Is there a safety committee?	<input type="checkbox"/>	<input type="checkbox"/>
How often does the safety committee meet?	<input type="checkbox"/>	<input type="checkbox"/>
Do senior management attend safety committee meetings?	<input type="checkbox"/>	<input type="checkbox"/>
Does the company provide information on health and safety?	<input type="checkbox"/>	<input type="checkbox"/>

employees. If the safety representative finds that matters that have been raised are not being dealt with, the safety representative should prepare a written memo setting out the facts, listing the action requested, and noting whether the employer's inaction is as a result of a considered decision or due to oversight.

If the inaction is the result of an oversight, consider if a further reminder will lead to satisfactory action being taken. If so, raise the issue again. If it is the considered view that further representations will not result in action, then advice on the issues in dispute should be sought from representative organisations and/or the HSA.

The HSA, in its Guidelines, advises safety representatives to maintain records of any matter found to be unsatisfactory, whether discovered during an inspection or otherwise.

Always remember that a safety representative is entitled to contact the HSA and make representations to an inspector. With most reasonable employers this should not be necessary, but where it becomes necessary because of an employer's inaction, advise the employer that the Authority is going to be contacted.

Power to influence

The SHWW Act 2005 (section 26) requires that employers will consult with employees and their safety representatives on matters relating to safety, health and welfare.

Section 26 gives employees rights which, if used effectively, will enable employees to influence a company's workplace safety, health and welfare at work policies and actions. Employers are required to consult with employees on a wide range of matters, ranging from training to the introduction of new technologies.

One proviso of the section, which is often overlooked, is the requirement that employers will, when appointing competent persons in relation to protective and preventative measures, consult with employees and safety representatives. This, no more than the proviso that employers must consult on the introduction of new technologies, gives employees and safety representatives considerable influence, bearing in mind that if consultation is not meaningful, the safety representative could make representations to the HSA on the issues.

Getting results

Safety representatives can help their fellow workers to attain their rights by seeking to ensure that safety, health and welfare conditions in the workplace are good.

A case brought with the support of a union on behalf of a shop worker illustrates what can be achieved. The shop worker suffered an accident at work and was on sick leave for a number of weeks. During this time, he was, his union argued before a Rights Commissioner, subject to harassment by the management who made numerous phone calls and comments. On appeal to the Labour Court, the Court held that the worker should be paid €3,000 in full and final settlement of all claims. At the earlier stage of the process, the Rights Commissioner who heard the case ruled that the shop owners should ensure there were no further recurrences of the matters complained of.

Another case brought with the support of a union to the Employment Appeals Tribunal also illustrates how trade union action can secure workers' rights

when health and safety issues arise. The EAT ordered that a bus driver, who was dismissed after failing an eyesight test, should be re-engaged in a position other than his former position. The tribunal heard that the driver's eye-sight had been tested by a company doctor. On examining the driver, the company doctor found that his sight did not meet the required standard. Accordingly he was declared unfit to drive.

The doctor told the driver of her finding and said she would enquire about alternative work. Evidence was given for the company that no alternative work was available and the driver, was retired on medical grounds. Two shop stewards gave evidence that alternative work was available.

Having heard the evidence, the Tribunal accepted that the driver was "permanently unfit to continue his duties as a bus driver". However, they stated it had not been demonstrated to them that the company had given due consideration to the possibility of finding alternative employment for him and ordered his re-engagement in a role other than his former position, from the date of his dismissal.

CHAPTER 14: PROTECTION AGAINST PENALISATION

One of the most significant achievements of the trade union movement in relation to the SHWW Act 2005 was the inclusion of the provision (section 27) protecting employees against actions taken by employers to penalise them for acting in compliance with health and safety legislation, exercising any duties or rights, making a complaint or representation, giving evidence in a court case against an employer (be it a prosecution or a civil claim), in relation to emergencies or serious or imminent danger or when acting as a safety representative.

Penalisation is defined as:

- suspension, lay-off or dismissal
- demotion or loss of opportunity for promotion
- transfer of duties, change of location of place of work, reduction in wages or working hours
- the imposition of any, reprimand or penalty
- coercion or intimidation.

If a safety representative or any other employee believes that he/she has been penalised, in any of the ways specified in the legislation, he/she may present a complaint to Workplace Relations Commission. The complaint is addressed to the Director of the Workplace Relations Commission.

An adjudication officer from the Workplace Relations Commission will give the parties an opportunity to be heard and to present evidence to the adjudication officer. The adjudication officer will give a decision in writing on the complaint and communicate it to both parties. He/she must send a copy of the decision to the Labour Court. The adjudication officer may declare that the complaint was or was not well founded. If the adjudication officer finds that a complaint is well founded, he/she may require the employer to take a specific course of action and/or to pay the employee compensation. If either party is dissatisfied with the adjudication officer's decision, that party may appeal the

decision to the Labour Court. The Labour Court will hear the parties' submissions and give the parties the opportunity to present evidence. Following the hearing the Labour Court will make a written determination, in which it will either affirm the adjudication officer's decision, set it aside or vary it. The Court shall communicate its determination to the parties.

A form for making an appeal is available on the Workplace Relations Commission's website. Click on the following link http://www.lrc.ie/en/Publications_Forms/Labour-Court-Appeals-Form.pdf

TABLE 14.1: Penalisation claims: procedures and time limits checklist

Complaint must be made within six months from date of penalisation.

If the Adjudication Officer considers it reasonable, he/she may extend this period by another six months.

Appeals against a Adjudication Officer's decision must be taken within six weeks from the date the decision was communicated to the party appealing.

TABLE 14.2: Penalisation Case Study: Rights Commissioner's decision

Two members of the Defence Forces, with others, were detailed to clean rubbish on army grounds. When the two sought PPE and did not carry out the task, they were informed that their actions were in breach of a lawful order and they were charged under military law. The charges were subsequently dropped. With the support of PDFORRA (their representative association), the two made a complaint to a Rights Commissioner. They argued that the ground in question

**TABLE 14.2: Penalisation Case Study:
Rights Commissioner's decision (cont.)**

was outside the area of military control, that members of the public had access to it and that the rubbish was not confined to litter.

They did not, they argued, refuse to carry out the detail, but sought the appropriate PPE. They were, they argued, penalised by being charged with a breach of discipline under military law and by not getting time off that the others, who carried out the task, got.

The Rights Commissioner held that the SHWW Act 2005 applied. The Rights Commissioner found that the work in question could have been dangerous and that the Defence Forces had failed to respond to the soldiers' request for a copy of the risk assessment. The Rights Commissioner decided that because the Defence Forces did not show the soldiers a copy of the risk assessment, the soldiers were entitled to take the steps they took. The Rights Commissioner concluded that the soldiers had been penalised by the threat of disciplinary action. They were each awarded €500 compensation.

A reviews of the outcome of 40 Labour Court determinations in penalisation cases found that employees who brought claims had succeeded in only 12 cases. The review found that bullying and harassment were frequently cited as the underlying issue by claimants. Dismissal is the most common form of penalisation cited in claims.

A notable feature of these determinations is that where the Labour Court finds that an employee has been penalised, the amount awarded in compensation is low. While in one case, in which the employer did not appear at the hearing, the Court confirmed an award of €12,000, in another case they reduced an award of €15,000 to €3,500. In contrast, in one case they increased the award to €8,000 from €3,000.

However, the awards are far below many awards made by the Employment Appeals Tribunal in unfair dismissal claims and fall far short of what some lawyers expected when, the SHWW Act 2005 became law, given that there was no cap on the amount that could be awarded.

'But for': the causal link

Any employee contemplating taking a penalisation claim, or any lawyer or trade union official advising an employee on taking a claim, should note the definition of detriment and consider if the detriment was caused by the action complained of: the causal or 'but for' link that the Labour Court looks for. The issue was highlighted in what has become the most frequently cited case from the Labour Court:

Paul O'Neill v Toni & Guy Blackrock.

Mr O'Neill, who worked as a colour technician in the hairdressing salon, was dismissed by the owners of the premises for refusing to wear, what he claimed, were lower quality gloves. He informed one of the owners that he regarded the gloves as inadequate on health and safety grounds. The owner dismissed his concerns and, he claimed, told him to buy his own, which he said he did.

He contacted the HSA and was advised that he should use suitable gloves when working with chemicals. He made his employer aware that he had contacted the HSA. He continued to raise the issue with his employer.

The employer told the Court that the worker was dismissed because he often was late for work and sometimes left early. She told the Court that because it was necessary to cut back on expenditure, it was decided to buy cheaper gloves, which she said were adequate for the purpose required.

The worker was issued with a verbal warning, a written warning and a final written warning. On the morning of March 14th 2007, Mr O'Neill was 20 minutes late for work and was dismissed. In cross-examination the employer told the Court that the company had a health and safety policy, but she could not recall what it said in relation to the use of chemicals.

Following his dismissal the worker brought a claim against his employer, claiming that he had been penalised, contrary to section 27 of the SHWW Act 2007.

Deliberating on the law, the Court said that where there is more than one causal factor in the chain of events leading to the detriment complained of the commission of a protected act must be an operative cause in the detriment suffered. A claimant must establish that on the balance of probabilities he made complaints relating to health and safety and that it is apt to infer that the complaints were an operative consideration leading to, in this case, his dismissal.

The Court said it was satisfied that the dismissed worker made complaints concerning health and safety matters arising from the change in the quality of the gloves provided. It was also satisfied that following those complaints, the employer appeared to take issue with the employee in respect of employment-related matters which had not previously been a source of difficulty. The Court held that the dismissed employee's complaint of penalisation had "been made out". It awarded him €20,000.

TABLE 14.3: Unsuccessful Penalisation Claims

Mr Carey claimed that he was dismissed because he had made complaints about safety issues in the store where he worked. He claimed this constituted penalisation. His employer contended that he was dismissed during his probationary period for consistent underperformance and because the store was experiencing a downturn in trade. The court noted that there was considerable controversy about whether or not Mr Carey had made complaints about safety issues, but was satisfied from the evidence that he had received negative reviews during his period of employment. The Court found that even if he had made complaints about safety issues, general dissatisfaction with his performance was the operative reason for his dismissal. (*Heatons and Christopher Carey. Case Ref: HSD 123. Date of determination: April 2012*)

Mr Ryan was employed on a one-year fixed-term contract as part of a FAS-administered community employment scheme. During his employment, Mr Ryan says that he made several complaints about health and safety issues and he was never provided with any resolution of his grievances. The employer said Mr Ryan never formally raised any issues regarding health and safety. At the end of the contract Mr Ryan's employment was not renewed. He claimed this was because of his complaints about health and safety. This, he claimed, constituted penalisation. The employer rejected the claim and gave the court an explanation for the non-renewal of the contract (the explanation is not disclosed in the determination). The Court acknowledged that there was a dispute as to whether or not Mr Ryan had raised health and safety issues with his employer. However, they accepted that the employer's explanation for not renewing the contract was reasonable and acceptable. The Court found no causal link between any health and safety issues and the non-renewal of Mr Ryan's employment. (*Mountwood Fitzgerald Park Community Development Project and Joe Ryan. Case Ref: HSD 1110. Date of determination: November 2011*)

HAZARDS: SECTION 5

OSH ROLES

The foundations of modern Irish occupational health and safety management were established by the Barrington Commission. Since the Barrington Commission reported in 1983, health and safety management in Ireland has evolved and while the principal role and responsibility for workplace health and safety lies with the employer, a wide range of advisors, trainers and others have a part to play.

CHAPTER 15: **OSH – THE EMPLOYER'S ROLE**

The basis of the employer's role is set out in the Barrington Commission Report. Under the heading 'Safety is a management responsibility', Barrington writes:

"Safety must be an integral part of the management process. It should be managed in the same way as productive efficiency. The responsibility for safety rests squarely on the shoulders of those who have power to make decisions in the company and to see that they are implemented".

Barrington draws a clear distinction between the management role and the role of professional safety advisors: "The function of professional safety officers is to provide expert advice and support to the management, not to take over management's responsibilities". That point is also made in the authoritative textbook *Safety at Work* (Ridley and Channing: 7th edition) by the then chairman of the British Health & Safety Executive, Bill Callaghan, who wrote: "health and safety is ultimately the responsibility of those who manage and direct companies".

In *A Short Guide to the Safety, Health and Welfare at Work Act 2005*, the HSA puts it succinctly: "Employers (including self-employed persons) are primarily responsible for creating and maintaining a safe and healthy workplace".

For management in the Barrington Commission Report, read employer in the SHWW Act 2005 and associated regulations. The full range of the employer's legal duties, detailed in the SHWW Act 2005, are set out in Section 1, Chapter 1. In this chapter we are concerned with the practical application of the legal obligations.

Employers are required to:

- Manage and conduct work activities to ensure the safety, health and welfare of employees.
- Prevent any improper conduct or behaviour.

- Provide a safe place of work.
- Provide safe systems of work.
- Provide proper equipment.
- Employ competent staff.
- Provide and maintain welfare facilities.
- Provide information, training and supervision.
- Provide and maintain PPE.
- Prepare emergency plans.
- Report accidents and dangerous occurrences (all fatal accidents and accidents involving more than three days absence are reportable).
- Use the services of a competent person for the purposes of ensuring the safety, health and welfare of employees.

From a practical day-to-day point of view, as Barrington wrote, safety must be an integral part of the management process, so without confusing legal definitions the words employer and management can be used interchangeably. The employer – whether running a business/undertaking as an owner-manager or through professional management – is responsible for safety, health and welfare. The individual manager, whether he/she be the owner of the business or an employee, can also be responsible. Three cases illustrate the point (*see Table 15.1*).

Managing and conducting work activities

Employers are required to manage the workplace to ensure, in so far as reasonably practicable, the safety, health and welfare of employees. In particular, they are responsible for managing and conducting work activities to ensure, in so far as reasonably practicable, that that objective is achieved. This is a duty under the SHWW Act 2005.

As Raymond Byrne writes in *Safety and Health Acts: Annotated and Consolidated*, the "emphasis on managing safety, health and welfare can be linked to the obligations" concerning "protective and preventative measures, hazard identification and risk assessment and the formation of a safety statement".

TABLE 15.1: Employer and managerial responsibility**COMPANY RESPONSIBLE**

A construction company, which pleaded guilty to allowing a gas leak that resulted in two workers suffering severe burns, was fined €40,000 by the Dublin Circuit Court. The Court heard that the company was carrying out work on gas pipelines in the vicinity. The normal supervisor was not on duty and two workers were diverted from another site to the Oscar Traynor Road site to cover an excavation with a metal plate.

When the men got to the site, the senior worker told the person in acting charge of the site that the excavation was too small for the work required. However, as a pipe had been cut, the senior worker told the HSA inspector investigating the incident that he had to go ahead, even though the procedures to be followed were not the correct procedures. When they were carrying out the work there was an explosion. The two workers, neither of whom were wearing the correct PPE, suffered severe burns.

Giving evidence in mitigation, the company having pleaded guilty to a charge of failing to, in so far as reasonably practicable, manage and conduct its work activities to ensure the safety and health of its employees (SHWW Act 2005, section 8.2.a), the health and safety director of the parent company told the court that the company took health and safety very seriously. In 2011 the parent company won a RoSPA president's award, having won RoSPA awards for the last 15 years. The company was, he said, "deeply sorry for the accident and the injuries". (*DPP for HSA v Enterprise Managed Services Ltd: Dublin Circuit Criminal Court, March 2012*)

COMPANY AND MANAGER BOTH RESPONSIBLE

Following a fatal accident in which a factory worker was trapped in a grinding machine, his employer B International (trading as Oasis) - and the company's plant manager, Paul Gallagher - pleaded guilty to breaches of health and safety regulations and were fined IR£1,150 and IR£300 respectively. The prosecution arose out of an accident in which a worker, who was trying to release a blockage, became trapped in the machine, which was described by an HSA inspector as similar to an old-fashioned mincing machine. The court heard that the HSA's investigation revealed that the machine jammed at regular intervals, as rotating cutters were not able to cope with the volume of materials fed into it. Then, to free the blockages, the machine was switched off and a worker climbed into it.

Following the investigation, the company was charged with failing to securely fence the cutting blades, failing to ensure the safety of employees, failing to possess a written risk assessment and failing to provide adequate training and information. The plant manager was charged with failing to prepare a revised safety statement after the machine had been modified to reduce noise. Taking account of guilty pleas by the defendants, District Judge Mary Devins imposed fines of IR£1,150 (€1,459) on the company and IR£300 (€380) on the plant manager. (*HSA v B International t/a Oasis and Paul Gallagher: District Court, Ballina*)

OWNER EMPLOYER RESPONSIBLE

A contractor, who pleaded guilty to failing to protect persons not in his employment, contrary to the SHWW Act 2005, section 12, was fined €1,000. The case arose out of an incident in which an employee of a sub-contractor fell from a roof and rolled through a scaffold which had no midrail or toeboard. He fell four metres and suffered a broken leg. (*HSA v John Phelan t/a Westlink Construction: Dublin District Court, December 2008*)

The protective and preventative duties are based on the premise that employers appoint competent people (the word in the Act is persons), whether it be one or more, to perform the functions specified by the employer relating to the risks and hazards to safety, health and welfare at work. A person is deemed to be competent where the person has the training, experience and knowledge appropriate to the work to be done, taking into account the size and the hazards of the workplace or the undertaking.

The requirement to appoint competent persons brings up the issue of resources. Employers are required to allow the competent persons the time and means to perform their functions. The time allowed and the means provided must be adequate, in relation to the size of the workplace and the risks. The employer is also required to provide the competent person with information on the factors that the employer knows or suspects affect the safety, health and welfare of employees and the risks at the place of work and of the work carried out.

The employer is responsible for identifying the hazards. The HSA's *Short Guide to the SHWW Act 2005* makes it clear that to successfully manage health and safety, employers need to know the hazards of the workplace. A hazard is defined as "anything with the potential to cause harm" (See *Potential Hazards Checklist, Table 15.2*).

Having identified the hazard, the employer is responsible for assessing the risk and putting in place control measures. One definition of risk used by the HSA is "risk is the likelihood that a person may be harmed or suffers adverse health effects if exposed to a hazard". Another definition adds in "the severity of the consequences" if the hazard caused harm.

The HSA advises that the risk assessment must:

- Address any significant hazards.
- Apply to all aspects of the work.
- Cover non-routine, as well as routine operations, such as occasional maintenance.

Risk assessments should be reviewed regularly. Risk assessments must be reviewed when there has been significant change or there is reason

to believe the current risk assessment is no longer valid. A simple example would be when new machinery is purchased. A somewhat trickier example would be when an experienced member of a team is replaced by a new recruit who has to be trained and integrated into the team.

When assessing the extent of a risk, some employers use complex matrixes; others simply rank risks as high, medium, low. A look at accident figures reported to the HSA indicates the high risk tasks (see *Table 15.3*). However, one of the problems with the reported accident figures is that they only deal with physical risks. Employers must also address the psychosocial risks and health risks, such as exposure to noise, vibration or stress and bullying.

When deciding what control measures to put in place, employers should have regard to the General Principles of Prevention:

- 1) The avoidance of risk.
- 2) The evaluation of unavoidable risk.
- 3) The combating of risk at source.
- 4) The adaptation of work to the individual, especially as regards design.
- 5) The adaptation of the place of work to technical progress.
- 6) The replacement of dangerous articles, substances or systems of work, with ones that are less dangerous.
- 7) Giving priority to collective protective measures over individual measures.
- 8) The development of an adequate prevention policy.
- 9) The giving of appropriate training and instruction to employees.

The HSA has published a hierarchy of control measures.

Where possible, the risk should be eliminated. Where it is not possible to eliminate the risk, risk must be reduced to be as low as reasonably practicable (ALARP). For a risk to be as low as reasonably practicable, it must be possible to demonstrate that the cost involved in reducing the

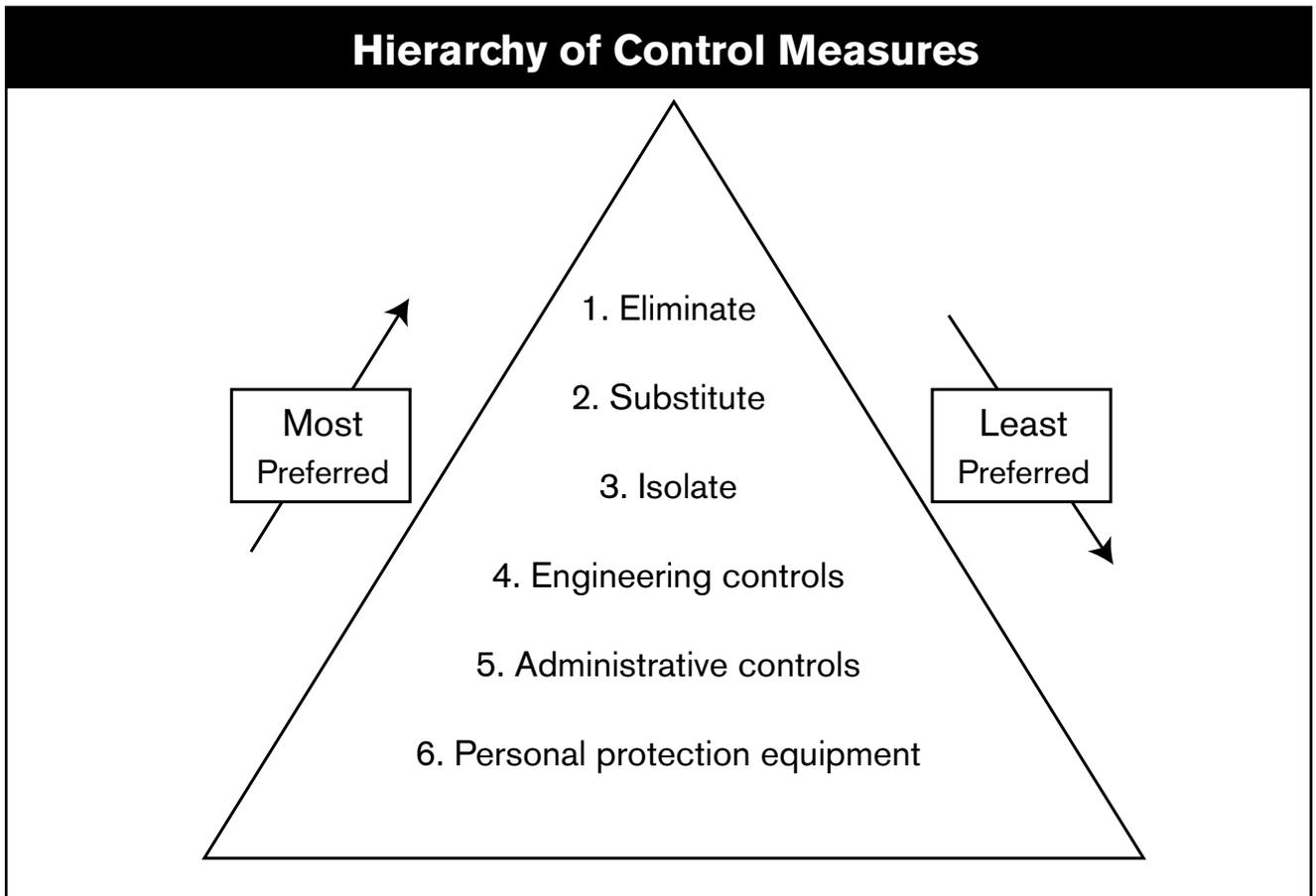
TABLE 15.2: Checklist of Potential Hazards (non-exhaustive list)

THE WORKPLACE	YES	NO
Slips/Trips/Falls	<input type="checkbox"/>	<input type="checkbox"/>
Falls from height (people)	<input type="checkbox"/>	<input type="checkbox"/>
Falling objects	<input type="checkbox"/>	<input type="checkbox"/>
Manual handling of loads	<input type="checkbox"/>	<input type="checkbox"/>
Plant and machinery (e.g. exposure to dangerous parts)	<input type="checkbox"/>	<input type="checkbox"/>
Mechanical handling	<input type="checkbox"/>	<input type="checkbox"/>
Vehicle movement and site transport	<input type="checkbox"/>	<input type="checkbox"/>
Fire and explosion	<input type="checkbox"/>	<input type="checkbox"/>
Hazardous substances (e.g. toxic, corrosive)	<input type="checkbox"/>	<input type="checkbox"/>
Use of compressed air	<input type="checkbox"/>	<input type="checkbox"/>
Noise: exposure to harmful levels	<input type="checkbox"/>	<input type="checkbox"/>
Vibration (exposure to harmful levels)	<input type="checkbox"/>	<input type="checkbox"/>
Exposure to radiation	<input type="checkbox"/>	<input type="checkbox"/>
Electrical hazards	<input type="checkbox"/>	<input type="checkbox"/>
Confined spaces entry	<input type="checkbox"/>	<input type="checkbox"/>
Unsuitable lighting levels	<input type="checkbox"/>	<input type="checkbox"/>
Thermal environment (too hot or too cold)	<input type="checkbox"/>	<input type="checkbox"/>
Human factors (violence, bullying)	<input type="checkbox"/>	<input type="checkbox"/>
Biological agents	<input type="checkbox"/>	<input type="checkbox"/>

This list is based on the HSA's list in the Short Guide but includes hazards identified in other publications.

TABLE 15.3: Causes/triggers of injuries – top five. Ranked by reference to 2015 figures

HSA REPORTED ACCIDENTS	2013	2014	2015
Manual handling	32%	32%	33%
Slips/trips/falls	18%	19%	19%
Shock/fright/violence/aggression	5%	5%	6%
Body movement/no physical stress	6%	5%	5%
Fall from height	5%	5%	5%



risk further would be grossly disproportionate to the benefit gained.

Having identified the hazards and assessed the risks, the employer must prepare a safety statement. The safety statement must:

- List the control measures to be taken to avoid the risks.
- Name the persons responsible for implementing and maintaining the measures.
- Include plans to deal with emergencies and imminent risks.
- List the names of safety representatives (if any).

As with risk assessments, safety statements should be reviewed regularly and if there are significant changes to work practices.

Employers must bring the safety statement to the notice of employees. In many workplaces, relevant extracts are accessible or on display near the work

activity to which the extract relates: this is a statutory requirement. When the safety statement is being brought to the attention of employees, it must be in a form, language and manner that they understand.

As well as addressing the hazards and risks facing employees, employers must also ensure the protection of the safety, health and welfare of persons who are not in the employer's employment to ensure, in so far as is reasonably practicable, that they are not exposed to risks to their safety, health and welfare. Put more simply, employers have duties towards contractors. A contractor could be the electrician or service technician who comes on site to repair machinery, or may be the caterer or the security guard.

One of the novel aspects of the SHWW Act 2005 is the provision allowing the HSA to draw up Codes of Practice, which employers, employing three or fewer employees and carrying on an activity for which a Code was developed, could adopt in place of drawing up a safety statement. Codes of Practice exist for:

- Agriculture.
- Construction.
- Road Works.

In summary, the employer's role is to manage safety, health and welfare at his/her workplaces by identifying the hazards, assessing the risks and putting in place control measures that are effective.

Improper conduct

While employers are under a duty to manage and conduct activities so as to, in so far as reasonably practicable, prevent improper conduct or behaviour likely to put the safety, health and welfare of employees at risk, what constitutes improper behaviour is not defined in the SHWW Act 2005. The HSA, in the *Guide to the Safety, Health and Welfare at Work Act 2005*, suggests two examples of improper conduct or behaviour: bullying and horseplay. Another example is violence between colleagues in the workplace. The HSA advises employers to put in place appropriate measures to prevent improper conduct.

Bullying in the workplace has emerged as a significant health and safety issue. The topic is discussed in Chapter 20. Notwithstanding that there have been no prosecutions for improper conduct under health and safety legislation, there have been a number of civil cases and cases brought under employment legislation for bullying.

One such case involved an assault on a young worker. The young worker was assaulted by three co-workers who put a high-pressure hose to his posterior. The assault resulted in the worker having to undergo emergency surgery in hospital, where he spent two weeks. The three workers were sentenced to 18 months imprisonment by the Cork Circuit Criminal Court. The assaulted worker took an action for personal injury against his employer, alleging that the employer was in breach of his obligations to protect him under the employer's common law duties of care.

Safe places of work

The statutory duty of employers to provide safe places of work derives from the common law

duties of employers. The statutory duty is set out in the SHWW Act 2005, section 8(2)(c)(i)(ii)(iii). Places of work must be safe, in so far as reasonably practicable, in relation to design, maintenance, access and egress. Also, plant, machinery and other articles at places of work must be safe and without risk to health.

The scope of the duty is perhaps best captured in a short HSE-GB web guide, *A safe place of work*. The web guide sets out twelve 'must do' rules:

- Make sure your buildings are in good repair.
- Maintain the workplace and any equipment in it so that it is safe and works efficiently.
- Put right any dangerous defects immediately, or take steps to protect anyone at risk.
- Take precautions to prevent people or materials falling from open edges: for example, fencing or guard rails.
- Fence or cover floor openings: for example vehicle examination pits when not in use.
- Have enough space for safe movement and access.
- Provide safety glass if necessary.
- Make sure floors, corridors, stairs and similar walkways are free of obstructions, such as trailing cables.
- Provide good drainage in wet processes.
- Make sure any windows capable of being opened can be opened, closed or adjusted safely.
- Make sure all windows and skylights are constructed so that they can be cleaned safely: for example the need to fit anchor points if window cleaners have to use harnesses.
- Minimise the risks caused by snow and ice on outdoor routes: for example by using salt or sand and sweeping.

The guide then goes on to deal with a number of specific aspects of workplace safety: lighting, workplace movement, cleanliness, hygiene and welfare and comfortable workplace conditions.

TABLE 15.4: Selected cases on duty to provide a safe place of work**EMPLOYERS' LIABILITY CASES****Not a place of work**

A claim by a drapery store manageress, for injuries suffered when she fell in a public car park while on her employer's business, was dismissed by a High Court judge on the grounds that a safety statement relates to a place of work and not to places where an employee may be in the course of work. The judge did not think the employer, having regard to the common law duty of care, could have anticipated the accident that occurred. (*Mullen v Vernal Investments*)

Unmarked glass door

A security guard who walked through an unmarked glass panel and suffered severe injuries was awarded damages of €529,126 (IR£416,721). The award was apportioned between the man's employer and its customer, who were held responsible for 85% (€455,152; IR£358,462) of the award, and the hospital treating him, which was held to be 15% responsible because of subsequent complications which aggravated his injuries. Evidence was given that the glass panel was unmarked. The judge held that in the absence of such markings, which were required by the relevant code of practice (standard), it was a 'hazard'. (*Daly v Guinness Peat Aviation and another*)

Employee - contributory negligence

A High Court judge awarded an injured workman, who slipped on a wet floor, damages of (€63,867) IR£50,300. However he reduced the damages by 25%, to €47,456 (IR£37,735), because of the workman's contributory negligence. The judge held that more could have been done to avoid the potential dangers of wet floors, but that as the man knew the floor was wet and did nothing about it, he could not be exonerated from all blame.

Asthma claim settled

A claim by a former print industry worker, that he contracted asthma as a result of exposure to paper dust, was settled in the High Court on undisclosed terms. Opening the case for the printer, counsel alleged that his employers were in breach of their duty of care to provide a safe place of work, proper ventilation and adequate respiratory equipment. (*Hamilton v Modus Media International*)

Electrocuted

A case brought by the mother of a Polish worker, who was electrocuted when a crane came into contact with overhead powerlines, was settled in the High Court for €85,000. The deceased worker's mother alleged that the employers failed to provide a safe place of work. (*Dzwil v Booth Precast Products and others*)

Doctor's multi-million settlement

While no details of the settlement were disclosed, it is believed that a case by a doctor who claimed her career was ended due to a severe back injury was settled for a multi-million sum. The doctor was injured when helping to lift a seriously ill patient. One of the doctor's grounds for the claim was that her employer had failed to provide a safe place of work. (*Slevin v HSE*)

Contributory negligence

The Supreme Court held that an office manager, who sued her employer for a wrist injury after she tripped and fell in an office, was guilty of contributory negligence, because she had a responsibility to keep her desk and the area around it tidy. The court held that while the primary duty of care rested

TABLE 15.4: Selected cases on duty to provide a safe place of work continued

on the employer, the office manager, who had previously complained about clutter and knew the danger, was guilty of contributory negligence, which the court measured at 25%. (*Coffey v Kavanagh*)

Burns caused by digger explosion

A worker who suffered burns to 14% of his body, after hot water and steam exploded when he opened the radiator of a digger, was awarded damages of €49,757 by the High Court. The worker claimed that his employer had been negligent and exposed him to a risk they ought to have known. Also, he alleged they had breached their statutory duty to provide a safe place of work. (*Clawlowski v Emdan Developments*)

Door stoppers

A hotel worker, part of whose little finger was amputated when the door of a room she was cleaning suddenly slammed shut, was awarded damages of €50,000 by the High Court. Arguments that the worker was guilty of contributory negligence were dismissed. The worker alleged that her employer was negligent on four grounds, including failing to provide a safe place of work. (*Antoszczyk v Gatehalf t/a Kilkenny Rivercourt Hotel*)

Lamp pole made contact with live powerline

A worker suffered brain damage and other severe injuries when a steel lamp pole, which he was manoeuvring into a hole, made contact with a live overhead powerline. His mother, acting as his next friend, sued his employer, the main contractors on site and another contractor. She alleged that the employer failed in its duty to provide a safe place of work and not to expose the worker to the risk of danger. It was alleged that the main contractor was under a duty to ensure the site was safe. The claim was settled for €5.2m. (*Crabbe v Al Read Electrical Company and others*)

PROSECUTIONS**Fell through hole in roof**

Following an accident, in which a worker who fell through a hole in a roof and suffered leg injuries, a building subcontractor was charged with failing to prepare a safety statement and failing to provide a safe system of work and failing to ensure a safe place of work by failing to identify roof openings. Giving evidence, a HSA inspector said the subcontractor had failed to ensure a safe place of work by failing to identify roof openings. The subcontractor, who was of limited means and had given up building work, was fined €1,000. (*DPP/HSA v Byrne*)

Burns

A company that operated a paving plant was fined €17,500, following an accident in which two apprentices suffered burns. The accident happened following a failure of the compressed air supply. The contractor who looked after electrical maintenance was not available. The apprentices spoke to him on the phone and he encouraged them to try and fix the problem. They returned to the switch house and one of them inadvertently touched a live buzz wire. This caused an explosion and the apprentices suffered burns. Their employer was charged with and pleaded guilty to failing to provide a safe place of work, as well as failing to provide training and information. (*DPP/HSA v Roadstone*)

TABLE 15.4: Selected cases on duty to provide a safe place of work *continued***Platform not inspected**

A company and a director of the company, who pleaded guilty to failing to provide a safe place of work, were fined a total of €17,500. The court heard that an employee had been brought on site and ordered to work on the platform, which had not been inspected prior to being put in use. The worker fell seven metres and suffered ankle and vertebrae injuries. (*DPP/HSA v Colm O'Rourke Ltd and Colm O'Rourke*)

Guardrail gave way

A mining company, which pleaded guilty to failing providing a safe place of work, after a worker was killed when a guardrail gave way, was fined €100,000. The court heard that as the worker was surveying a crusher on a manway gantry platform, the top guardrail gave way and he fell onto a concrete floor beneath the crusher.

As noted above, the duty on employers to provide a safe place of work, while now incorporated in statutory law, derives from the common law. Claims by employees who have been injured at work often allege the employers were negligent in failing in their duty to provide a safe place of work, contrary to common law and now also statutory law. Also the HSA has regularly prosecuted employers for allegedly failing in their statutory duty to provide a safe place of work (*See Table 15.4 of Case Law*)

There are no figures for the actual number of workplaces in the country but according to the latest Business Demography figures from the CSO (the figures are from the most recent business demography statistics published in 2016 for the period up to 2014) there are 238,000 enterprises in Ireland.

Delving further into the CSO business demography figures provides an insight into the structure of Irish business. The figures are for the "private sector economy". According to the figures SMEs, that is enterprises employing less than 250 people, accounted for 99.8% private sector enterprises. The SMEs employed 68.6% of those employed in the private sector, with larger firms, those employing over 250 people employing just over 30%. The sectoral distribution of enterprises was: services (51%); distribution (19%); construction (20%); industry (7%); and financial services (3%). The numbers employed in the

sectors were: services (44%); construction (7%); distribution (25%); industry (15%); and financial services (2%).

In the October-December 2016 quarter there were 2,048,100 people at work. Three sectors not mentioned in the CSO business demography figures are health and social care (257,000 employed), education (156,000 employed) and public administration defence (101,000 employed). It is reasonable to assume most of the people employed in these sectors were public sector workers. Their employers have a duty to provide them with a safe place of work.

Safe systems of work

Employers are also required to provide, again in so far as is reasonably practicable, safe systems of work. Work must be planned, organised and performed, to be safe and without risk to health. Like the duty to provide a safe place of work, the duty derives from the common law. The duty to provide a safe system of work has been the basis for both employer liability claims and prosecutions (*See Table 15.5*).

Employers are under a statutory duty to provide systems of work that are planned, organised, performed, maintained, revised and appropriate to be, in so far as reasonably practicable, safe and without risk to health. The statutory duty is set out in the SHWW Act 2005, section 8(2)(e).

There is no single document in which the scope of the duty to provide a safe system of work is identified in simple terms. The HSA has developed the concept of Safe System of Work Plans, designed to help employers carry out work activities safely.

The Authority has published a number of Safe System of Work Plans (SSWP):

- House Building.
- Ground Works.
- Demolition.
- Civil Engineering.
- Road Works.
- Agriculture.
- New Commercial Buildings.
- Building and Monument Maintenance.
- Working in Graveyards and Cemeteries.

SSWP are two-sided sheets, designed in pictogram format to identify the hazards of a task and to guide the user towards putting controls in place. As the introductory guidelines state, the SSWP complements the safety statement.

There are three sections in each form: Part 1 dealing with planning the activity; Part 2 dealing with hazard and control identification; and Part 3 sign off. Guidelines on using the SSWP are set out on the inside cover of the booklets. The primary objective of the SSWP is to identify the major hazards associated with the work activity.

The broad scope of the duty is discussed in *The Handbook of Health & Safety at Work* (authors: Bateman and others; publishers Kogan Page), in which a safe system of work can, it is said, be defined "as the work method resulting from the assessment of the risks associated with a task and the identification of the precautions necessary to carry out the task in a safe and healthy way". The authors write that the degree of formality establishing safe systems of work depends on a number of factors, including:

- The level of risk.
- The frequency with which the task is carried out.

- The complexity of the task.
- The capabilities of the employees concerned.
- The complexity of the precautions required.

Some tasks necessitate the use of permit to work systems. The risk assessment is a key element in planning safe systems of work, while training is, the authors say, closely linked to the establishment of systems. When established, systems must be maintained.

Raymond Byrne, writing in *Safety and Health Acts: Annotated and Consolidated*, in his analysis of the statutory provision, notes an emphasis on advanced planning of systems, taking account of the preventative aspects of the SHWW Act 2005. The reference to maintaining safe systems, he writes, involves follow up and supervision and the transmission of information between units in an undertaking.

Welfare facilities

Welfare is the often overlooked third leg of safety, health and welfare at work. Employers are under a duty to provide and maintain facilities and arrangements for the welfare of employees at work. The duty to provide for the welfare of employees has been described as the most vague of the three concepts of safety, health and welfare.

The Barrington Commission report initially had "some problems" with the term "welfare". In practice the Commission found it difficult to establish a clear distinction between welfare and other elements of occupational health and safety. Having overcome these initial difficulties, the Commission decided that policies on occupational health and safety should have regard to elements which affect the physical and mental wellbeing of employees.

Welfare has been described as being primarily concerned with "comfort" items, such as sanitary and washing facilities. What is meant by welfare is specified in more detail in the SHWW Act 2005 (Schedule 7, paragraph 31). Welfare facilities include the supply of hot water, sanitary conveniences, washing and bathing facilities, ambulance and first-aid arrangements, cloakroom

TABLE 15.5: Cases on duty to provide a safe system of work**EMPLOYERS' LIABILITY****Supreme Court rules on elements of a safe system of work**

An experienced painter fell from a ladder as he was painting pipes, which were over 12 feet from the ground. The pipes were obscured by ducts. To gain access, the painter moved his ladder and placed it against the ducting, which was in front of the pipes. He looked for the foreman, who was the only other person working on the premises, to ask him to hold the ladder. He could not find the foreman. He climbed the ladder, which was not secured at the top. When he got to the top, in order to reach the pipes, he had to get onto the duct. As he attempted to do so, the ladder slipped. The painter fell and suffered injuries. He sued his employer, whom he alleged had failed to provide a safe system of work. The High Court dismissed the claim, on the grounds that as an experienced worker, he was responsible for his own misfortune.

The painter appealed to the Supreme Court. The Supreme Court held that the employer was 60% responsible because the employer failed to provide a safe system of work and that the painter, as an experienced worker, was 40% responsible. In the judgment, the Supreme Court set out the factors to be taken into account when considering if a system of work is safe, which are:

- To address in advance the foreseeable risks inherent in the work.
- If the work is highly complex, to establish an elaborate system of work which is supervised and enforced.
- If the system is not complex, a warning of the dangers inherent in the job or specific instruction may suffice.
- While an employee's experience and competence are relevant factors, the duty to provide a safe system of work is the employer's responsibility. (*McSweeney v McCarthy: Supreme Court*)

Hot soup spill

A kitchen porter, who was carrying a basin full of hot soup from a kitchen into a carvery, had to ascend a step on which gravy had spilled. It was lunchtime and he was in a rush. He fell and the soup spilled over his wrist, causing him second degree burns. Evidence was given that his employer had a system in place to ensure spills were cleaned up immediately. Other evidence was given that tidying was often left over until after lunch. The judge held that while the system of work was perfectly safe if followed; it was not, and the actual operating system was dangerous.

Failed to provide eye protection

An employee lost an eye when struck by a flying nail after a nail gun misfired. The accident happened when the worker was firing nails from a machine into the head of timber door frames. The court heard evidence that the nail gun had misfired previously, but on the day of the accident, the worker tested it and checked that the settings were correct. Counsel for the injured worker alleged that the employer was in breach of his statutory and common duty to provide a safe system of work. An engineer for the injured worker told the court that there was no guarding on the machine and that it was highly dangerous. The court held that the employer was in breach of its statutory duty to operate a safe system of work. When the employer knew of the earlier misfires, the employer should have addressed the matter. Awarding the injured worker €440,000 damages, the High Court judge held that the designer of the machine was also negligent in failing to design a machine that prevented errant nails from flying around and in failing to provide a guard to prevent flying nails and he ordered the designer to pay 25% of the damages awarded. (*Brett v Carrolls Systems with Braid Systems joined as a third party*)

TABLE 15.5: Cases on duty to provide a safe system of work *continued*

PROSECUTIONS

Truck driver pinned to ground under slurry tank

A truck driver was killed when a slurry tank slipped off forklift forks. The accident happened when the slurry tank was being loaded onto a trailer. Because the hydraulic crane on his truck would not reach the slurry tank, the driver asked a colleague to use a forklift to lift the slurry tank. As this was being done, a wheel caught on a loose section of timber. The driver pulled the timber to release it. As he did so, the slurry tank moved and slipped from the forks, pinning the driver to the ground. His employer, who pleaded guilty to a number of charges, including failing to provide a safe system of work, was fined €140,000. (*DPP/HSA v Abbey Farm Equipment*)

Conveyor chain causes injury

A worker suffered severe cuts to his right foot, when a conveyor chain on which he was standing started suddenly. A District Court heard that the worker walked on the conveyor chain and that there was a gate on which there was no interlock. The employer, who pleaded guilty to failing to have a safe system of work, was fined €3,000. (*HSA v Glennon Brothers (Cork): District Court*)

Failed to learn from near miss

A worker suffered the partial amputation of two fingers while he was trying to stop a locomotive engine in a maintenance shed. To stop the locomotive, he threw wooden chokes underneath the wheels. In doing so, his fingers were caught between the shelving and the locomotive. The Court heard that while a train shunting crew was available, the company used the system of stopping locomotives with chokes because it was convenient. The Court also heard about an earlier similar near miss incident. The employer pleaded guilty to a number of charges, including failing to prove a safe system of work, and was fined €4,500. (*HSA v Irish Rail: District Court*)

facilities, seating, and refreshing facilities, including places for the taking of meals.

In *Providing the right workplace facilities*, the HSE-GB advises employers to consider:

- Toilets and hand basins, with soap and towels or hand-dryers.
- Drinking water.
- Place to store clothing and to change clothing if special clothing is worn for work.
- Place to rest and eat meals.

Many of these issues are dealt with in the *General Application Regulations 2007, Part 2, Chapter 1: The Workplace*. The Authority's recommendations in relation to general welfare requirements (*General Application Regulations, regulation 18*) are concerned with:

- Cleaning: workplaces should be kept clean and clear of refuse.
- Where a job can be carried out while seated, or where there may be opportunities for workers to sit down between tasks without detriment to their work, seating (chair with a back), or if that is not practicable, some other form of support should be provided.
- Drinking water should be provided at accessible locations.
- There should be facilities to boil water.
- Table surfaces should be easy to clean.
- Rest rooms should be provided where work involves arduous physical activity or is conducted in a hostile atmosphere (for example, where employees are exposed to dust or fumes).

In the HSA's guide to the Regulations, recommendations on sanitary facilities are given (See *Tables 2.1 & 2.2: Sanitary Facilities pg21*).

Two issues that arise frequently in relation to workplaces are temperature and lighting.

The General Application regulations (Regulation 7) provide that after the first hour's work the minimum temperature for sedentary office work is 17.5 degrees centigrade, while for other office work that does not involve serious physical activity, the minimum temperature should, in so far as reasonably practicable, be 16 degrees centigrade after the first hour's work. While maximum temperatures are not specified, high or uncomfortable temperatures should be controlled.

The regulations on lighting do not specify any particular level of luminance but natural lighting takes precedence over artificial lighting and lighting should be sufficient to enable persons to detect obvious hazards. A HSE-GB publication, *Lighting at Work* (<http://www.hse.gov.uk/pubns/priced/hsg38.pdf>), though now somewhat dated, still offers useful guidance and includes information on lighting levels for certain tasks.

Information, training and supervision

Employers are under a duty to provide information, training and supervision (The General Application Regulations 2007, regulation 10). Information, training and supervision should be in a form, manner and language that the employee understands.

But beyond complying with statutory requirements, why provide health and safety training? The HSE-GB puts the case in a publication *Health and safety training: a brief guide*. Providing health and safety information and training helps employers:

- Ensure that people who work for them know how to work safely and without risk to health.
- To develop a positive health and safety culture.
- By contributing to making employees competent in health and safety.
- By reducing accidents and occupational ill-health, thus reducing costs.

The guide can be accessed at: <http://www.hse.gov.uk/pubns/indg345.pdf>

Where employers fail to provide training, the training is inadequate or records are not available, the employer is effectively unable to defend proceedings if sued after an accident in the workplace. Speaking at the National Irish Safety Organisation's annual conference in 2013, a senior insurance industry claims advisor said training has to be appropriate and task-specific. On the issue of records, he said: "The making and keeping of records is fundamental to defending claims". In court, "if it is not written down, it did not happen". A leading senior counsel said training must be appropriate to the work to be done. Giving an example of the standards expected by the courts, he said no judge will accept that a worker, who has been shown a video or some slides, has received proper manual handling training.

Training or rather the failure to provide training or the provision of inadequate training ranks with the provision of safe places of work and safe systems of work as one of the most commonly cited grounds for negligence actions at common law by employees injured at work. The HSA regularly prosecutes employers for not providing training. (See *Table 15.6 Case Law – Training*)

In the publication *Workplace Safety and Health Management*, the HSA advises that adequate arrangements must be made to ensure employees have the necessary skills to do their work safely. Training should be provided:

- On recruitment.
- If an employee is assigned to a new task.
- When new equipment or technology is introduced or systems of work are changed.

Employers are required to provide training during working hours and without loss of remuneration to employees attending training. This particular requirement often leads to difficulties.

In the publication *Workplace Safety and Health Management* the HSA states that good training arrangements should include:

- Systems to identify health and safety training needs.

TABLE 15.6: Cases on Training**EMPLOYER LIABILITY****Failed to provide training**

A bus driver, who was injured when he went to the aid of a passenger who was being attacked, was awarded compensation of €13,500 by the Dublin Circuit Court. The Court heard that a gang of aggressive and drunken passengers had attacked a passenger who was upstairs. The passenger came down and told the bus driver, who tried to contact his base for help. Later, as the aggressive and drunken passengers came down the stairs to get off the bus, one of them punched the passenger on the face and knocked him over. The driver intervened to stop the attack. He in turn was attacked. He suffered physical injuries and developed post-traumatic stress disorder.

Awarding the injured bus driver €13,500 compensation, the judge, while saying that the matter had been taken seriously by the bus company, held that the company was negligent because it failed to provide adequate communications and training on how to handle such situations. Commenting on the company's advice to drivers to stay in the safety of their secure cabs, the judge said the bus driver could have done little other than come to the aid of the passenger. (*Collins v Dublin Bus: Dublin Circuit Court*)

PROSECUTIONS**Waste picker fatal injury**

A woman working as a waste picker at a waste recycling plant was killed when an excavator was used to move waste for another load which was coming in. Even though the woman was wearing a high visibility vest, the excavator driver was unable to see her over three skiploads of rubbish. An HSA inspector told the court that the deceased worker and her husband, who also worked as a waste picker at the site, were given a demonstration of what to do but were not told of any hazards or risks. The excavator driver told the inspector that he had never been shown any safety rules or warned of risks. There was no safety statement. The two companies operating at the recycling plant were charged with offences, including failing to provide training and adequate instructions on health and safety risks. The companies pleaded guilty and were fined a total of €80,000. (*DPP/HSA v Noel Murphy Waste Disposal Limited and McCaul-Murphy Waste Services Limited: Dublin Circuit Criminal Court*)

Two fingers amputated

While a worker was operating a lathe, his glove became entangled in a rotating device and his little finger and ring finger were severed. An HSA inspector told the court that the worker had not been trained in the operation of a lathe since he was an apprentice 30 years earlier. The company, which pleaded guilty to failing to have a risk assessment and of failing to ensure the safety of workers, was fined €7,000. (*DPP/HSA v O.S Sheetmetal Limited: Cork Circuit Criminal Court*)

- Training documentation appropriate to the size and activity of the organisation.
- Refresher training.
- Proper supervision to ensure the development and maintenance of competence.

The literature on health and safety training links training to competence. New employees and current employees assigned to new tasks, need to be up to the standard to carry out the tasks. New employees will need induction training. Induction training should cover health and safety policy, personal responsibilities, fire procedures, emergency procedures, first-aid arrangements, accident and incident reporting procedures, basic manual handling techniques and information on PPE and washing, eating and changing facilities, where these apply in the workplace.

Provide and maintain PPE

Employers are obliged – where risks cannot be eliminated or, by applying the General Principles of Prevention, be adequately controlled – to provide personal protective equipment (SHWW Act 2005, regulation 8(2)(1)). The rules governing the provision and use of PPE are covered in more detail in the General Application Regulations Part 2, Chapter 3 (*see Section 2, Chapter 2*).

The fundamental principle to be remembered about PPE, which is spelt out clearly by the HSA in the *Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007*, is that that PPE “should only be used as a last resort”. Having carried out risk assessment and having applied the General Principles of Prevention and concluded that PPE is required, what should the employer do?

Legally, the employer is required to assess the hazards of the workplace in order to identify the correct type of PPE to be provided. Then consider whether the PPE is:

- Appropriate to the risks involved and the condition of the workplace?
- Does the PPE adequately prevent or control the risks?

- Can it be adjusted to fit the wearer correctly?
- Is the employer aware of medical conditions of the wearer that have to be taken into account?
- Does the PPE cause discomfort?
- If more than one item of PPE is being worn, are the items compatible?

PPE is provided for the use of individual employees. But where necessary, it may be worn by more than one employee, provided such use does not present health or hygiene problems. Employees are under a duty to take reasonable steps to sure that PPE is returned to storage after use.

CONTRACTORS

Employers have a duty to, in so far as reasonably practicable, manage and conduct their businesses, so that persons not in their employment are not exposed to risks to their health and safety. While the persons not in the employer's employment includes members of the public, more often than not such persons are contractors or the employees of contractors providing services to employees.

Many of the contractors will be self-employed and many more will have employees working on other employers' sites. Either way those contractors are employers. As employers they owe all the duties an employer owes to an employee and the employers to whom they are contracted to provide services owe a duty of care to them and their employees. As persons in control of a workplace (SHWW Act 2005, section 15) the employers to whom they are contracted owe them duties in relation to access and egress, articles and substances.

TABLE 15.7: HSA must established a prima facie case

In overturning a building contractor's conviction for operating an unsafe system of work, the Court of Criminal Appeal said the Circuit Court judge should be acceded to the company's application to dismiss the prosecution. The contractor involved, P J Carey (Contractors) Limited, was in fact operating a safe system of work, the Court held. Delivering the judgment of the three-judge appeal court, Mr Justice Adrian Hardiman said there was no evidence that the system of work was inadequate. Indeed there was ample evidence that the system of work was quite adequate and that no alternative system was "needed or practicable". The court also held that for the prosecution to place the onus of proof on a defendant, it must first establish a prima facie case.

Recapping the evidence given in the Circuit Court, Mr Justice Hardiman noted that the deceased worker had entered the unsupported trench before the trench box was inserted.

He did this knowing it was a "golden rule" on site that no person should enter an unprotected trench and despite the fact that he had previously been reprimanded for having entered an unsupported trench. Furthermore, on the day of the accident he had been given a specific warning not to go into the trench until the trench box was in place. This evidence, said Mr Justice Hardiman, established "that the proximate cause" of the worker's death "was his own action in entering the trench before the trench box was inserted".

Summarising the respective cases of the prosecution and defence, Mr Justice Hardiman, dealing with the prosecution case that the facts speak for themselves, said "the offence is not complete merely on proof that the trench collapsed". Mr Justice Hardiman said that a prima facie case had not been made out and P J Carey was entitled to a directed verdict of not guilty at the close of the prosecution evidence. (*P J Carey (Contractors) Limited and the DPP: Court of Criminal Appeal,*)

TABLE 15.8: Prosecutions – judge directs acquittal**Construction company director acquitted**

A director of a company, who was charged with offences under health and safety legislation, following an accident in which a worker was killed when a girder fell on him at a gym which was under construction, was acquitted on the direction of the trial judge. Directing the jury to find the director not guilty on all charges, Judge Rory McCabe said there had been an "appalling lack of communication" on the site. The evidence, he said, was that when the worker and his colleagues went on site they were under instructions from the director of the company to work on three other girders, but were told by the site foreman to adjust a different girder. They undertook this work without the director's knowledge and without a risk assessment being carried out. No evidence was offered by any witness to suggest a failure on the part of the director's company to comply with health and safety legislation. The worker was, the judge said, sent to do a job and he did another job he was not told to do. (*DPP for HSA v Colin Murphy, Galway Circuit Criminal Court*)

CHAPTER 16: PROFESSIONAL ROLES

Managing safety, health and welfare in the workplace and in relation to work activities is the responsibility of management. It is, however, a responsibility in which management is advised and supported by a range of professionals and others with specialist skills.

In the 1980s the Barrington Commission encountered arguments that new hazards in Ireland's modern industrial sector and the detailed and demanding standards of European Directives called for more and better health and safety professionals.

Since then, health and safety has emerged as a distinct management discipline. However, as the Barrington Commission advised, health and safety has remained a management responsibility, with management calling on the advice of professional health and safety advisors, but also other professionals and others with specialist expertise and skills.

The health and safety profession

The profession of health and safety advisor is a modern one. While the origins of the profession may be traced back to the late 19th century, it was only in 1945, at the end of World War II, that the Institution of Occupational Safety and Health (IOSH), was founded in Britain.

While there were members of IOSH advising on occupational safety, health and welfare in Ireland before the Barrington Commission reported, in the years since the report, membership of the Institution has grown, as Ireland's universities and third level colleges responded to the Barrington proposals and developed certificate, diploma and degree courses, which allied with practice allow people qualify for membership of IOSH.

There are currently nearly 2,000 members of the IOSH Ireland Branch. Many safety representatives are members of IOSH. Indeed, many health and safety advisors in Irish workplaces were formerly safety representatives and learnt about health and safety when they attended union-organised safety representatives training.

While IOSH membership and especially chartered membership is considered to be the badge of competence for health and safety professionals, there are competent health and safety professionals who are members of other health and safety professional organisations who can be regarded as competent, even though they are not members of a professional safety organisation. There are individuals who are competent health and safety professionals by virtue of their training, experience and knowledge.

Other professional and specialist roles

Health and safety professionals are akin to general practitioners in the medical profession, they are generalist advisors on the broad spectrum of health and safety in the workplace. Often in relation to specific aspects of safety, health and welfare, employers need specific advice or the skills of those with specialist training.

Among the professions and those with specialist skills who employers call upon for advice and guidance in relation to health and safety are:

- Occupational physicians
- Occupational health nurses
- Occupational hygienists
- Ergonomists
- Physiotherapists
- Audiologists
- First aiders
- Manual handling instructors.

The responsibility of professional advisors

A question often arises as to what extent are health and safety professionals in particular – and other professionals and specialists – responsible for management decisions? There are in fact two aspects to the questions: one is the aspect of criminal responsibility under health and safety legislation; the other is civil liability for negligence.

The first point to make is that, as provided for in the SHWW Act 2005, section 77(12), an employer does not have a defence in a case taken for a breach of statutory duty by virtue of any act or default of a competent person. However, that of itself does not absolve a competent person from criminal responsibility. That said, while there have been cases

of senior managers being prosecuted for breaches of health and safety legislation, no professional health and safety advisor or other professional or specialist advisors in Ireland have been prosecuted.

TABLE 16.1: Professional organisations

Institution of Occupational Safety & Health
Faculty of Occupational Medicine
Occupational Health Nurses Association of Ireland
The Irish Association of Chartered Physiotherapists
Irish Ergonomics Society
Occupational Hygiene Society of Ireland
Health & Safety Lawyers' Association of Ireland

While no health and safety professional in Ireland has been prosecuted by the HSA, there have been prosecutions in the UK. Following the death of a worker, who was killed when an unsupported trench on a construction site in London collapsed, the safety advisor to the construction company, who failed to inspect the site properly, was jailed for nine months. The commercial director of the construction company, on whose site a fatal accident occurred, was jailed for three years and three months.

The two men were found guilty by a jury at Southwark Crown Court after it heard that the worker was killed when an unsupported trench collapsed. The worker was crushed to death. The court heard that the company was carrying out work on a house in Fulham, London. The work included excavation of a basement area and the underpinning of supporting walls. The Court heard that the commercial director was aware of the dangerous state of the excavation but took no steps to ensure it was safe. The Court heard that the safety consultant – who was contracted out by a company, All Day Safety Services Limited – was also aware of the risks, as he was responsible for drafting the method statement. His document was found to be inadequate and he did nothing to stop the dangerous work, though he had the power to do so and had identified the risk.

OSH and other professionals can be sued for negligence in the performance of their duties.

There are no reported cases of OSH professionals in Ireland having been sued for professional negligence, or indeed in any of the professions that provide OSH-related consultancy and advice.

Selecting competent professional advisors

When employers are appointing health and safety advisors or advisors on any particular aspect of health and safety, they are required to appoint competent advisors. Before making an appointment or contracting with a professional advisor for services, an employer might ask questions, such as:

- Does the service provider hold a recognised health and safety qualification?
- If the service provider is a member of IOSH, enquire as to whether the person is a chartered member?
- Where does the qualification rank in the National Qualifications Framework?
- If the service provider is offering services in a specialist field, does the service provider hold relevant qualifications and are the service provider's qualifications and the course offered recognised by the QQI?
- Is the service provider qualified in terms of experience to provide the service offered?
- Is the service provider a member of another relevant professional organisation?
- Is the service provider a member of the Irish Institute of Training and Development (IITD) or the Chartered Institute of Personnel and Development (CIPD)?
- Does the service provider carry adequate professional indemnity insurance cover: in particular, where the service provider offers services in relation to asbestos, does his/her policy cover asbestos work? (most insurance policies exclude asbestos cover)
- Can the service provider give a client list and permission to contact clients for reference purposes?

As well as asking these questions, which should be on any basic checklist, organisations seeking consultancy or training services might also consider discussing developments in safety management practice and legislation, with potential service providers. This can provide an opportunity to consider the depth of the service provider's knowledge.

HAZARDS: SECTION 6

THE HAZARDS OF THE WORKPLACE

The basis of good occupational safety and health practice is the identification of hazards, an assessment of the risks presented and putting in place control measures. In this section we look at a number of the most common workplace hazards (the list is non-exhaustive) and consider the information that can help us to address and control those risks.

CHAPTER 17: ASBESTOS

BASIC FACTS ABOUT ASBESTOS

Asbestos has been recognised as a major cause of occupational ill health from about 1950 onwards and is still the greatest single work-related killer. There are four main asbestos-related diseases that may take years to develop after exposure:

- Mesothelioma - cancer of the lining of the lungs, which is always fatal.
- Lung cancer, which is almost always fatal.
- Asbestosis which is not always fatal, but it can be very debilitating.
- Diffuse pleural thickening (not fatal).

Another condition caused by asbestos is scarring of the lining of the lungs, called pleural plaques. This is caused by asbestos exposure but does not cause symptoms.

Recent research also shows an increased risk of heart disease for asbestos workers. Workers exposed to asbestos as part of their job are at a significantly greater risk of heart disease and stroke than the general population, with women more likely to be affected than men, according to new research. The study was conducted by researchers at the HSE-GB's research arm, Health and Safety Laboratory (HSL), and was published online in the journal *Occupational and Environmental Medicine* <http://oem.bmj.com/content/early/2012/03/05/oemed-2011-100313>. The HSL analysed cause of death among just under 100,000 asbestos workers taking part in regular voluntary health monitoring and answering questions on levels of exposure for the Asbestos Workers Survey. Most of the men taking part in the survey worked in asbestos removal while most of the women worked in manufacturing. The research team compared the number of deaths from stroke and heart attacks among these workers, between 1971 and 2005, against the number that would be expected to occur in the general population. They found asbestos workers were significantly more likely to die of

cardiovascular disease than the general population, even after taking account of smoking. Male asbestos workers were 63 per cent more likely to die of a stroke and 39 per cent more likely to die of heart disease. The corresponding figures for women were, respectively, 100% and 89%.

There was some evidence that the longer the duration of exposure to asbestos, the greater the likelihood of dying from heart disease: "*Cardiovascular Disease Mortality Among British Asbestos Workers (1971-2005)*" *Occupational and Environmental Medicine*, published online 2 April 2012. <http://oem.bmj.com/content/early/2012/03/05/oemed-2011-100313>.

A report from the National Cancer Registry Ireland (NCRI), *Cancer Trends No 17 Mesothelioma* (published December 2012), records that on average 24 cases of mesothelioma are recorded in Ireland each year. The report states that the main risk factor for mesothelioma is asbestos. The NCRI report, while noting that information on Irish patient occupation is "very incomplete", says it is worth noting 49% of male mesothelioma patients had an occupation in construction and related trades such as electrical, metal and woodworking, compared to 20% of all male cancer patients. The report notes that the majority of mesothelioma patients were aged between 60 and 80. The disease has a long latency period; usually 30 years or more. Deaths from asbestos-related diseases are expected to peak around 2020. These deaths are tragic for the people concerned, causing them, their relatives, friends and colleagues immense pain and suffering. Nothing can be done to prevent past exposures now, but safety representatives play a vital role in controlling workplace risks and helping to prevent the exposure of workers to asbestos now.

What is asbestos?

Asbestos is the name used for a range of natural minerals which are still mined from rocks in a few countries, including Canada, Brazil, Russia, Kazakhstan and Zimbabwe. There are three main types of asbestos:

- Blue (crocidolite)
- Brown (amosite)
- White (chrysolite)

The type of asbestos cannot be identified just by its colour.

The legal definition of what is asbestos is set out in the *Safety, Health and Welfare at Work (Exposure to Asbestos) Regulations 2006*.

Asbestos means the following fibrous silicates:

- Asbestos actinolite, CAS No. 77563-66-4*
- Asbestos grunerite (amosite), CAS No. 12172-73-5*
- Asbestos anthophyllite, CAS No. 77536-67-58*
- Chrysotile, CAS No. 12001-28-5*
- Crocidolite, CAS No. 12001-28-4*
- Asbestos tremolite, CAS No. 77536-68-6*

(* Number in register of the Chemical Abstract Service (CAS))

Asbestos has been used in a huge range of products for its thermal insulation, fire retardant and strengthening properties. Many of these products have been used in buildings and are still there. Some products consist of only one type of asbestos while others are mixtures of two or more. All types of asbestos are classified as human carcinogens by the International Agency for Research on Cancer (IARC), which is part of the World Health Organisation.

The relative risk is estimated as: crocidolite (blue) is about 500 times more potent than chrysotile (white) and amosite (brown) is about 100 times more potent than chrysotile.

Why is it dangerous?

Asbestos is made up of very thin fibres which can break down into much smaller, thinner fibres, the smallest and most dangerous of which are microscopic and can be breathed deeply into the lungs, where they do the damage. Asbestos fibres are only dangerous if they are made airborne and breathed in, but all types of asbestos fibres are potentially fatal if breathed in. The fibres that are breathed in can become stuck in the lungs and can scar and damage them. This can cause scars that stop the lungs working properly (asbestosis), or can cause cancer. The main types of cancer caused by asbestos are cancer of the

lung and cancer of the lining of the lung called mesothelioma, which can be caused by very short exposures to low levels of asbestos fibres. These diseases can take from 15 to 60 years to develop and there is no cure for any of them.

Where do you find asbestos?

You should assume that all buildings built or refurbished before 2000 may contain asbestos. Crocidolite and amosite were banned much earlier but the import and use of chrysotile was only finally banned in 1999. Many thousands of tonnes of asbestos products were used in buildings; much of it is still there, often in a poor condition, and it is not easy to identify asbestos products by appearance. For help in locating where asbestos may be found in buildings, see the HSA's publication *'Asbestos-containing Materials (ACMs) in Workplaces: Practical Guidelines and ACM Management and Abatement'* http://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/asbestos_guidelines.pdf.

The most common uses of asbestos in buildings were:

- loose packing between floors and in partition walls.
- sprayed ('limpet') fire insulation on structural beams and girders.
- lagging, e.g. on pipework, boilers, calorifiers, heat exchangers, insulating jackets for cold water tanks, around ducts.
- asbestos insulation board (AIB), e.g. ceiling tiles, partition walls, soffits, service duct covers, fire breaks, heater cupboards, door panels, lift shaft linings, fire surrounds.
- asbestos cement (AC), e.g. roof sheeting, wall cladding, walls and ceilings, bath panels, boiler and incinerator flues, fire surrounds, gutters, rainwater pipes, water tanks.
- other products, e.g. floor tiles, mastics, sealants, textured decorative coatings (such as artex), rope seals, gaskets (e.g. pipework), millboards, paper products, fire doors, cloth (e.g. fire blankets), bituminous products (roofing felt).

Remember, how dangerous the asbestos is depends on the type of asbestos and the type

of material it is in, the condition of the material, and how likely the material is to be disturbed. Identifying it correctly is essential to carrying out suitable risk assessments and using safe handling and control measures. An asbestos map should be drawn up for workplaces

Who is likely to be exposed to asbestos fibres?

Anyone who disturbs asbestos-containing materials, for example, by working on them or near them. Research has suggested that the groups

most at risk are those who carry out building maintenance and refurbishment work. For example, heating and ventilation engineers, demolition workers, carpenters and joiners, plumbers, roofing contractors, painters and decorators, construction workers, fire and burglar alarm installers, shop fitters, builders, plasterers, gas fitters, computer installers, general maintenance staff, caretakers, telecoms engineers, building surveyors, cable layers and electricians.

TABLE 17.1: Asbestos in buildings – HSA/HSENI prosecutions

CASE: HSENI v Belfast Health and Social Care Trust

Key facts: Two workers carrying out maintenance work in a hospital were exposed to asbestos. The Trust had carried out an asbestos survey and the building was known to contain asbestos. The information was not passed onto the maintenance contractors. The court heard that staff were not trained in asbestos management.

Charges: The Trust was charged with failing to protect, in so far as reasonably practicable, persons not in its employment.

Fine: The Trust pleaded guilty to the charges. Imposing a fine of £10,000 (about €11,600), the judge said there was a serious failure of management oversight. Having a management plan and a survey is of little value if staff are not trained.

CASE: HSA v Hodgins Architectural Facades

Key facts: Asbestos boards were discovered behind windows being taken out of a school by a sub-contractor. They were double wrapped and stored in a sealed container. However, one board was not put in the container and a painter, thinking it was a plasterboard, used it to level the ground under his ladder. The asbestos board broke and contaminated the school yard.

Charges: Hodgins Architectural Facades was charged with failing, in so far as reasonably practicable, to manage its work so as to ensure persons not in its employment were not exposed to risks to their health and safety, contrary to the SHWW Act 2005, section 12.

Fine: The company pleaded guilty and was fined €10,000.

CASE: HSA v Markethaven/Walmac

Key facts: While the Markethaven and Walmac cases were two distinct prosecutions from a legal perspective, they arose out of the same set of facts and so from the learning point of view might be regarded as one case. A building was being demolished. Complaints were made to the HSA. On inspection, damaged asbestos was found lying around the site.

Charges: Markethaven was charged with failing to appoint a PSCS and also under section 13 of the Non-Fatal Offences Against the Person Act 1997 with endangerment by recklessly or intentionally engaging in conduct which created a substantial risk of death.. Walmac was charged with failing, in so far as reasonably practicable, to conduct an undertaking so that persons not in its employment were not exposed to risks to their health and safety.

Fine: Both companies pleaded guilty. Markethaven was fined €120,000 and Walmac €30,000.

TABLE 17.1: Asbestos in buildings – HSA/HSENI prosecutions (continued)

CASE: HSA v Ampezzano Limited/Patrick McLoughlin

Key facts: A roof on a café in a shopping mall went on fire. The fire brigade was called and put the fire out. When some hours later HSA inspectors visited the site they found asbestos in the roof. Some of this had been torn when fire officers battled to put out the blaze. At the time the fire broke out, a workman was repairing a leak on the roof.

Charges: The property owner was charged, as a person in charge of a place of work, with failing to ensure, in so far as reasonably practicable, that the place of work was safe, contrary to the SHWW Act 2005, section 15. During cross-examination, counsel for the property owner established that the asbestos in the roof was encased in concrete and surrounded by metal cladding and that the roof was safe so long as the asbestos was not disturbed. The workman, who was described by the judge as an odd-job man, pleaded guilty to failing to, in so far as reasonably practicable, organise a safe place of work.

Fine: The property owner was acquitted. The workman was fined €200.

CASE: HSENI v Kane t/a Northside Demolition/BR Construction

Key facts: Another case where two companies were prosecuted for the one incident. A premises was being demolished. A member of the public complained. An inspection followed and found that during the demolition, the removal of the asbestos was not in accordance with best practice. A Prohibition Notice was served. It was ignored.

Charges: Both the main contractor and the demolition sub-contractor were charged with breaching health and safety regulations. The demolition sub-contractor was charged with not implementing its method statement.

Fine: Both pleaded guilty. The demolition sub-contractor was fined £4,000 (€5,400) and the main contractor was fined £1,000 (€1,350).

Evidence is accumulating that workers in some buildings, including schools and other public buildings containing poorly managed asbestos, may also be at risk of developing mesothelioma. A review of prosecutions taken by the HSA and the Health & Safety Executive Northern Ireland illustrate the dangers that exist in such buildings (see Table 17.1).

ASBESTOS REGULATIONS

Overview

The *Safety, Health and Welfare at Work (Exposure to Asbestos Regulations) 2006 (SI 386/06) as amended by the Safety, Health and Welfare at Work (Exposure to Asbestos Regulations) (Amendment) Regulations 2010 (SI 589/2010)*, impose a duty on employers to

ensure no employee is exposed to an airborne concentration of asbestos in excess of 0.1 fibres per cm³ as an eight hour time-weighted average.

Where there is a likelihood that employees may be exposed, employers are required to reduce exposure to a minimum and in any case below the exposure limit. Employers must limit the number of employees exposed to the lowest number possible; ensure that work processes and systems are designed so as not to produce asbestos dust or, if that is impossible, to avoid its release into the air; ensure that all premises are capable of being regularly and effectively cleaned and maintained; ensure that asbestos/dust-generating asbestos-containing material is stored and transported in suitable sealed packaging and that waste is removed as soon as possible. Employers must also demarcate with warning signs areas where

asbestos-related work is taking place, ensure that protective clothing is worn, ensure that the work area is only accessible by employees whose work requires entry, ensure no smoking in the area, and where exposure cannot be reasonably reduced by other means, provide individual respiratory protective equipment and ensure it is worn.

At the end of 2010 the scope of the Asbestos Regulations was, by the *Exposure to Asbestos Regulations 2010*, expanded to include work that involves repair or maintenance and by banning the application of asbestos by spraying. The application of asbestos by spraying and work procedures that involve using low density (less than 1g/cm³) insulating or soundproofing materials is prohibited. The 2010 regulations also provide that where demolition or other work is being undertaken and it involves asbestos or products containing asbestos, the plan should include repairs or maintenance work in addition to removal. Also, information must now be easily understandable.

The placing on the market of articles containing asbestos has been banned under the provisions of the *Chemicals (Asbestos Articles) Regulations 2011*. However, the HSA may issue a certificate of exemption if it is satisfied that the health and safety of persons will not be prejudiced.

Summary of main provisions of Asbestos Regulations 2006-2010

Employers' duties

As well as the duties employers owe to employees, employers are under a like duty to non-employees, where the duties listed apply in relation to their own employees (regulation 4)

Assess the risk (regulation 5a and schedule 2)

Employers are required to assess the risks to employees' health and safety resulting from any activity from which an employee is or may be exposed in their place of work, to determine the nature and degree of exposure and to lay down the measures necessary to ensure employees' health and safety.

Sporadic and low intensity (regulation 5b)

Where an employee's exposure is sporadic and of low intensity and it is clear from the risk

assessment that the exposure limit value will not be exceeded, the regulations regarding notification to the HSA (regulation 11) and health assessment and medical records (regulations 20 and 21) will not apply, where the work involves: short non-continuous maintenance activities in which only non-friable materials are handled; the removal without deterioration of non-degraded materials in which the asbestos fibres are firmly linked in a matrix; encapsulation or sealing of asbestos-containing materials which are in a good condition; and air monitoring and control and the collection of samples to ascertain if specific material contains asbestos.

Exposure limit value (regulation 6)

The exposure limit value imposes a duty on employers to ensure that "no employee is exposed to an airborne concentration of asbestos in excess of 0.1 fibres per cm³ as an eight hour time-weighted average". Employers must not expose workers to airborne concentrations of asbestos in excess of the exposure limit value.

Identification of presence of asbestos (regulation 7)

Before undertaking work, which would, or would be liable to, expose an employee to dust arising from asbestos and/or asbestos-containing materials, carry out a risk assessment as to whether such materials are, or are liable to be, present in those premises and if there is a doubt, to assume they are present and comply with the provisions of the regulations as appropriate.

Determination and assessment of risk (regulation 8)

Where employees are, or would be liable to be, exposed to dust from such materials, employers are not to permit an employee to carry out an activity which would, or would be liable to, cause such an exposure unless he/she (the employer) has made an assessment of the risk from such exposure. In carrying out a risk assessment an employer shall: identify the type and condition of asbestos or materials containing asbestos; make a suitable and sufficient assessment of the risk and the steps needed to prevent or minimise the exposure; record significant findings and retain every risk assessment in a permanent form. Employers must consult with

employees and/or their representatives when preparing a risk assessment.

Measures relating to exposure (regulation 9 and schedule 2)

Where there is, or is likely to be, an exposure, employers are required to: reduce the exposure to a minimum and in any case below the exposure limit; limit the number of employees exposed to the lowest number possible; ensure that work processes and systems are designed so as not to produce asbestos dust, or if that is impossible, to avoid its release into the air; ensure that all premises are capable of being regularly and effectively cleaned and maintained; ensure that asbestos/dust-generating asbestos-containing material is stored and transported in suitable sealed packaging; and that waste is removed as soon as possible.

Employers must also demarcate with warning signs areas where asbestos related work is taking place; ensure that protective clothing is worn; ensure that the work area is only accessible by employees whose work requires entry; ensure no smoking in the area, and where exposure cannot be reasonably reduced by other means, provide individual respiratory protective equipment and ensure it is worn.

Employers are required to implement the measures set out in schedule 2 to protect employee's health and safety.

Notifying HSA (Regulation 11)

Employers are required to prepare and submit a notification to the Authority if carrying out an activity which would, or would be liable to, expose an employee to dust arising from asbestos and/or asbestos containing materials above the limit. The notification should comprise the details set out in Schedule 3 of the regulations. The Authority should receive notification of the proposed work not less than 14 days before commencement.

Presumed asbestos-containing materials (regulation 12)

Employers are required to identify presumed asbestos-containing materials before commencing demolition, removal or maintenance work.

Unforeseen exposure (regulation 13)

If employees are unforeseeably exposed to dust in excess of the exposure limit value, employers are required to identify the reasons for the exposure and implement measures to remedy the situation and not to continue work until adequate measures to protect employees have been taken.

Foreseeable exposure (regulation 14)

If it is foreseeable that as a result of certain activities, such as demolition, removal, repairing or maintenance, the concentration of asbestos will exceed the limit value, despite the use of technical methods, before the activity is carried out employers must determine and implement protection measures.

Plan of work

The provisions relating to plans of work were updated by the 2010 Regulations, which provide:

- Where any demolition or other work, which involves asbestos or products containing asbestos, is being undertaken, the plan of work shall now include repairs or maintenance work in addition to, as required by the 2006 Regulations, removal (Reg 15.1).
- The plan of work shall now specify "all preventive and other measures" necessary to ensure the safety of employees at the place of work rather than, as under the 2006 Regulations, just the "measures" (Reg 15.2).
- The employer shall keep a copy of the plan of work at the workplace to which it relates while the work continues and shall make the plan available to an HSA inspector or to persons authorised under the Air Pollution Act 1987 and the Waste Management Acts 1995-2006 (Reg 15.3).
- When an employer is, in compliance with Regulation 11 – which provides that an employer shall not carry out any work activity which would, or would be liable to, expose an employee to dust arising from asbestos or material containing asbestos – notifying the HSA of the proposed works (this should be done 14 days before work commences, unless the HSA agrees a shorter period), the employer shall send a copy of the plan of work to the HSA (Reg 15.6).

Where work is being carried out which may expose employees, the employer is required to ensure that the premises or those parts of the premises where the work is being carried out and the plant used in connection with that work are kept in a clean state.

Training and information (regulation 17)

Employers are required to provide employees with training and information on: potential health risks; the meaning of the exposure limit value; operations which could result in asbestos exposure; the need for atmospheric monitoring; the properties of asbestos and its effects on health; types and products of materials containing asbestos; safe work practices; respiratory protective equipment and emergency; decontamination; waste disposal procedures and medical examinations. Training should be given at regular intervals and adapted to take account of significant changes. Employees and/or their representatives should have access to asbestos measurements and be informed if the limit value is exceeded. Employers are required to keep records of training given to individual employees.

Provision and cleaning of protective clothing (regulation 18)

Employers are required to provide protective clothing and either dispose of it or adequately clean it.

Measuring asbestos (regulations 10)

Where the initial assessment determines that the amount of asbestos fibres in the air is equal to or greater than the exposure limit value, the asbestos in the air at the place of work should be measured regularly. Sampling should be representative of an employee's personal exposure and should be carried out and analysed by a competent person. Representative exposure for an eight-hour reference period should be established.

Fibre counting should, wherever possible, be in accordance with PCM (phase-contrast microscope) in accordance with the 1997 World Health Organisation's recommended method. Only fibres with a length of more than five micrometres and a breadth of less than three micrometres and a length and breadth ratio greater than 3:1 shall be taken into consideration.

Health assessment and the role of medical practitioners

The principal purpose of the Asbestos Regulations is to prevent employees and other workers from contracting an asbestos-related illness.

Employer's duties

To help achieve this objective employers are required to: take measures to ensure employees' health and safety (schedule 3); make available health assessments, which should be performed by a responsible medical practitioner (regulation 20); where employees are, or may be, exposed to dust, or where a health assessment has been made, to keep and maintain an occupational health register containing the information referred to in schedule 6. The employer is required to keep the occupational health register for a period of 40 years following the end of the exposure (regulation 25).

Medical practitioner's role (regulations 2, 19, 20, 21, 22, 23)

A "responsible medical practitioner" is the registered medical practitioner engaged by the employer to be responsible for the health assessments of employees. Health assessments must be carried out by a responsible medical practitioner, who shall be provided by the employer with the facilities to carry out the assessment. The medical practitioner is required to keep individual medical records of assessments. The records must be kept for 40 years following the last assessment. The medical practitioner shall give an employee who requests it access to the information contained in his/her records and give information and advice regarding the assessment.

Competence/ability to perform work

A person carrying out work, including asbestos demolition or removal, shall provide evidence of their ability to do the work, to the person for whom it is being done and, on request, to an HSA inspector (Regulation 16 and Schedule 4).

THE ROLE OF THE SAFETY REPRESENTATIVE

If a safety representative suspects that there are asbestos materials in a building, he or she should ask the employer what has been done to determine if such materials are present. Safety representatives can ask to see the results of any inspection or survey done to identify the presence, and condition, of asbestos materials – the asbestos plan or register.

Remember that there is only a risk if asbestos fibres are made airborne. This can happen when asbestos materials are damaged or disturbed. However, all asbestos-containing materials should be clearly marked, even if in good condition.

If you see material which you have reason to believe contains asbestos, it has been damaged and you believe that there is a serious risk of exposure to asbestos fibres, you should ask everyone to leave the area.

But remember not to create more of a risk to people by, for example, causing a panic or leaving something in an unsafe condition. Remember also that minor damage to some asbestos materials does not always mean that there is a serious risk or that immediate evacuation of the area is warranted. In any case, you should notify the employer or occupier immediately.

No further work should take place until the area is safe. That means that action – appropriate to the risk – has been taken. Such action could be the repair or removal of asbestos or cleaning of the area by a trained person with suitable equipment. When anyone needs to work in a building built or refurbished before 2000, or with something which may contain asbestos, ask:

- Is asbestos present?
- What is the safest way to do the work?
- Can you look at the risk assessment for the job (which should tell you what the risks are and how to control them)?
- Is the work such that it should only be done by a specialist contractor?

- Is the work notifiable and if so has the HSA been notified?

Workers can do certain jobs with asbestos but their employer must ensure that they are adequately trained and have the right equipment. The employer must ensure that they:

- Have received adequate training first.
- Are provided with and always wear a suitable respirator.
- Are provided with disposable overalls.
- Are provided with a class HEPA vacuum cleaner to vacuum up dust.
- Do not cut or drill into asbestos with power tools (unless it is unavoidable – in which case the employer must ensure that the appropriate controls are in place and used).
- Dispose of all waste properly.

The training should help workers to understand, among other things, the dangers of working with asbestos, where they may come across it, and how to work safely with it. Only certain work on asbestos-containing materials can be carried out without a licence.

The following table is a suggested checklist of questions safety representatives should be asking about asbestos.

TABLE 17.2: Checklist: Questions safety representatives should ask

	YES	NO
Have you checked whether asbestos is present in your buildings?	<input type="checkbox"/>	<input type="checkbox"/>
• A survey/inspection has been planned for _____ (date)		
• A survey/inspection has been done to find materials that might have asbestos in them	<input type="checkbox"/>	<input type="checkbox"/>
• An expert has checked and confirmed whether or not the materials have asbestos in them, or it has been assumed that unknown materials contain asbestos	<input type="checkbox"/>	<input type="checkbox"/>
Have you got a record or drawing which clearly shows where in your buildings the asbestos is and what condition it is in?		
• A record or drawing showing where it is and what it looks like has been done	<input type="checkbox"/>	<input type="checkbox"/>
• A register has been drawn up listing all the asbestos materials and their condition, or this will be done when the survey/inspection is finished	<input type="checkbox"/>	<input type="checkbox"/>
How are you managing the asbestos in your buildings?		
• The badly damaged asbestos has been removed, or sealed to stop fibres being released	<input type="checkbox"/>	<input type="checkbox"/>
• The undamaged asbestos has been labelled/colour coded	<input type="checkbox"/>	<input type="checkbox"/>
• A nominated person controls maintenance work	<input type="checkbox"/>	<input type="checkbox"/>
• Building and maintenance workers are told where the asbestos is before they start any work, or the asbestos is regularly checked every year to make sure it has not deteriorated or been damaged	<input type="checkbox"/>	<input type="checkbox"/>
How are you warning people who might work on or damage the asbestos in your buildings?		
• Workers are told where the asbestos is and whether the asbestos is damaged or undamaged	<input type="checkbox"/>	<input type="checkbox"/>
• Workers are given a plan with this information	<input type="checkbox"/>	<input type="checkbox"/>
• Workers are told the building may contain asbestos and they should treat the material as if it is asbestos	<input type="checkbox"/>	<input type="checkbox"/>
• Workers have been/will be given awareness training so that they do not disturb/damage the asbestos and know what to do if they find damaged material	<input type="checkbox"/>	<input type="checkbox"/>
How are you checking that your management systems that are meant to prevent exposure to asbestos actually work and continue to do so?		
• The arrangements to control the risk are periodically reviewed as a matter of course	<input type="checkbox"/>	<input type="checkbox"/>
• Spot checks are done to make sure the building/maintenance worker is getting the right information and working safely	<input type="checkbox"/>	<input type="checkbox"/>
• Any changes in the use of the building or the condition of the asbestos are dealt with	<input type="checkbox"/>	<input type="checkbox"/>

FURTHER INFORMATION/RESOURCES

HSA guidance

Don't risk it! Stop & Think Asbestos

[http://www.hsa.ie/eng/Publications_and_Forms/
Publications/Chemical_and_Hazardous
Substances/asbestos_flyer.pdf](http://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/asbestos_flyer.pdf)

*Asbestos-containing Materials (ACMs) in
Workplaces: Practical Guidelines on ACM
Management and Abatement*

[http://www.hsa.ie/eng/Publications_and_Forms/
Publications/Chemical_and_Hazardous
Substances/Asbestos_Guidelines.pdf](http://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/Asbestos_Guidelines.pdf)

Health & Safety Executive UK guidance

*Asbestos Essentials [http://www.hse.gov.uk/
ASBESTOS/essentials/index.htm](http://www.hse.gov.uk/ASBESTOS/essentials/index.htm)*

CHAPTER 18: ASTHMA

BASIC FACTS ABOUT ASTHMA

Asthma is described in the HSA's *Guidelines on Occupational Asthma* as an inflammatory disorder of the airways. When an asthma attack occurs, the muscles surrounding the airways become tight and the lining of the air passages swell. This reduces the amount of air that can

pass by. This can lead to wheezing sounds. Most people with asthma have wheezing attacks separated by symptom-free periods. Other symptoms include shortness of breath, cough and chest tightness. Asthma attacks can last minutes to days and can become dangerous if the airflow becomes severely restricted.

The Guidelines then consider what is work-related asthma, which can, the Guidelines state, be divided into two subsets:

- Work-aggravated asthma
- Occupational asthma.

TABLE 18.1: List of substances that can cause occupational asthma

Alpha amylases	Isocyanates
Azodicarbonamide	Ispagula
Bromelains	Laboratory animal excreta/secretata
Carmines	Latex
Castor bean dust	Maleic anhydride
Cephalosporins	Methyltetrahydrophthalic anhydride
Chloramine-T	Nickel sulphate opiates
Chloroplatinates and other halogenoplatinates	Papain
Chromium (VI) compounds Cobalt (metal and compounds)	Penicillins pesulphates
Cockroach material	Phthalic anhydride
Coffee bean dust	Piperazine psyllium
Cow epithelium/urine	Reactive dyes
Crustacean proteins	Rosin-based solder flux fume
Diazonium salts	Some softwood dusts
Egg proteins	Soybean dust
Ethylenediamine	Spiramycin
Fish proteins	Storage mites subtilisins
Flour dust	Tetrachlorophthalic anhydride
Glutaraldehyde	Trimellitic anhydride
Hardwood dusts	
Henna	

From Section C of the HSE Asthmagen Compendium of Substances classified by EU as respiratory sensitizers and labelled with R42 risk phrase

The Guidelines state that work-related asthma accounts for about 10% of all adult onset asthma.

Work-aggravated asthma

Persons with work-aggravated asthma usually have a history of pre-existing asthma. This usually has been symptomatic and the person may have been on treatment but sometimes they have not been. Some but not all of this latter group may give a history of childhood asthma, that they have “grown out” of. They may tell of recurrent asthmatic episodes that are triggered by cold temperatures, excessive exertion, or exposure to irritant aerosols including dusts, fumes, vapours, and gases. These people may get wheezy or have other symptoms at work. The problem can often be eliminated by improving the work environment or avoiding the irritant.

Occupational Asthma

Occupational asthma is caused as a direct result of workplace exposure. There are two forms of occupational asthma: irritant-induced occupational asthma and allergic occupational asthma.

Irritant-induced occupational asthma usually develops after a single, very high exposure to an irritant chemical. It is a direct “burn” effect on the airways and is not related to the immune system. Examples of causal agents include ammonia, acids and smoke. The high levels of exposure required are usually the result of accidents or some major failure of controls, often in enclosed spaces. The workers nearly always manifest asthma symptoms within 24 hours of the exposure, that is, there is no latent period. Symptoms will tend to improve over time and may go away entirely but if symptoms persist beyond six months, persistent problems are possible.

Whether recurrent exposure to lower levels of respiratory irritants leads to irritant-induced asthma is currently a matter of debate but the majority of experts believe it does not.

Allergic occupational asthma is caused by sensitisation or becoming allergic to a specific chemical agent in the workplace over a period of time. This is the mechanism for the vast majority (over 90%) of cases of occupational asthma.

The sensitisation process does not occur after one exposure but develops over time (i.e. it has a latency period). Latency periods are variable and can be as short as several weeks or as long as 30 years. If exposure is consistent, the period of greatest risk is the first two years of exposure. The risk does not go away after that but may reduce somewhat.

The top eight causes of occupational asthma (based on the HSE-funded Surveillance of Work-Related Occupational Disease Intelligence Network) (SWORD) and main occupations exposed are:

- Isocyanates – spray painters, other metal or electrical processors, makers or repairers (mainly vehicle manufacture and mechanics), plastics workers.
- Flour and grain – bakers, other food processors, farmers or farm workers
- Wood dust – wood workers.
- Glutaraldehyde – nurses, other non-metal or electrical processors (mainly darkroom technicians), other professional, clerical and service occupations (mainly radiographers).
- Solder/colophony – welders, solderers or electronic assemblers, other metal or electrical processors, makers or repairers.
- Laboratory animals – laboratory technicians, scientists and assistants, other professional, clerical and service occupations (mainly medical/pharmacological research).
- Resins and glues – metal and electrical processors, makers and repairers, construction and mining, other non-metal or electrical processors, makers or repairers, chemical processors.
- Latex – nurses and auxiliaries, laboratory technicians.

There are many more substances known to cause occupational asthma, which affect a host of other occupations. The HSE-GB has published a list of substances that can cause occupational asthma.

TABLE 18.2: Employers' Liability and Unfair Dismissal Cases

Mechanic awarded IR£135,000 (€171,414)

A mechanic contracted chronic asthma as a result of working close to spray paints which contained isocyanates. He was not involved in using spray paints but worked in the area where they were used. The judge accepted that as a result of the exposure, the mechanic would suffer chronic asthma for the rest of his life. The mechanic was awarded damages totalling IR£135,000 (€171,414).

Asthma precluded return to work: dismissal not unfair

The Employment Appeals Tribunal held that a spray painter who was absent from work because he suffered from asthma was not unfairly dismissed. Asked why he might suffer asthma, he told the Tribunal that he presumed it was caused by fumes in the workplace. The company doctor told the Tribunal that he doubted the man's ability to return to work because of exposure to noxious fumes.

Solder flux asthma

A woman, who was engaged in soldering work in a factory, claimed that she was consistently exposed to solder fumes. These caused her breathlessness, gasping, coughing and tiredness. She first noticed the problems in 1986. Initially she was treated by the company doctor, but when her symptoms persisted she went to her GP, who referred her to a specialist who treated her for asthma. She left her factory job. Giving evidence, her doctor said that 50% of people working in a solder flux environment would develop solder flux asthma. Awarding the worker €51,325 damages, the judge noted that she smoked until shortly before the case, which was an indicator that her symptoms could not have been all that bad.

Exposed to diesel fumes

An electrician, who was exposed to fumes from engines, raw diesel and batteries, claimed that his asthma was aggravated by being exposed to the fumes from engines as they entered the shed where he worked. Evidence was given that about 42 engines a day passed through the shed, that fumes blew around the shed, that the fans were ineffective and face masks were not provided. Expert witnesses quoted the HSE (UK) guidance on the control of diesel exhaust emissions. Evidence was also given of a report which recommended a new fume extraction system for the shed. The judge held that the employer was negligent. He awarded damages totalling IR£144,838 (€183,903). Then, because there was no evidence on the proportion of the disability that could be attributed to the electrician's pre-existing condition, he reduced the award by 50%.

Claim dismissed: costs awarded to employer

A maintenance fitter claimed that he suffered asthma as a result of exposure to solder fumes which were not removed from the factory. He told the court that his workshop was in the centre of an open plan factory and soldering was going on around him all the time. He started working in the factory in 1979. An extractor system was installed in or about 1989/1990. In 1991 he suffered flu symptoms. In 1996 he took redundancy and in 1997 he was diagnosed as suffering occupational asthma. He said that in the mid-1990s he had complained to the company doctors about his breathing problems. Dismissing the claim, the judge said that the man had visited ear, nose and throat specialists in connection with a noise-induced hearing loss claim against the army in 1991. When he was examined by a consultant in 1991 there was no mention of his asthma symptoms. Dismissing the case, the judge said that on the balance of probabilities, the worker had failed to establish that he was suffering from asthma caused by solder fumes. Saying that costs must follow the judgment, the judge awarded costs to the employer.

TABLE 18.2: Employers' Liability and Unfair Dismissal Cases *continued*

Exposed to dust and fumes: awarded €165,120

A worker, who claimed that he was required to use machinery, including a hopper and blending units, alleged he contracted asthma as a result of exposure to dust and fumes. Summing up, the judge said the worker had a good work record before he went to work for the defendants. However when he was employed by them he began to experience symptoms of wheezing and breathlessness. He was diagnosed as suffering from asthma. He was awarded damages of €165,120.

How many workers get occupational asthma?

The Asthma Society of Ireland estimates that about 470,000 people in Ireland suffer from asthma. Figures from the US suggest that three out of four asthma sufferers is an adult. Extrapolating from that figure and taking the HSA's estimate that 10% of adult onset cases are work-related, it may be that up to 35,000 people (about 2% of the workforce) could be suffering from asthma caused or aggravated by work. Research published recently by Imperial College London found that one in six cases of adult onset asthma is caused by workplace exposure.

It is interesting to contrast the estimates of the prevalence of work-related asthma with the actual number of reported cases. Over the three-year period 2010 to 2012, just ten cases were recorded by the Occupational Injury Benefits scheme. Under the SWORD scheme (a scheme under which respiratory physicians report cases of respiratory diseases) respiratory physicians in Ireland reported 43 asthma cases over the period 2005 to 2012. That is just over five cases a year.

In the UK in 2011, respiratory physicians reported 148 new cases of occupational asthma to SWORD. However the UK HSE, based on Labour Force Survey figures, suggests the true number of cases could be more than ten times higher. If the HSE-GB multiplier of ten is correct, then the number of cases in Ireland each year could be as high as 50.

In terms of workplace health and safety issues likely to grab management's attention because

of litigation, asthma ranks low. There have been very few cases (*see Table 18.2*) and because of insufficient data, the Injuries Board does not include guidance on compensation levels for work-related asthma in the *Book of Quantum*.

A research report, *The true cost of occupational asthma in Great Britain*, published by the HSE-GB in 2006, examined the cost of occupational asthma in Britain. While the report was written for the benefit of British employers, many of the findings are likely to be applicable in Ireland. The report found that the average worker suffering from occupational asthma is estimated to lose between 3.5 and 4.5 workdays per year. The estimated lifetime cost to society of new cases is between £3.4m and £4.8m a year. The estimated costs to society are the costs incurred by individuals, employers and the State. The largest burden falls on the individual worker (49% of the total), followed closely by the State (47%). Employers incur only about 4% of the costs.

In the UK the Royal College of Physicians (RCP) estimates one in six cases of asthma in people of working age is either caused or aggravated by work-related factors. New RCP guidance advises hospital doctors to question patients with respiratory problems about their job, the materials they work with and whether their symptoms improve when they are away from work.

The guidance, published in the *Journal of Clinical Medicine*, recommends that doctors seek consent from sufferers to communicate with the employer and advise them of the diagnosis and of the need to protect the patient from further exposure.

LEGAL AND OTHER STANDARDS FOR PREVENTION AND CONTROL

There are no specific regulations referencing asthma. However, employers are required by the SHWW Act 2005 to ensure, in so far as reasonably practicable, the safety, health and welfare of employees (section 8). As already noted, the HSA's guidelines state that employers must ensure a safe working environment where exposure to substances which can cause asthma is prevented or controlled.

Anyone who might think that because the guidelines do not specifically mention protecting employees against risks that might aggravate existing asthma, that the employer is not under a duty to protect such employees, should read barrister Raymond Byrne's comments in an article on the *Mackey v Iarnrod Eireann case* (see below), in which the company was held to be 50% responsible for Mr Mackey's asthma, which had been aggravated by his work.

The HSA's guidelines provide employers with a list of what is required of them. This includes a safety statement based on a risk assessment which sets out adequate control measures and provides information to employees and which alerts employers to the need for health surveillance. The risk assessment should identify if respiratory sensitisers which can cause asthma are being used in the workplace. Respiratory sensitisers can be identified by checking safety data sheets for the R42 phrase: "may cause sensitisation by inhalation".

If respiratory sensitisers are identified, then employers must ascertain if employees are exposed and whether the exposure exceeds the daily occupational exposure level specified in the Chemicals Agents Regulations 2001 (SI 619/2001).

As Raymond Byrne wrote in the article on the Mackey case, the Chemicals Agents Regulations impose duties on employers in the context of any chemical likely to involve a health risk for employees. Byrne writes, in a comment that reflects the HSA's guidance, that the regulations

require employers to take account of information provided on safety data sheets.

The HSA's guidance poses the question: are any of the substances used listed with the "Sen notation" in the Chemical Agents Code of Practice? The guidance was written some years ago and the Code of Practice is now the 2011 Code.

The next question is: does the exposure exceed the daily exposure limit in the Chemicals Agents Regulations? The Chemicals Agents Regulations are undoubtedly the major regulations in relation to work-related asthma. The regulations set out how employers should determine and assess risks from hazardous chemical agents, the control and prevention measures required, the duties of employees, the arrangements to deal with accidents, incidents and emergencies, the employer's duty to provide information, training and to consult and set out the rules on health surveillance.

However, they are not the only relevant regulations. As Byrne goes on to point out, employers have, under the General Application (Workplace) Regulations, a duty to ensure that any deposit or dirt that is likely to create an immediate danger to the health of employees must be removed without delay. Byrne was writing in 2002. The relevant regulation now is the Reg 6 of the General Application (Workplace and Work Equipment) Regulations 2007. As well as dealing with the removal of deposits and dirt, Reg 6 deals with ventilation in enclosed places of work.

EQUALITY ACT 2004

Any person who develops asthma may be covered by the disability duty under the Equality Act. The employer would then be required to make suitable adaptations to ensure the person is kept working without being exposed to any substance that may trigger an attack. This will normally mean removing the person exposed from the substance that is causing the asthma attacks. Ideally that should be done by looking at substitutes or redesigning the job. However, in some circumstances unions will want to negotiate redeployment to a similar job

where there is no possibility of exposure. Safety representatives have to be aware that if a person has developed asthma, then simply moving them to another job will not protect other workers who may also be exposed. Risk assessments and control methods will need to be urgently reviewed.

COMPENSATION

In the article on the Mackey case, which is titled *Occupational Asthma: employers' liability (Health & Safety Review, April 2002)*, Byrne, having set out the statutory duties imposed on employers, goes on to point out that the common law duty of care requires employers to ensure that employees are not exposed to risks which can trigger occupational asthma.

He writes that an employee seeking damages will only be successful if the employer failed to take reasonable care. In deciding what is reasonable care, he adds, courts regularly refer to guidance from reputable organisations such as the HSA.

Byrne's comment that it is unusual to see asthma-related claims being litigated in court is borne out by the fact that there are few reported cases (see *Table 18.2*). While such cases are, to use another word Byrne used, a "rarity", those rare cases seem to attract high damages. The average award in the four cases in which awards were made was €130,000. On average, in three of the cases, the award for pain and suffering (general damages) was €90,000. The Injuries Board *Book of Quantum* does not give guidelines for awards because insufficient data is available.

An interesting feature of the cases is that all arose from what might be termed industrial employment.

THE ROLE OF THE SAFETY REPRESENTATIVE

Asthma is a preventable disease but prompt diagnosis and treatment are crucial. Workers should not be exposed to any substance that can cause or trigger occupational asthma. Safety representatives should report their concerns and

those of their members to management in writing. Safety representatives should ask for copies of the risk assessments the employer has done to ensure they are preventing exposure to workplace asthma, and check the Safety Data Sheets for chemicals categorised as R42: Respiratory sensitisers. They should also look out for respiratory irritants.

Safety representatives should also make sure that their employer is notifying them of any cases of suspected occupational asthma and work-related asthma within the workplace. Where control measures are in place, then safety representatives can check that they are being adhered to and maintained and also that they are being effective in preventing asthma. Safety representatives should also make sure that, where there is any potential asthma risk, their employer has given all their workforce appropriate training and information on both the symptoms of asthma and how to avoid it. In addition, a system of health surveillance should be in place wherever there is an asthma risk.

FURTHER INFORMATION

The HSA's *Guidelines on Occupational Asthma* should be read by every employer in the country, not just those who think employees might be exposed to respiratory sensitisers. Also useful is the chapter on occupational asthma in the Authority's *Workplace Health Toolkit to Assist Small Businesses*. The Authority publishes information sheets. The information sheets on isocyanates, spray polyurethane foam and machine-made mineral fibres are relevant in relation to work-related asthma.

http://www.hsa.ie/eng/Workplace_Health/Occupational_Asthma_and_Dermatitis/Occupational_Asthma_Frequently_Asked_Questions/

The HSE-GB has published a range of guidance documents on asthma. *About Asthma* is a good introductory guide. Then there is the series of asthma publications which deal with asthma in relation to particular occupations, such as bakers, woodworkers and engineering workers. The HSE-

GB's, *Asthmagen? Critical assessments of the evidence for agents implicated in occupational asthma* should be on the reading list of anyone who wants an in-depth understanding of substances classified as respiratory sensitisers and labelled R42.

The guidance documents can be downloaded from the HSA's website, www.hsa.ie or the HSE's website www.hse.gov.uk.

The HSA's *Guidelines on Occupational Asthma*, as well as explaining what work-related asthma is, provides information on respiratory sensitisers and the links between specific sensitisers and occupations and on health surveillance. Health surveillance is extremely important as it is, to quote the guide, "used to detect the early onset symptoms of asthma", but it is seen as a secondary measure of prevention, rather than a primary one. The primary measures of prevention include stop using the sensitiser, segregate work to minimise the number of workers exposed, totally enclose the process and lastly, if other measures still leave workers exposed, provide respiratory protective equipment.

Safety representatives can get information on the substances that can cause occupational asthma on the HSA's website at http://www.hsa.ie/eng/Workplace_Health/Occupational_Asthma_and_Dermatitis/Occupational_Asthma_Frequently_Asked_Questions/

CHAPTER 19: BIOLOGICAL HAZARDS

BASIC FACTS ABOUT BIOLOGICAL HAZARDS

Biological agents can be a source of hazards. Biological agents are defined in the *Biological Agents Regulations 2013 (SI 572/2013)* as micro-organisms, including those which have been genetically modified, cell cultures and human endoparasites, which may be able to provoke any infection, allergy or toxicity, classified in four risk groups according to the level of risk of infection.

The four risk groups of biological agents are, in order of severity from lowest to highest:

- Group 1: unlikely to cause human disease to employees.
- Group 2: can cause human disease and might be a hazard to employees and unlikely to spread to the community and in respect of which there is usually an effective prophylaxis or treatment available.
- Group 3: can cause severe human disease and presents a serious hazard to employees and may spread to the community, although again there is usually an effective prophylaxis or treatment.
- Group 4: causes severe human disease and is a serious hazard to employees and may present a high risk of spreading to the community.

At the same time as the enactment of the Regulations, the HSA published a Code of Practice, which lists numerous biological agents.

If the biological agent being worked on does not appear in Schedule 1 of the *Biological Agents Code of Practice*, the employer must classify the agent. The employer must classify the agent in one of the groups according to the level of risk of infection as defined in the Code of Practice. If there is any doubt as to which of the two groups to which to assign the biological agent, the employer must assign it to the higher of the two groups.

THE LAW: SAFETY, HEALTH AND WELFARE AT WORK (BIOLOGICAL AGENTS) REGULATIONS 2013

The Biological Agents Regulations, which give effect to the EU Biological Agents Directive, requires employers to carry out an assessment of the risks posed by such agents and to take measures to prevent exposure causing ill-health. Employers are required to provide information, training and health surveillance. Biological agents are listed in the schedules to the regulations and are classified as either group 1, 2, 3 or 4 agents. The schedules indicate if the agents are likely to be toxic or allergic, when an effective vaccine is available and when it is advisable to keep a list of exposed workers for more than 10 years.

Employers are required (Reg 7) to assess the risks (existing or potential) to the health and safety of employees resulting from any activity likely to involve a risk of exposure to biological agents and to put in place prevention and risk reduction measures and to apply the risk reduction measures specified in Schedule 2 of the Code of Practice, where it is not technically possible to prevent exposure. Employers are also required to take any special measures that are required.

When carrying out risk assessments, employers need to refer to the risk groups. Where employees are, or might be, exposed to Group 1 biological agents but the risk assessment shows there is no identifiable health risk, certain regulations do not apply (see Reg 3.2) but the principles of good occupational safety and hygiene must be observed. Certain Group 3 biological agents may present limited risk of infection because they are not normally infectious by the airborne route and the employer may, having completed a risk assessment in relation to such agents, dispense with some Group 3 containment measures (see Reg 7.2.a).

Risk assessments must be carried out regularly and whenever there is a change in conditions which may affect workers' exposure.

Apart from carrying out risk assessments and putting in place prevention or reduction measures, if prevention is not technically possible, the broad

range of employers' duties are set out in section 5, with greater detail provided in following sections. Employers are required to provide:

- **Training, information, consultation:** Consult with employees and provide information and training (prior to work with biological agents) on the potential risks to health, the precautions taken, hygiene requirements, the wearing of suitable work clothing and PPE and the steps to be taken by employees in the case of incidents or to prevent incidents (Reg 8). Also, if employees are handling a Group 4 agent or there has been a serious incident, employers are required to provide written instructions and, if appropriate, display notices, to inform employees of any accident or incident (Reg 8).
- **Hygiene:** Take hygiene measures so that employees do not eat or drink where there is a risk of contamination and to provide washing and toilet facilities, which may include skin washes and antiseptics. Also employers must specify procedures for the handling and processing of samples of human or animal origin (Reg 9).
- **Individual protection:** Where there is a risk, employers are required to provide suitable work clothing, special protective clothing and PPE and to ensure that such clothing and equipment which may be contaminated be removed on leaving the work area and kept separately from other clothing, clean and decontaminated and if necessary destroyed (Reg 10).
- **Vaccination:** Make effective vaccinations available to employees who are not already immune to the biological agent to which they are exposed or likely to be exposed (Reg 11).
- **Health surveillance:** Make health surveillance available, where appropriate before exposure, and at such intervals as necessary. Where an employee is suffering from an infection suspected to be as a result of exposure, ensure health surveillance is made available to other employees who have been exposed, if so requested by the responsible medical practitioner or the HSA. Employers are required to keep individual health records for

at least ten years following the end of the exposure and for 40 years depending on the likely duration of the risk (Reg 12).

- **Emergency plans:** Have and maintain emergency plans and procedures appropriate to the hazards of the place of work (Reg 13).
- **Occupational exposure list:** Employers are required to keep an occupational exposure list of employees who are exposed to biological agents. They must keep the list for at least ten years following the end of the exposure and for 40 years depending on the likely duration of the risk (Reg 15).

There are special provisions in relation to health care and veterinary care facilities other than diagnostic laboratories (Reg 16) and in relation to laboratories, industrial processes and animal rooms (Reg 17).

Employers commencing work involving biological agents from groups 2, 3, and 4 for the first time are required to notify the HSA at least 30 days prior to commencing work. If an accident or incident occurs which may result in the release of an agent which may cause severe human harm or illness, the employer is required to notify the HSA.

Employees are required to report to their employer or to the person responsible for health and safety any accident or incident of which they become aware which involves exposure or the risk of exposure or the release of a biological agent (Reg 6).

OCCUPATIONAL EXPOSURE

In some cases there are infectious organisms which are innately part of the job exposure, such as those found in healthcare work in hospitals and the community, or are incidentally part of job exposure, such as those found in sewer work or agriculture. There are also micro-organisms which have been deliberately genetically altered for use in industrial processes. Some workers are exposed to plants which can cause health problems, or substances of biological origin such as wood dusts, juices from plants, or dust generated in the handling of foodstuffs. In many cases,

exposure can produce allergic responses such as occupational asthma.

Apart from those who intentionally work with micro-organisms in a laboratory-type setting, there are many occupations where there will be an element of incidental exposure to micro-organisms as a result of the kind of work that is carried out. This incidental exposure could be because the

hazard, that is the micro-organism, is present on or within the materials, substances, animals or people that are being handled. For example, handling waste contaminated with human/animal waste or working with equipment or in an environment that is contaminated, such as sewers.

Below (*Table 19.1*) is a list of occupations where there may be a risk of infection. The list gives an

TABLE 19.1: Occupations with a risk of infection*

Abattoir workers	Hairdressers
Acupuncturists	Heating and ventilation engineers
Ancillary healthcare workers (such as cleaners, porters)	Kennel/cattery workers
Animal rescue workers	Laundry workers
Beauticians	Local authority services (such as pest control, gardeners, park keepers)
Butchers	Metalworking
Care workers	Motor vehicle repairers
Chiropodists	Nurses
Cleaners (such as public transport, parks, streets, public toilets)	Plastics injection moulding workers
Custodial workers (for example, police, prison officers)	Plumbers
Dentists/dental nurses,	Post mortem technicians
Ditch clearers	Poultry processors
Doctors	Refuse collectors
Ear and body piercers	Sewage workers
Electricians visiting people's homes	Slurry spreaders
Embalmers	Social workers
Emergency service workers	Tattooists
Farmworkers	Undertakers
Foresters	Veterinary workers
Grave diggers	Water sports teachers
Grooms	Zookeepers
Groundspersons	

*The list is non-exhaustive

indication of the range of jobs where biological hazards should be considered.

PREVENTING OCCUPATIONAL EXPOSURE

Risk assessment is the root of prevention. As the HSA points out, every employer has a duty under the SHWW Act 2005 to carry out risk assessments. In relation to biological agents, the Authority also points out that employers have to comply with the *Biological Agents Regulations 2013*. Employers will find guidance on risk assessment in the *Biological Agents Code of Practice* and in the *Authority's Guidelines to the Biological Agents Regulations*.

Where it is not possible to prevent risk entirely, employers must reduce the risk. The HSA advises that where it is not technically possible to prevent exposure to biological agents, measures must be taken to reduce the risk of exposure and to ensure the control of any remaining risk so as to protect the worker. These measures should include:

1. Keeping the number of employees exposed or likely to be exposed to a biological agent as low as possible.
2. Work processes and engineering control measures should be designed so as to avoid or minimise the release of a biological agent into the place of work.
3. Use of both collective protection measures and individual protection measures where exposure cannot be avoided by other means.
4. Use of hygiene measures compatible with the aim of preventing or reducing the accidental transfer or release of a biological agent from the workplace.
5. Use the bio-hazard sign (depicted in the Third Schedule of the 2013 Biological Agents Regulations), and other relevant warning signs.
6. Draw up plans to deal with accidents involving a biological agent.
7. Test, where it is necessary and technically possible, for the presence, outside

the primary physical confinement, of a biological agent used at work.

8. Use of means for safe collection, storage and disposal of waste by employees, including the use of secure and identifiable containers, after suitable treatment where appropriate.
9. Make arrangements for the safe collection, storage and disposal of waste by employees within the workplace.

The HSA advises in the case of any activity in relation to which there is a risk to the safety or health of employees caused by working with a biological agent, the employer must take appropriate measures to ensure that:

- Employees do not eat or drink in any location within a place of work where there is a risk of contamination by a biological agent.
- Employees are provided with suitable washing and toilet facilities, which may include eye washes and skin antiseptics (or both).
- Employees are provided with suitable personal protective equipment (PPE).
- Any necessary PPE is:
 - i. properly stored in a designated place
 - ii. checked and cleaned if possible, before, and in any case after, each use
 - iii. repaired, where defective, or replaced, before further use.
- Procedures are specified for taking, handling and processing samples of human or animal origin.
- Working clothes and PPE, which may be contaminated by a biological agent, are removed on leaving the working areas and, before taking measures for cleaning/decontaminating/destroying, kept separately from other clothing.
- The working clothes and PPE are decontaminated and cleaned or, if necessary, destroyed.

In the UK the Advisory Committee on Dangerous Pathogens (ACDP) has published advice on

controlling the risk of infection at work. The booklet *Infection at Work: Controlling the Risks* can be downloaded at <http://www.hse.gov.uk/pubns/infection.pdf>. According to the ACDP, employers should identify the hazard. There are four main sources of infection to be considered:

- Blood and other body fluids
- Human and animal waste
- Respiratory discharges
- Skin.

It should be noted infections can be transmitted from person to person.

The ACDP identify a number of ways in which infection can be caused. These include:

- Putting contaminated hands and fingers into the mouth, nose or eyes.
- Breathing in infectious aerosols/droplets from the air.
- Splashes of blood and other body fluids
- Broken skin, if it comes into contact with microorganisms.
- A skin penetrating injury, by for example a contaminated needle.

HEALTH SURVEILLANCE AND VACCINATIONS

Employers have specified duties towards employees in relation to health surveillance and vaccinations. The HSA guidance sets out how employers should go about complying with these duties.

Health surveillance

It is the employer's duty to make provisions for relevant health surveillance to be made available for those employees for whom the results of any risk assessment reveals a risk to their safety or health. Such health surveillance, where appropriate, must be made available prior to exposure to biological agents and at regular intervals thereafter.

These health surveillance arrangements must be such that it is directly possible to implement

individual and occupational hygiene measures. Additionally, after health surveillance has been undertaken, a further reassessment of the risk of exposure must be made.

Individual records of health surveillance must be kept and be made available, on request, to the employee concerned.

Where appropriate, the responsible medical practitioner carrying out health surveillance should be familiar with the exposure conditions or circumstances of each employee.

Health surveillance of employees must be carried out in accordance with the principles and practices of occupational medicine. At a minimum, it must include at least the following measures:

- The keeping of records of an employee's medical and occupational history.
- A personalised assessment of the employee's state of health.
- Where appropriate, biological monitoring as well as detection of early and reversible effects.

Further tests may be decided upon for each employee, when he/she is the subject of health surveillance, in light of the most recent knowledge available to occupational medicine, on the advice of the responsible medical practitioner.

The employer and responsible medical practitioner are required to retain individual health records and individual confidential medical records respectively for an 'appropriate' time, usually between 10 to 40 years, depending on the length of time of exposure and/or the likely duration of risk to the safety and health of the employee due to exposure.

Vaccinations

It is the duty of the employer to ensure that effective vaccines are made available when necessary. Therefore, if the risk assessment reveals that there is a risk to the safety and health of employees due to their exposure to a biological agent, for which effective vaccines exist, the employer must offer them vaccination, free of charge.

Employees should be informed of the benefits and drawbacks of both vaccination and non-vaccination, and a vaccination certificate may be drawn up which should be made available to the employee concerned and, on request, to the Authority. Records of vaccination and follow-up as necessary should be kept and retained.

NOTIFICATION TO HSA

The Health and Safety Authority requires notification 30 days prior to the commencement of work for the following activities:

- First time use of a group 2 biological agent.
- First time use of a group 3 biological agent and any subsequent new group 3 biological agents, where the employer provisionally classifies that biological agent.
- First time use of a group 4 biological agent and first time use of each subsequent group 4 biological agent.
- Laboratories providing a diagnostic service in relation to group 4 biological agents are required only to make an initial notification.
- Re-notification is required for all groups where there are changes to processes, procedures or the biological agents that are of importance to safety and health at work, that result in the original notification being invalid or out of date.

Information that must be contained in the Notification includes:

- The name and address of the establishment or undertaking (or both): this must relate to the place where the work is being carried out. For example, in the case of universities, the department or faculty carrying out the work must be documented, including the specific location or laboratory facility in question.
- The names and capabilities of the person responsible for safety and health at work: this must document the names and capabilities (e.g. experience/training etc.) of those at the local level.
- The results of the risk assessment: at a minimum this should include the type of

infection likely, the mode of transmission (e.g. skin contact).

- The species of biological agent.
- The protective and preventative measures that are envisaged.

Therefore, for the purposes of notification an adequate risk assessment should be site, task and agent specific, as appropriate, and should be submitted together with the notification form. There is no approved form of notification for group 1 biological agents. However, the Form of Notification for a Group 2,3 or 4 Biological Agent may be used for notifying the Authority. Other notification methods may also be used, provided the required information (above) is included.

THE ROLE OF THE SAFETY REPRESENTATIVE

Infections from biological hazards are preventable, but prompt diagnosis and treatment are crucial. Workers should not be exposed to any micro-organism that can cause or trigger infections and safety representatives can get more information on biological hazards on the HSA website.

Safety representatives can:

- Give co-workers facts about biological agents.
- Discuss whether management plans for dealing with the issue are adequate.
- Provide opportunities for them to express/register their concerns – by holding meetings, conducting surveys and using body mapping and risk mapping techniques.
- Inspect the workplace regularly.
- Encourage them to report any exposure or symptoms. Safety representatives should report their concerns and those of their members to management in writing. Use the chapter above for ideas on how you can make sure that management gets things done.
- Risk assessments: Safety representatives should ask for copies of the risk assessments that the employer has done to ensure that they are preventing exposure to biological hazards, and make sure that their employer is notifying

them of any cases of suspected infections within the workplace. Where control measures are in place, then safety representatives can check that they are being adhered to and maintained and also that they are effective in preventing infections from biological hazards.

employer has given all their workforce appropriate training and information on both the symptoms of infections from biological hazards and how to avoid them. In addition, a system of health surveillance should be in place.

Safety representatives should report their concerns and the concerns of those they represent to management in writing. Safety representatives should ask for copies of the risk assessments that the employer has done to ensure that they are preventing exposure to biological hazards, and make sure that their employer is notifying them of any cases of suspected infections within the workplace. Where control measures are in place, then safety representatives can check that they are being adhered to and maintained and also that they are effective in preventing infections from biological hazards.

FURTHER INFORMATION/RESOURCES

Guidelines to the Safety, Health and Welfare at Work Biological Agents Regulations 2013
http://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/Guidelines_to_the_Safety_Health_and_Welfare_at_Work_Biological_Agents_Regulations_2013.html

HSA biological agents web pages link
http://www.hsa.ie/eng/Topics/Biological_Agents/
HSA biological agents information for healthcare sector link http://www.hsa.ie/eng/Your_Industry/Healthcare_Sector/Biological_Agents/

Safety representatives should also make sure that, where there is any potential risk, their

TABLE 19.2: Biological Agents action checklist

	YES	NO
Getting information on substances and processes		
Is management passing on information about biological hazards?	<input type="checkbox"/>	<input type="checkbox"/>
Is this information kept up to date?	<input type="checkbox"/>	<input type="checkbox"/>
Does management actively consider biological hazards in its safety statement and risk assessments?	<input type="checkbox"/>	<input type="checkbox"/>
Consultation procedures		
Does the employer keep safety representatives informed and consult with them about its strategy for infections from biological hazards?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employer discuss plans to review risk assessments in the light of amendments to COSHH?	<input type="checkbox"/>	<input type="checkbox"/>
Have dates, priorities and targets been agreed?	<input type="checkbox"/>	<input type="checkbox"/>
Is progress monitored through a joint safety committee?	<input type="checkbox"/>	<input type="checkbox"/>
Assessing the risks		
Has a risk assessment been carried out for micro-organisms with the potential to cause infections?	<input type="checkbox"/>	<input type="checkbox"/>
Have the workers who might be harmed been identified?	<input type="checkbox"/>	<input type="checkbox"/>

TABLE 19.2: Biological Agents action checklist *continued*

Assessing the risks	YES	NO
Are some more at risk than others?	<input type="checkbox"/>	<input type="checkbox"/>
Have the risks been evaluated and decisions taken upon whether existing precautions are adequate, or if more should be done?	<input type="checkbox"/>	<input type="checkbox"/>
Have the findings been recorded?	<input type="checkbox"/>	<input type="checkbox"/>
Has the assessment been reviewed and revised where necessary?	<input type="checkbox"/>	<input type="checkbox"/>
Does the employer have procedures to respond to confirmed or suspected cases of infections which may be occupational/work-related?	<input type="checkbox"/>	<input type="checkbox"/>
Prevention or control	YES	NO
Has the employer taken steps to prevent exposure to micro-organisms with the potential to cause infections?	<input type="checkbox"/>	<input type="checkbox"/>
Has the employer instituted good occupational hygiene standards if prevention from exposure is not possible?	<input type="checkbox"/>	<input type="checkbox"/>
Has the employer ensured that control measures and hygiene standards are used?	<input type="checkbox"/>	<input type="checkbox"/>
Health surveillance	YES	NO
Are workers under health surveillance where they are exposed or liable to be exposed to biological hazards?	<input type="checkbox"/>	<input type="checkbox"/>
Information, instruction and training	YES	NO
Are workers adequately informed and trained about:		
* micro-organisms and symptoms of infection?	<input type="checkbox"/>	<input type="checkbox"/>
* procedures for reporting symptoms?	<input type="checkbox"/>	<input type="checkbox"/>
* the precautions introduced by the risk assessment?	<input type="checkbox"/>	<input type="checkbox"/>

CHAPTER 20: BULLYING

BASIC FACTS ABOUT BULLYING

In the later years of the 20th century, workplace bullying emerged as a serious health and safety issue. In late 1999 the Taskforce on the Prevention of Workplace Bullying was established by the then Minister for Labour, Tom Kitt, who displayed a particular interest in the issue.

The Taskforce was given a fourfold mission:

- To identify the size of the problem and the sectors most at risk.
- To develop practical programmes and prevention strategies.
- To produce a co-ordinated response from State agencies.
- To consider if specific legislation was necessary.

In 2001 the Taskforce reported.

Scale of the problem

The Taskforce commissioned a survey by the Economic and Research Institute into the scale of the problem. The survey found that bullying at work was a major problem. The results of the survey, which were based on an analysis of 5,252 completed questionnaires, found that 7% of the workforce (employed and self-employed) had been bullied within the previous six months.

When in 2007 the Government reviewed bullying prevention policies, the ESRI carried out a further survey. The report, *Bullying in the Workplace Survey Report 2007*, found that 7.9% of workers were bullied in the previous six months. The survey found that workers in the public service are most at risk. In this it confirmed the findings of the 2001 survey. The sectors with the highest rates of bullying were found to be education, public administration, health and social work and transport and communications (the latter of which would be largely private sector). The incidence rates in these sectors ranged from 12% to 14%.

The finding that the problem is worse in the public service than in the private sector is at odds with the fact that the public sector is much better at adopting policies to tackle workplace bullying. Practically 82% (81.9%) of public sector organisations have policies, compared to just 36.9% of private sector employers.

The 2001 survey sought to answer the question: why are some people bullied? They found no simple answer. The results of the survey would suggest that women were more likely to be bullied than men, the better educated were more likely to be bullied than those less well educated and casual and temporary employees were more likely to be bullied than permanent employees.

One possible cause of bullying highlighted in the report was organisational change. Four aspects of organisational change were associated with bullying. They were:

- The appointment of a new manager/supervisor.
- A change of ownership occurred.
- Company re-organisation resulted in a similar two to one ratio of bullying.
- Where new technology was introduced.

Another possible explanation for bullying may lie with who perpetrates the bullying. Most bullying is perpetrated by a single individual, either a single supervisor/manager (accounts for 45.3%) or a single colleague (accounts for 42.6%).

NEW FORMS OF BULLYING

With the growth of online social networking sites, chat rooms, the everyday use of email, mobile phone texts, Twitter and photo messaging, a 21st century hazard has arrived in the form of cyber-bullying.

Often reported in the press as an issue that more usually affects children and young people, cyber-bullying is becoming a new health and safety hazard for workers. School teachers and lecturers in further and higher education are finding themselves the target of current and past students spreading malicious and unfounded comments and allegations.

Intranet sites are easy mediums for in-house bullying in offices and call centres. The massive growth in email as a management technique easily depersonalises contact between manager and staff and can be a convenient shield for aggressive and insensitive behaviour.

The employer's duty of care, to ensure that employees are working in a safe environment, applies equally to cyber-intimidation. Part of an employer's duty may involve alerting employees, especially those in contact with young people and clients, to keep personal details and photographs off social networking sites (even of out of work activities), and to be careful who they 'friend' on Facebook. Victims of cyber-bullying experience the same feelings of fear, intimidation, stress and low morale as those bullied face-to-face. A key difference is that by using information systems to cause harm, the victim has no control over who witnesses the abuse.

There is often a misconception that because cyber-bullies are able to target their victims anonymously, there is less chance to identify who the bully is. This is not usually true. Employers can take immediate steps to have the offending material removed from websites but making a request for information to be removed is not enough.

The employer should make sure that the offensive material has been removed and that the web pages have been 'uncached'. This will disable the web page from displaying the offensive material and stop further users from using search engines to locate the pages.

EFFECTS OF BULLYING

While there can be a tendency to look at the effects of bullying in terms of quality of life and stress, the most startling effect apparent from the survey results is that 11% of those who had been bullied in the six months preceding the survey had quit their jobs. A further 14% said they had considered withdrawing completely from the labour force as a result of the bullying.

The survey found that the effects of bullying spread beyond the workplace. Just over 42% of respondents said bullying impacted on the quality of life outside work. The effects were then measured on a scale ranging from 'minor effect' to 'very significant'. Just 8.5% complained that the effect was very significant.

In carrying out the survey, it was considered to be reasonable to assume that being the victim of bullying is a stressful experience. As with the quality of life effects, the stress effects were measured on a scale ranging from low to high. Just 0.4% reported high stress effects, with 46% reporting low stress effects.

The link between bullying and stress is often mentioned in cases which come before the courts, rights commissioners or the Employment Appeals Tribunal.

As the HSA points out in the Code of Practice, bullying is a cost for both employers and employees. The costs can be human and financial.

LEGAL STANDARDS

The issue of bullying is not addressed specifically in the SHWW Act 2005 or the General Application Regulations 2007, but as barrister and law lecturer Raymond Byrne writes in *Safety, Health and Welfare Law in Ireland*, section 8 of the SHWW Act 2005 imposes a duty on employers to manage and conduct their activities to prevent any improper conduct or behaviour which might affect the health and safety of employees. This general duty has, he writes, been supplemented by the HSA's *Code of Practice for Employers and Employees on the Prevention and Resolution of Bullying at Work*.

There are three Codes of Practice on addressing the issues of bullying and harassment in the workplace. There is the:

- *Code of Practice for Employers and Employees on the Prevention and Resolution of Bullying at Work* (HSA Code).
- *Code of Practice Detailing Procedures for Addressing Bullying in the Workplace* (SI 17/2002) (LRC Code).

- *Code of Practice on Sexual Harassment and Harassment at Work* (SI 208/2012) (Equality Authority Code).

Though the Codes are what is termed 'quasi-law', rather than full statute law, the fact is that while failure to abide by the Codes is not in itself a criminal offence and does not of itself provide a ground for taking a personal injuries action against an employer for negligence, failure to abide by the Codes may be used in evidence in proceedings. For that reason, it is prudent to treat the Codes as if they were law and to implement their provisions.

Initially the Codes were adopted following the report of the Government-appointed Task Force on the Prevention of Workplace Bullying. They were drafted by an implementation group set up under the auspices of the HSA, who have been given overall responsibility for tackling the issue of workplace bullying. As such, though sexual harassment and harassment remain the responsibility of the Equality Authority (now the Irish Human Rights and Equality Commission), they may be regarded as coming within the ambit of health and safety law. Subsequently, in 2007, following another report by an expert group, the HSA Code of Practice was updated and bullying, sexual harassment and harassment are defined in the Codes.

What is bullying?

Workplace bullying is defined in the HSA and LRC Codes. It is repeated inappropriate behaviour, direct or indirect, whether verbal, physical or otherwise, conducted by one or more persons against another or others, at the place of work and/or in the course of employment, which could reasonably be regarded as undermining the individual's right to dignity at work. An isolated incident of the behaviour described in this definition may be an affront to dignity at work but as a once-off incident is not considered bullying.

This definition has been approved by the Supreme Court in judgments (*see law cases, pg146*).

The legally approved definition of what is bullying should be read in conjunction with the guidance in the HSA's Code of Practice. To amount to bullying,

the conduct must be repeated. An isolated one-off incident may be an affront to dignity, but is not considered bullying. It is important to distinguish bullying from inappropriate behaviours.

The Code gives a non-exhaustive list of examples of bullying-type conduct. These include:

- Exclusion with negative consequences
- Verbal abuse/insults
- Being treated less favourably than colleagues
- Intrusion – pestering, spying, stalking
- Menacing behaviour
- Intimidation
- Aggression
- Undermining behaviour
- Excessive monitoring at work
- Humiliation
- Withholding work-related information
- Repeatedly manipulating a person's content or targets
- Blame for things beyond a person's control.

The Code deals with an issue that arises in the workplace, the distinction between reasonable and essential demands arising from good management of performance. An example is given of an employee whose performance is continuously signalled at a level below required targets.

What is sexual harassment?

Sexual harassment is defined in the *Equality Authority Code* by reference to the *Employment Equality Act* (section 23), which the Equality Authority have summarised by noting that sexual harassment includes any act of physical intimacy, request for sexual favours, and/or other act or conduct including spoken words, gestures or the production, display or circulation of written words, pictures or other material that is unwelcome and could reasonably be regarded as sexually offensive, humiliating or intimidating. (Based on the Employment Equality Act 1998, section 23)

Harassment

In the Code, the Equality Authority states that harassment is similar to sexual harassment, but

without the sexual element. It has to be based on the relevant characteristic of the employee, whether it be the employee's marital/civil status, family status, sexual orientation, religious belief (or none), age, disability, race, colour, nationality or ethnic or national origin or membership of the travelling community. Bullying not linked to one of the discriminatory grounds is not covered by the Employment Equality Act. (Based on the Employment Equality Act 1998, section 32 (5))

The Codes require employers to apply health and safety principles, in relation to the issues of bullying, sexual harassment and harassment. Employers must identify the hazard, assess the risk (in writing) and put in place prevention measures.

The Task Force recommended that as a demonstration of commitment to tackle the issues of bullying, harassment and sexual harassment, organizations should adopt a Dignity at Work Charter. The HSA has published a model Charter. Every organization should obtain a copy, review it and apply it to its own workplace.

Under the terms of the Code, employers should adopt a policy for the prevention of bullying, sexual harassment and harassment in the workplace. That policy should set out the prevention measures taken and procedures for dealing with allegations of such conduct. Procedures may in the first instance be informal, but formal procedures should also be adopted. The procedures should deal with issues such as investigations, time limits, representation rights, the right of the alleged perpetrator to respond, disciplinary procedures and sanctions.

In the HSA Code, the point is made that harassment is closely related to bullying. However unlike bullying, a one-off incident can be considered to be harassment.

CASE LAW

There is an extensive body of case law on workplace or work-related bullying. Four cases merit particular attention:

- *Quigley v Complex Tooling and Moulding*, because the Supreme Court endorsed the definition of bullying in the LRC and HSA Codes of Practice.
- *Sweeny v Ballinteer Community School* for Mr Justice Herbert's rulings on aspects of conduct that amounted to bullying and those that were not bullying.
- *Shanley v Sligo Corporation* as an early case in the series of bullying at work cases and an example of the sort of situations that can arise in workplaces.
- *Allen v Independent Newspapers*.

Quigley v Complex Tooling and Moulding: Supreme Court 2008

The Quigley case is important because the definition of bullying in the LRC and HSA Codes of Practice was accepted by the Supreme Court. Mr Justice Nial Fennelly, who delivered the Court's judgment, said bullying must be repeated, inappropriate and undermining of the dignity of the employee at work.

Both parties had accepted that at common law an employer owes a duty of care to his employees not to permit bullying to take place and both accepted the definition of workplace bullying at paragraph 5 of the *Industrial Relations Act 1990 (Code of Practice Detailing Procedures for Addressing Bullying in the Workplace) (Declaration) Order 2002 (SI 17/2002)* as an accurate statement of the employer's obligation.

It was also interesting because it highlights the complexities of the law and the uncertainty of personal injuries litigation. In the High Court, Mr Justice Lavan found that Mr Quigley had been bullied and awarded him damages of €75,000. However, the Supreme Court, despite upholding Mr Quigley's complaints of bullying and harassment, held that the employee was not entitled to recover damages for depression – which he claimed he suffered as a result of the bullying – because he failed to show that the depression was caused by the bullying or harassment. Based on its finding, the Supreme Court overturned a High Court award of €75,000 to Mr Quigley.

While the legal importance of the case lies in the Supreme Court's acceptance of the LRC/HSA Codes definition of bullying, the examples of conduct that the courts found amounted to bullying conduct is an excellent guide to what constitutes bullying in the workplace.

The facts of the case, as summarised by Mr Justice Fennelly in the Supreme Court judgment, were that the plaintiff, Matt Quigley, was employed by Complex Tooling and Moulding Limited, who he was suing. He worked, as a general operative, with the company and its predecessors since 1977. He was dismissed in October 1999. In 1998 the company was taken over by Complex Tooling and Moulding and a new plant manager was appointed. Most of Mr Quigley's complaints related to his treatment at the hands of the new plant manager.

When the case was heard in the High Court, in 2005, the judge hearing the case found on, as the Supreme Court noted, "uncontradicted evidence", that following Mr Quigley's refusal to accept a voluntary redundancy package, Mr Quigley was subjected to humiliation at the hands of the company's managing director.

Among the incidents of bullying and harassment found by the High Court were:

- a remark by the managing director, who when asked on what principle Mr Quigley was the only employee offered voluntary redundancy, replied, "the principle, don't make me laugh".
- remarks by the plant manager: "I'll sort out the granddads"; he could do with "some broom training"; and "I do not know why you are doing that, that is no good".
- excessive and humiliating scrutiny, with the plant manager often standing behind Mr Quigley watching him for up to 45 minutes at a time as he worked.

Commenting on these incidents, Mr Justice Fennelly said the evidence was unchallenged in the High Court and the trial judge was entitled to accept it as true. Continuing, the judge said such conduct "amply meets the criteria of being repeated, inappropriate and undermining of the dignity of the plaintiff at work".

Having found as a fact that the former employee had been bullied and harassed, Mr Justice Fennelly said, the employee also had to prove "that he suffered damage amounting to personal injury as a result of his employer's breach of duty". Recalling that Mr Quigley was dismissed in October 1999, Mr Justice Fennelly, citing the evidence of Mr Quigley's GP, found that the evidence was consistent "only with the plaintiff's depression having been caused by his dismissal". There was "no medical evidence of a link with the harassment". Consequently, the Supreme Court concluded that Mr Quigley "had not discharged the burden of proving that his depression was caused by his treatment during his employment". The Court held the employer's appeal against the High Court judgment should be allowed and the plaintiff's claim dismissed.

Sweeney v Ballinteer Community School: High Court 2011

This case is notable for the types of conduct the judge found amounted to bullying and those he found did not.

The board of management of a school owed a teacher a duty to take reasonable care to prevent her suffering mental injury in the workplace as a result of being harassed or bullied by other employees.

Awarding the teacher €75,000 damages, Mr Justice Daniel Herbert held that the school's board of management, as the teacher's employer, owed her a duty of care, both at common law and by virtue of the provisions of the SHWW Act 2005. He said he was satisfied that from March 2007 onwards the board of management should have known that the teacher was claiming that she was being victimised, bullied and harassed by the school's principal.

While they did not concern the court, there was a background of events that, the judge said, led the teacher to believe that every action or omission of the principal "was part of a conscious and deliberate campaign by him to bully and harass her".

Judge Herbert noted that the teacher, who was the school's home-school liaison co-ordinator (liaison teacher), had until 2005, when she was unsuccessful in an application for one of four

“A” posts of responsibility, been regarded as a dedicated and progressive teacher who had done enormous work in extending the educational services provided by the school to deprived families and especially children at risk. The liaison teacher considered her rejection for one of the posts to be unjust and attributed her “lack of success” to the “malign influence” of the principal. Judge Herbert also noted that between August 2006 and March 2007 the liaison teacher was absent from work on certified sick leave. The medical certificates stated that she was suffering from work-related stress.

A number of allegations of bullying and harassment were alleged against the principal.

The return

When the liaison teacher returned to teach in March 2007, she did not give the school notice of her intention to return but turned up. The school principal met her in the corridor of the school. He asked her: “What’s this, what are you doing here, who knows you are back, did you inform the Board of Management?”. While these questions may have been put to the liaison teacher in a brusque manner, they did not, the judge concluded, amount to bullying or harassment.

Entering a classroom

Following this meeting the liaison teacher entered a classroom where a male colleague was teaching. Then there was a knock on the door and the principal put his head in and told the male teacher “You cannot have people invading your room, you’d want to look after yourself”. The judge found the principal’s conduct in this instance was “a destructive and malicious targeting of the plaintiff and amounted to bullying” within the meaning of the Code of Practice for Employers and Employees on the Prevention and Resolution of Bullying at Work (the HSA Code).

Marked absent

Mr Justice Herbert did not accept that an erroneous entry (which had been corrected) in the school attendance book, that the liaison teacher was absent, when in fact she was attending a training course, was “contrived” to bully or harass the teacher.

Parent’s visit

A parent had gone to a classroom and was abusing a teacher who had disciplined her son. The school principal, hearing the “noise” went into the room and tried to mediate between the teacher and the parent. He insisted the parent come to his office. Instead the parent ran over the liaison teacher, who advised the parent not to go with the principal. The principal directed the liaison teacher to return to her class. The judge held that the principal’s actions and words on this occasion did not amount to bullying or harassment.

The timetable

The liaison teacher had occupied a classroom and was teaching some parents computer skills. In using the classroom, the liaison teacher was adhering to a timetable that had not been approved by deputy principal, whose duty it was to draw up the timetable. A Leaving Certificate class was booked to use the room. The principal and deputy-principal then came into the classroom and asked the parents to leave, saying the room had been “over booked”. However, matters became heated and the principal threatened to call the gardai and told the liaison teacher, who was on her mobile phone summoning other teachers, not to get another teacher out of her class. On this occasion, Mr Justice Herbert held that the principal’s conduct, notwithstanding the liaison teacher’s provocative behaviour, was “oppressive and bullying”.

Counselling

Mr Justice Herbert did not accept that the principal’s refusal to allow the liaison teacher act as the school’s counsellor/psychotherapist amounted to bullying. It was, he told her, a matter for the board of management.

Private investigators

Relations between the principal and the liaison teacher had broken down to such an extent that, as Judge Herbert put it, nobody in authority in the school knew where the liaison teacher was or what she was doing during her working day. Having failed to get the Department of Education to become involved, the principal hired private investigators to follow the liaison teacher. This, the judge said, was wholly inappropriate and amounted to “serious harassment”.

Medical evidence

Medical evidence was given by the liaison teacher's GP and a consultant psychiatrist to whom she was, at her own request, referred. The GP told the court that the liaison teacher was suffering from severe stress and anxiety, which he considered to be a psychological crisis but not an illness.

The consultant psychiatrist told the court that the liaison teacher was suffering from severe clinical depression, with an overlay of post-traumatic stress disorder. She had, the psychiatrist said, recovered considerably but remained anxious. Having reviewed the various incidents, Mr Justice Herbert found that since her return to work in March 2007, the liaison teacher had been continuously treated by the principal in a bullying and aggressive manner. She had been marginalised and treated with unrelenting hostility and contempt.

Summing up, Mr Justice Herbert said that the consultant psychiatrist did not give evidence that the liaison teacher suffered PTSD because of her immediate fear of being followed by the investigators. He also noted evidence that the condition occurs some weeks after a person has been involved in a traumatic event.

He concluded that the liaison teacher had not established that she suffered PTSD because of the bullying or harassment of the school principal, but she had suffered a psychiatric illness in the form of clinical depression and that a direct causative connection existed between that injury and continuous harassment and bullying by the school principal. He was, he added, satisfied that the history of occupational stress going back to 2005 and 2006, which the principal and the Board of Management were aware of, meant they knew the liaison teacher was vulnerable to some form of mental injury.

Finding the Board of Management liable, Mr Justice Herbert said that apart from being vicariously liable for the acts of the principal, they also, as her employer, owed the liaison teacher a duty of care both at common law and by virtue of the SHWW Act 2005, to take reasonable

care to prevent her suffering mental injury in the workplace as a result of being bullied by other employees, if they knew or ought to have known that such was occurring.

He awarded the liaison teacher €75,000 damages, made up as to €60,000 for past pain and suffering and €15,000 in respect of future injuries.

Shanley v Sligo Corporation: High Court

The Shanley case is important because it was the first case to come before the Irish courts where an award was made in a case where bullying was clearly the identifiable issue. Mr Shanley, a fireman who was systematically abused, bullied and belittled by a superior officer over an eight year period, was awarded damages of IR£65,000 (€82,532).

As liability was admitted, the High Court's task was to assess damages. Making the award, Mr Justice Butler said that the case was unusual and concerned post traumatic stress disorder (PTSD). Having heard evidence as to the nature of the bullying suffered and its effect upon the fireman, the judge, after a short adjournment to consider the case, returned to court and delivered an extempore judgment.

Saying that the bullying had gone on for a long period (eight years), he awarded the fireman general damages of IR£50,000 for the injury suffered and IR£15,000 for past and future medical and counselling expenses.

Earlier the court had heard from the fireman that as a result of bullying by a superior officer he had changed. Now he liked his own company and at times found it difficult to carry on a conversation. He told the court that he had missed out on his children growing up and being with his wife when she suffered a brain tumour. He had contemplated suicide.

He had, he said, filed complaints but nothing happened. Eventually, after returning from a holiday in 1999, he contacted his union and a meeting was arranged. The meeting was attended by the county secretary, the county engineer and a SIPTU official. Following the meeting, an inquiry was set up.

As part of the investigation, the Anti-Bullying Centre, based at Trinity College, were requested to investigate the matter. A report prepared by the Centre was handed into court. Giving evidence, the Centre's Jean Lynch told the court the report concluded that there had been bullying. The evidence was overwhelming.

The bullying was, she stated, due not only to the behaviour of the fireman's superior officer, but also to a lack of intervention by senior management. They had allowed the bullying to continue. They had been aware of the bullying but did nothing about it.

The bullying started from the commencement of his employment in 1991. The report showed that the fireman's perception of his relationship with his superior officer was one of intimidation, humiliation, undermining and attempting to isolate him from his colleagues.

He was subjected to frequent use of abusive language and obscenities, open aggression and threatening behaviour, undermining of authority, criticism of efforts in front of others, excessive criticism over minor things, deliberate withholding of information that was required to carry out orders, false accusations, rumours and goading.

Giving evidence, Galway-based clinical psychologist Michael Mullally told the court that he had seen the fireman nearly 40 times. The fireman was, he said, suffering from PTSD. Answering counsel, he said that it was possible to distinguish the post traumatic stress, caused by bullying, from stress caused by the illness of the fireman's wife and the stress of the job.

Allen v Independent Newspapers: EAT

Where bullying at work becomes intolerable for an employee and he or she resigns, the employee may still claim unfair dismissal under the Unfair Dismissals Act 1977 for what is termed 'constructive dismissal.' The employer has not formally dismissed the employee, but nonetheless the conditions of employment may justify resignation and bringing an unfair dismissals claim. A number of bullying claims have taken this form.

The best known example of related unfair dismissal and personal injury claims is the Liz Allen and Independent Newspapers case. Liz Allen was a well known journalist with Independent Newspapers, where she was the paper's crime correspondent. She claimed that she suffered ill-health and was forced to resign from her job as a result of harassment and bullying. She was awarded IR£70,500 compensation by the Employment Appeals Tribunal.

Allen claimed that she was constructively dismissed because the conduct of her employer, and its treatment and attitude towards her, left her with no choice but to terminate her employment. She claimed that she was subject to continuous harassment and bullying and that she was effectively isolated at work. This conduct, she claimed, undermined her confidence and health to such a degree that she could not tolerate her working environment.

Allen, who commenced employment in August 1996, resigned in September 2000. During that time, she claimed that one colleague in particular behaved in a hostile manner towards her. This hostility was, she alleged, manifested by the colleague ignoring her and refusing to communicate with her. She also alleged that her immediate boss behaved in an antagonistic and impatient manner towards her.

In August 1998 she raised her concerns with the particular colleague, whom she alleged was treating her in a hostile manner. He professed not to understand what she was talking about. Then, about a year later, when it was proposed that she be transferred from being a crime correspondent to being a diarist, she raised the issue with her immediate boss.

Her evidence was that in the two years that followed, her working conditions worsened and though she raised the issue with management at various levels, no effective remedial action was taken.

Evidence was given by her doctor that she consulted him in September 2000. She was, he told the Tribunal, suffering sleeplessness,

palpitations, nervousness, headaches, and had a poor appetite. He gave it as his medical opinion that her work situation was the cause of her health difficulties.

Though Independent Newspapers rejected her claim, the Tribunal found that it was reasonable for Allen to have considered the manner in which her various complaints were dealt with when she decided to resign in September 2000. And in deciding to resign, she was not acting unreasonably in taking into account the effect on her health, a concern which she had communicated to her employer a year earlier. Accordingly, the Tribunal found that she had been constructively dismissed.

In all the circumstances, the Tribunal decided that compensation was the appropriate remedy. Considering the medical evidence, the Tribunal decided that Allen's illness was caused by the factors which led to her constructive dismissal.

Relying on a Supreme Court judgment in the case of *Carney v Balkan Tours* and on two English EAT rulings, the Tribunal held it was entitled to consider the extent to which Allen's financial loss was due to the conduct of her employer. The fact that she suffered ill-health and was unavailable for work was due to her employer's conduct. Therefore, she was entitled to compensation.

Compensation was awarded on the basis of medical evidence, which indicated the journalist would be unable to work for about 18 months. Her gross weekly wage was IR£903.85 and, allowing for 78 weeks' lost earnings, the Tribunal awarded her IR£70,500. Independent Newspapers appealed the EAT decision.

At the same time as she was pursuing her claim for unfair dismissal, Allen initiated a High Court personal injuries action against Independent Newspapers. The High Court action never came to court. While it has never been confirmed publicly, the belief is that the two cases were combined and settled for a substantial sum.

The Ruffley Case

The final outcome of another case, *Ruffley v The Board of Management of St Anne's School* is awaited with interest by all who are concerned about workplace bullying. The Supreme Court is due to deliver its judgment on an appeal by Ms Ruffley against a decision of the Court of Appeal to overturn a High Court finding that she had been bullied.

Summarising the facts of the case, Mr Justice Ryan, the President of the Court of Appeal, said Ms Ruffley worked in a school for children with physical or intellectual disabilities.

In September 2009 she received a severe warning after she locked a door in a sensory room from the inside. As Mr Justice Ryan put it the matter might have been forgotten except that in October 2009 Ms Ruffley had incorrectly ticked a box on a monitoring form designed to record pupils' achievements. The boy's teacher was not just satisfied to have the entry corrected, and reported the matter to the school principal. The principal regarded the matter as serious and that it warranted the reactivation of the disciplinary issue. The matter was brought to the attention of the school board.

The outcome was that Ms Ruffley was given a severe warning (just below dismissal). This, she was told, would remain on her record for 18 months. Her response was that she had been in touch with her union and wanted to appeal. In January 2010 she said that at a meeting with the principal she was subjected to severe denigration and reduced to tears. In September 2010 Ms Ruffley, in Mr Justice Ryan's words, "experienced an otherwise minor exchange over alleged lateness for work as the last straw and went on certified sick leave due to work-related stress". Ms Ruffley then took an action for damages against the school. The High Court accepted that she had been bullied within the meaning of the definition in the Industrial Relations Act 1990 (Code of Practice Detailing Procedures for Addressing Bullying in the Workplace (Declaration) Order 2002. She was awarded damages totalling €255,000, which included a sum of €47,000 for future loss of earnings.

The school appealed the judgment to the Court of Appeal. By a majority of two to one the Court of Appeal, dealing with what Mr Justice Ryan said was the central issue of the appeal, held the conduct did not amount to bullying. Reviewing the various alleged incidents of bullying, Mr Justice Ryan held they were not repeated and not inappropriate and did not undermine Ms Ruffley's dignity. He said it is stretching the meaning of the 'repeated' much too far to regard a continuing process of discipline in pursuit of legitimate concerns, even if actually mistaken or unfair, as repeated behaviour.

In turn that judgment has been appeal and the Supreme Court's decision is awaited.

DIGNITY AT WORK

Among the proposals put forward by the Task Force to tackle the problem of workplace bullying was a proposal for a Dignity at Work Charter to be adopted at workplace level.

The Task Force recommended that a Charter should seek to create and maintain an environment where the right of each individual to work with dignity is respected. It should ensure that all staff, at all levels, are committed to the concept and that programmes and training aimed at raising awareness should be carried out. Procedures to deal with alleged cases of bullying should be adopted.

The HSA, with the backing of the ICTU, Ibec and the CIF, developed and published a document, *Dignity in the Workplace*, in which organisations commit to supporting an environment that would encourage and support dignity at work.

PREVENTION

The HSA Code states employers have a duty to manage and conduct work activities in such a way as to prevent any improper conduct or behaviour likely to put employees' safety, health and welfare at risk. The prevention of bullying must therefore be part of the management system.

Employers must consider if bullying is a likely to be a hazard at the place of work, the extent of the risk involved and what preventive measures are necessary. The Code sets out guidance on identifying if there is a hazard:

- Has unacceptable conduct or behaviour been observed?
- Have substantiated complaints of bullying been made?
- Have there been reports of bullying at work from human resources or occupational health and safety?
- Is sick leave above the norm?

When carrying out a risk assessment, employers should review:

- The findings of the hazard identification process.
- Information derived from an organisational climate or work environment assessment (such assessments are more likely in large rather than smaller organisations).
- Views gathered from consulting with employees and their safety representatives.

The HSA recommends that employers:

- Have a bullying prevention policy.
- Provide training, particularly at management level.
- Ensure clarity of individual and department goals and roles.
- Ensure access to competent and supportive internal and, if need be, external structures.

Prevention policy document

The employer's bullying prevention policy document should:

- State the employer's commitment to ensure the workplace is free from bullying and that the policy extends to places of work off-site and to work-related social events.
- State all employees have the right to be treated with dignity and respect at work.

- That the risk of bullying has been assessed and preventive measures have been included in the safety statement.
- Include the arrangements for consultation with employees, safety representatives and safety committees.
- That employees also have responsibilities in creating and contributing to the maintenance of a workplace free from bullying or from conduct likely to contribute to bullying.
- That a person alleged to have been bullied will be afforded natural justice and treated with fairness and sensitivity.
- That the alleged bully will also be afforded natural justice and fairness.
- That bullying at work by employers, employees, contractors or clients will not be tolerated.
- That a complaint which is found, following investigation, to be vexatious, will be followed up through the disciplinary procedure, but that employees who make a complaint will not be victimised.
- That the policy will be updated.

The policy document should give the name or job title of the person who may be approached by a person wishing to complain of bullying at work.

THE ROLE OF THE SAFETY REPRESENTATIVE

The HSA Code of Practice says the policy should address the contribution trade unions can make to the prevention of bullying in the workplace. This can be done through their participation in the development and implementation of policies and procedures, through their information and training services and through collective bargaining. Trade unions can provide information, advice and representation, both to members who allege they have been bullied and members against whom allegations have been made. Safety representatives can play a key role.

There are a number of positive steps that safety representatives can take to raise awareness and tackle bullying in the workplace. Safety representatives should treat bullying and harassment as a hazard and tackle it like any other workplace health and safety issue. Safety representatives can urge their employer to have procedures in place to prevent bullying at work and establish whether the employer already has a policy and procedure for tackling bullying at work. If not, take steps to negotiate a policy with management.

Safety representatives should report their concerns and those of their work colleagues to management in writing.

TABLE 20.1: Safety Representatives' Bullying Policy Review

Initial measures	YES	NO
At our workplace:		
Have we copies of the Codes of Practice?	<input type="checkbox"/>	<input type="checkbox"/>
Have we read the Codes?	<input type="checkbox"/>	<input type="checkbox"/>
Have we attended any lectures/seminars explaining the Codes?	<input type="checkbox"/>	<input type="checkbox"/>
Have we checked for indications of bullying/harassment/sexual harassment?	<input type="checkbox"/>	<input type="checkbox"/>
Indicators of Bullying/Harassment/Sexual Harassment	YES	NO
At our workplace are there any indications in the organisation/workplace of conduct that might:		
- humiliate?	<input type="checkbox"/>	<input type="checkbox"/>
- intimidate?	<input type="checkbox"/>	<input type="checkbox"/>
- victimise?	<input type="checkbox"/>	<input type="checkbox"/>

TABLE 20.1: Safety Representatives' Bullying Policy Review *continued*

- be threatening?	<input type="checkbox"/>	<input type="checkbox"/>
- intrusive?	<input type="checkbox"/>	<input type="checkbox"/>
Have there been incidents in the organisation/workplace of:		
- verbal abuse?	<input type="checkbox"/>	<input type="checkbox"/>
- shouting/swearing at staff (either in public or private)?	<input type="checkbox"/>	<input type="checkbox"/>
- insulting comments on a person's appearance?	<input type="checkbox"/>	<input type="checkbox"/>
- offensive jokes?	<input type="checkbox"/>	<input type="checkbox"/>
Is or has any person been excluded/isolated?	<input type="checkbox"/>	<input type="checkbox"/>
Has any person been given repeated unreasonable assignments to duties, which compare unfavourably with those given to others?	<input type="checkbox"/>	<input type="checkbox"/>
Has any person been given repeated impossible deadlines or tasks?	<input type="checkbox"/>	<input type="checkbox"/>
Has any person been subjected to unwanted physical contact?	<input type="checkbox"/>	<input type="checkbox"/>
Have any comments denigrating a person because of gender, marital status, family status, sexual orientation, disability, age, race, religious belief or membership of the travelling community been made?	<input type="checkbox"/>	<input type="checkbox"/>
Have we checked absence/sickness records for any indications of problems that might indicate bullying, harassment, sexual harassment, such as for example stress?	<input type="checkbox"/>	<input type="checkbox"/>
Is any person/are any persons showing signs of depression, anxiety, inability to cope, alcohol/drug abuse?	<input type="checkbox"/>	<input type="checkbox"/>
Are any particular departments manifesting any of the hazards associated with bullying?	<input type="checkbox"/>	<input type="checkbox"/>
Are there any other indicators (e.g: absence) that may suggest a person could be subjected to bullying/harassment/sexual harassment?	<input type="checkbox"/>	<input type="checkbox"/>
Actions required	YES	NO
At our workplace does our employer have a policy/policies on the prevention of bullying, harassment, sexual harassment?	<input type="checkbox"/>	<input type="checkbox"/>
Is the policy adequate?	<input type="checkbox"/>	<input type="checkbox"/>
Is there a Dignity at Work Charter?	<input type="checkbox"/>	<input type="checkbox"/>
Did our employer consult with trade unions/employee representatives/employees when drawing up the Charter?	<input type="checkbox"/>	<input type="checkbox"/>

TABLE 20.1: Safety Representatives' Bullying Policy Review *continued*

Is the Charter on display in the workplace?	<input type="checkbox"/>	<input type="checkbox"/>
When drawing up our Safety Statement, did our employer consult with employee representatives/employees?	<input type="checkbox"/>	<input type="checkbox"/>
In considering measures to prevent bullying, was bullying identified as a hazard?	<input type="checkbox"/>	<input type="checkbox"/>
Was the risk assessed?	<input type="checkbox"/>	<input type="checkbox"/>
Were prevention measures adopted?	<input type="checkbox"/>	<input type="checkbox"/>
Is a policy review system in place?	<input type="checkbox"/>	<input type="checkbox"/>
Has the policy been adequately implemented?	<input type="checkbox"/>	<input type="checkbox"/>
Does our employer communicate the policy?	<input type="checkbox"/>	<input type="checkbox"/>
Has appropriate training to personnel involved in the process of responding to allegations been provided?	<input type="checkbox"/>	<input type="checkbox"/>
Allegations: procedures	YES	NO
In our workplace:		
Are procedures in place to deal with allegations?	<input type="checkbox"/>	<input type="checkbox"/>
Are there both informal and formal procedures?	<input type="checkbox"/>	<input type="checkbox"/>
Are the procedures based on the Labour Relations Commission's Code (which is set out also in the HSA's Code)?	<input type="checkbox"/>	<input type="checkbox"/>
Do the procedures comply with the Equality Authority's Code?	<input type="checkbox"/>	<input type="checkbox"/>
If not, what measures are needed to ensure compliance?	<input type="checkbox"/>	<input type="checkbox"/>
Do procedures reflect the Labour Relations Commission's Code of Practice on Grievance and Disciplinary Procedures and Voluntary Dispute Resolution?	<input type="checkbox"/>	<input type="checkbox"/>
Allegations: procedures	YES	NO
Is there a named contact person to deal with informal complaints?	<input type="checkbox"/>	<input type="checkbox"/>
Have complaints been resolved using informal procedures?	<input type="checkbox"/>	<input type="checkbox"/>
If the formal procedure has been invoked, while it is noted that the complaint should be in writing, has our employer a procedure to assist a person who may be discriminated against (perhaps because of a disability or language difficulty), by having to express the complaint in writing?	<input type="checkbox"/>	<input type="checkbox"/>
Has the alleged perpetrator of the conduct been given a copy of the complaint and a fair opportunity to respond?	<input type="checkbox"/>	<input type="checkbox"/>

TABLE 20.1: Safety Representatives' Bullying Policy Review *continued*

Has the complaint been investigated by a designated member of the management team/an appropriate person?	<input type="checkbox"/>	<input type="checkbox"/>
Who is to carry out the investigation?	<input type="checkbox"/>	<input type="checkbox"/>
Allegations: procedures	YES	NO
What are the parties' rights of representation?	<input type="checkbox"/>	<input type="checkbox"/>
When the investigator completes investigation, the Code recommends that a formal written report should be submitted to management. Has this been done?	<input type="checkbox"/>	<input type="checkbox"/>
Have the parties been given a chance to comment on the findings before the management decides on any action to be taken?	<input type="checkbox"/>	<input type="checkbox"/>
Policy review	YES	NO
Have we a system in place to ensure we review policy as and when changes in work organisation and systems of work dictate - and at least annually?	<input type="checkbox"/>	<input type="checkbox"/>

RESOURCES/FURTHER INFORMATION

Government reports

Report of the Task Force on Workplace Bullying

Report of the Expert Advisory Group on Workplace Bullying http://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/task_force_bullying.pdf

HSA publications

Code of Practice for Employers and Employees on the Prevention and Resolution of Bullying at Work (The HSA Code). http://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/CoP_Bullying.pdf

Bullying at Work - the HSA web pages http://www.hsa.ie/eng/Workplace_Health/Bullying_at_Work/

Workplace Toolkit to Assist Small Business. (Extract from) http://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety

and Health Management/Section%2011%20Bullying%20at%20Work.pdf

Dignity at Work Charter http://www.hsa.ie/eng/Publications_and_Forms/Publications/As_Gaeilge/Dignity_at_Work_Charter_Poster_English_Irish_A4_Size1.pdf

National Anti-Bullying Research and Resource Centre Dublin City University

Trade union

A guide published by IMPACT, *Stand up to bullying* <http://www.impact.ie/wp-content/uploads/2012/04/final-bullying-document-2010.pdf>

Safety representatives may from time to time find they need to consider disability issues in the context of health and safety. ICTU has published a negotiating guide to which they could refer: *Negotiating disability in the workplace*. To download visit: http://www.ictu.ie/download/pdf/negotiating_disability_in_the_workplace_sept_2004.pdf

CHAPTER 21: CHEMICALS AND HAZARDOUS SUBSTANCES (ALSO COVERS CARCINOGENS)

INTRODUCTION

Chemicals have brought great benefits to society. They cure illnesses and diseases and help us clean our houses, cars and workplaces. The chemical industry is a major employer. In Ireland about 25,000 people are employed directly in the chemicals industry. On the other hand, chemicals can be dangerous. As Margot Wallstrom, former vice-president of the European Commission and one of the architects of the REACH Regulation, put it, "chemicals are a blessing and a curse".

An expert report published by the European Agency for Safety and Health at Work estimates that about 74,000 work-related deaths in the European Union (EU) each year may be linked to hazardous substances at work. The HSA's *Short Guide to the Safety, Health and Welfare at Work* (Chemical Agents) Regulations is all about protecting workers from hazardous substances. The words chemicals and hazardous substances are intertwined.

In 2007 the European Union adopted a new chemicals policy for Europe, the Registration, Evaluation, Authorisation of Chemicals Regulation (REACH). The purpose of the policy is to protect human health and the environment from the harmful effects of chemicals.

The REACH Regulation established the European Chemicals Agency (ECHA). The regulation requires the manufacturers and importers (from outside the EU) of chemical substances of a quantity greater than one tonne per annum to register them with ECHA.

FACTS ABOUT CHEMICALS

When it comes to establishing the facts, one of the problems is, as the European Commission puts it

in the environmental fact sheet *REACH – a new chemicals policy for Europe*, "We know very little about chemicals".

However, thanks to REACH we know more. We know that over 143,000 chemicals were pre-registered with ECHA and that by December 2016 over 49,000 had been registered.

Figures published in 2013 by the World Health Organisation's International Agency for Cancer Research (IARC), which reviews and classifies chemicals for their carcinogenicity, state that of the around 1,000 chemicals assessed, they have classified:

- 113 as carcinogenic
- 66 as probably carcinogenic
- 285 as possibly carcinogenic.

So we know that chemicals can be hazardous and possibly carcinogenic. In the workplace the task is to protect employees and others, such as contractors and visitors, from exposure to chemicals that may be harmful.

HOW CAN CHEMICALS BE HAZAROUS TO HEALTH?

The HSA's *Your steps to chemical safety: a guide for small business* answers the question of how chemicals can be harmful to health, by pointing out that chemicals can cause different types of harm, ranging from mild skin irritation to cancer. However, in order for a chemical to be harmful to health there must either be contact with the chemical or it must enter the body. Chemicals can be ingested, inhaled, injected or absorbed through the skin.

The ease with which substances enter the body depends on their physical and chemical make-up. It could be a gas or vapour, an aerosol, fume, liquid, dust or fibre. For an aerosol, dust or fibre, particle size is important as this affects how far it can travel into the lungs. Once inside the body, the substance's effect will depend on its solubility in body fluids (such as blood, saliva, or mucus) and how the substance reacts with the body's own chemicals.

The routes of entry are:

- **Inhalation:** breathing is the most common route of entry. Aerosols, fumes, vapours and gases can cause harm anywhere in the respiratory system and may also be absorbed into the blood stream. Particles of dust and fibre can also cause harm. Large particles are filtered off in the nose; smaller ones, or those breathed through the mouth, settle on the walls of the windpipe or throat and are coughed up and either spat out or swallowed. The smallest particles of dust and fibres can be inhaled down into the lungs, where they can cause local damage, or be absorbed into the blood stream. See more information on dust below.
- **Skin absorption:** the thickness of the skin and its natural covering of sweat and grease provide some protection. This means only a few substances are readily absorbed by this route, such as organic solvents and phenols. Substances can also enter the body through cuts.
- **Ingestion:** the swallowing of substances is most likely when contaminated fingers are placed in the mouth, or used to handle food or cigarettes. In addition, inhaled particles may be coughed up and then swallowed.

The effects of entry can be:

- **Irritation of the breathing system.** Substances can irritate the nose and upper lung passages, causing sneezing and coughing and, in some cases, bronchitis. They may also damage lung tissue.
- **Irritation of the skin and eyes.** A common reaction is dermatitis – a rash. Solvents can remove the protective oils from the skin. This makes it dry, rough and sore. Some chemicals (for example, hydrochloric acid and caustic soda) may cause irritation in dilute form, but when concentrated can cause chemical burns. The eye is extremely vulnerable if substances make contact.
- **Sensitisation of the respiratory system.** Some substances can cause 'sensitisation'. Once a worker is sensitised, any further exposure, even very small, may bring on an

allergic response of coughing and wheezing. The most extreme sensitisation reaction is anaphylactic shock, which can result in death within a few minutes. See chapter above on asthma for more details.

- **Sensitisation of the skin.** Sensitisation can also occur if a substance gets on the skin. Further contact, even if tiny, may cause itching, rashes and discomfort.
- **Long-term effects.** Some effects only emerge after years of exposure, or manifest themselves years after exposure. These are called chronic effects. Often very low doses can cause these – there may be no short-term (acute) effects to warn people of the risk. Lung damage caused by dusts or heart disease caused by smoking are two examples of long-term effects.
- **Cancer.** This is the long-term effect of most concern. A disorder of cell growth, it arises from a complex interaction between a harmful agent or agents (carcinogens) and the body. A number of chemicals are known or suspected cancer agents. The effect of exposure to a carcinogen may not be seen for many years, and early identification is often difficult. Trade unions argue that the incidence of work-related cancer is grossly underestimated in the official figures.
- **Reproductive disorders.** Some substances can cause loss of sex drive, and infertility in both men and women. They can damage the sperm or the egg (mutagens) or the foetus (teratogens).
- **Endocrine system disruption.** The endocrine system consists of organs such as the pituitary, thyroid and adrenal glands, and the ovaries and testes, which produce hormones that are responsible for normal growth and development, learning and behaviour. The hormonal system is delicately balanced and controls many processes within the body, such as the speed of metabolism, heart rate, the 'fight or flight' response to stress, control of blood sugar, development of male and female sexual organs and reproductive processes, including development of the foetus. Even small changes to the endocrine

system can have serious and even fatal results, for example interference with the hormone insulin can lead to diabetes due to failure of the blood sugar control system. There are a number of chemicals which, in very small amounts, cause disruption to the endocrine system and are called endocrine disrupting chemicals (EDCs), such as bisphenol A and phthalates in plastics. Evidence is building that the assumption that chemicals will not affect the hormonal system may not be true and even those few chemicals in use that have been subjected to some testing have not been tested for any endocrine disruption effects. EDCs are important in the development of cancers and other serious health effects.

IDENTIFYING HARMFUL CHEMICALS AND HAZARDOUS SUBSTANCES

The legislative framework around chemicals includes:

- *The Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (REACH)*
- *The Classification, Labelling and Packaging (CLP) Regulation (EC 1272/2008)*
- *Chemicals Acts 2008-2010*
- *European Communities (Protection of Workers) (Exposure to Chemical, Physical and Biological Agents) Regulations 1989*
- *Safety, Health and Welfare at Work (Carcinogens) Regulations 2001*
- *Safety, Health and Welfare at Work (Chemicals Agents) Regulations 2001*, which is the starting point for the identification of hazardous chemicals and substances, which is of course the first step on the road to prevention of exposure.

At the workplace the concern is: how are chemicals and hazardous substances identified and which preventative control measures should be put in place?

The HSA defines 'chemical substance' in its *Chemical Safety Information Sheet* as "a material

with a specific chemical composition". The HSA gives an example of a chemical: water. A chemical substance can exist as a solid, liquid or gas and still be the same substance. The example given is water and steam, which are different forms of the same substance.

The question then is: what is harmful? The legal definition is:

- Any chemical which meets the criteria for classification as hazardous in accordance with the classification criteria of Annex 1 of the CLP Regulation.
- Any chemical agent which may, because of its physico-chemical or toxicological properties and the way it is used or presented in the workplace, presents a risk to the safety and health of employees.

The *Dangerous Substances Directive (67/548/EEC)* was replaced with the CLP Regulation following a transitional period that ended on December 1st, 2010. Similarly the *Dangerous Preparations Directive (1999/45/EC)* will be replaced with the CLP Regulation following a transitional period ending on June 1st, 2015.

Occupational exposure limit values

Occupational limit values (OELVs) provide a basis for ensuring that exposure to airborne contaminants in the workplace is controlled in such a way as to prevent adverse health effects. An exposure limit is the concentration in the workplace air to which most people can be exposed without feeling harmful effects. The HSA advises that exposure limits should not be taken as sharp dividing lines between safe and unsafe exposures.

OELVs are defined in the Chemical Agents Regulation as meaning, unless otherwise specified, the limit of the time-weighted average of the concentration of the chemical in the air within the breathing zone of the worker in relation to an eight hour or 15-minute reference period.

Consideration must also be given to short-term exposure limits (STELs). STELs are defined as the concentration to which workers can be exposed

for short periods of time without suffering side effects: usually 15-minutes, four times a day.

The OELVs are set out in the schedules to the *Chemical Agents Code of Practice* and are updated periodically in the *Chemical Agents Code of Practice*.

Identification, risk assessment and prevention

The first step in identifying hazardous chemicals is, as the HSA advises, to prepare a list of all the chemicals in your workplace. The Authority also advises preparing a list of the processes which generate dust or fumes. It is suggested that the findings should be recorded in a chemical inventory.

The next step is to check the label on the chemical container, the safety data sheet (SDS) and any documentation which came with the chemical. If you do not have a SDS, you can request one from your supplier.

The third step is risk assessment. Assessing the risk involves evaluating the information on the hazards and uses of the chemical and consideration of the likelihood of exposure.

Having assessed the risk, you then have to put prevention measures in place. Elimination of the hazard is the ideal, but if this cannot be done, then exposure to the hazardous substance must be reduced to the lowest practicable level. The best guidance on the steps to be taken is set out in the HSA's *Short Guide to the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001*. Based on the principles of the hierarchy of controls, the measures to be taken are:

- *Elimination*: change the process/activity so that the hazardous substance is no longer required.
- *Substitution*: replace harmful substances with a safer substance/process.
- *Isolation*: of the hazardous substances from the workers.
- *Enclosure*: enclose the process using the hazardous substance to prevent employee exposure.
- *Extraction*: local exhaust ventilation to remove fumes/dust at source.
- *General ventilation*: to dilute the concentration of any hazardous substance present.
- *Personal protective equipment*: this is the last measure that should be taken and only after all other methods have been considered and, where appropriate, used.

Information/Training/Consultation

Employers are required to train employees in the safe use of chemicals they work with. Training should be designed so that on completion of training, employees fully understand:

- What the chemical hazards are.
- What the potential risk to health could be.
- What controls are in place to protect health and safety.
- How to handle, move and store chemicals in a safe manner.
- How to clean up chemical spills safely.
- Who to report problems to.
- What to do in an emergency.

Employees should be provided with the following information on:

- The hazardous substances that are present in the workplace.
- How employees may be exposed to the hazardous substances.
- The risks associated with the substances.
- The precautions employees must take.
- The control measures that are in place to protect employees and how to use them.
- If an employee is required to wear specific personal protective equipment or follow a specific procedure, then he or she must be trained to do so.
- What to do in the event of an accident, incident or emergency involving a hazardous substance.
- What health surveillance, if any, is appropriate

- The importance of employees reporting any faults that they are aware of or observe at the workplace..

The level of detail required will be dependent on the results of the risk assessment. Information to employees should be updated at regular intervals and, in particular, where there have been significant changes to work activities involving the use of hazardous substances.

Employers are required to consult with employees about the use of chemicals in the workplace.

Health surveillance

Health surveillance should be carried out as appropriate, based on the outcome of a risk assessment. Where health surveillance is required, it should be made available 'under the responsibility of an occupational healthcare professional'. Health surveillance might involve examination by a doctor or a trained nurse. In some cases trained supervisors could, for example, check employees' skin for dermatitis.

However, decisions on the outcome of the health surveillance will be made by the healthcare professional. Health surveillance may be appropriate/required for employees when:

- (i) They work with substances that have been assigned a Biological Limit Value. Mandatory health surveillance applies currently only to work involving exposure to lead.
- (ii) The exposure of an employee to a hazardous chemical agent is such that an identifiable disease or adverse health effect may be related to the exposure.
- (iii) There is a reasonable likelihood that the disease or effect may occur under his or her particular conditions of work.

A record must be kept of all health surveillance carried out. The risk assessment may need to be reviewed based on the results of the health surveillance to ensure that the control measures are adequate and effective.

THE ROLE OF THE SAFETY REPRESENTATIVE

Safety representatives should check that their employer is implementing the protective and preventative measures of the *Chemicals Agents Regulations*, the *Chemical Agents Code of Practice* and the *Carcinogen Regulations*.

Trade unions argue for a precautionary principle to keep all exposures to chemicals as low as possible, because there is insufficient information known about the effects of most chemicals to claim that any level is safe and without harm. The safest level of exposure to harmful chemicals is zero. To achieve this, safety representatives should argue for the implementation of the principles of the hierarchy of control:

1. Eliminate hazardous substances wherever possible.
2. Substitute for something safer or less toxic.
3. Enclose the process to isolate it from people, e.g. negative pressure containment.
4. Isolate workers from the process, e.g. effective exhaust ventilation to remove fumes, mechanical handling aids to prevent skin contact; suitable guards to prevent splashing, suitable packaging to prevent handling, change form of substances.
5. As a last resort, to control any residual risk after taking all the other measures, provide workers with personal protective equipment.

Employers must inform workers about the hazards and risks of any substances they are required to work with. Safety representatives must ensure this happens, and can also give workers the facts about hazardous substances, discuss whether management plans are adequate, provide an opportunity for workers to express/register their concerns and encourage workers to report problems to management and safety representatives. Safety representatives should report their concerns and those of their colleagues to management in writing.

Where control measures are in place, then safety representatives can check that they are being adhered to and maintained and also that they are being effective in preventing ill health. Safety representatives should monitor that where there are potential risks, their employer has given all their workforce appropriate training and information on both the symptoms of ill health and how to avoid it. In addition, a system of health surveillance should be in place wherever there are risks.

FUTHER INFORMATION

HSA publications

Chemical Agents Code of Practice 2016
http://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/Chemical_Agents_COP_2016.pdf

Short Guide to the Chemical Agents Regulations 2001 http://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/short_guide_chemical.pdf

Your Steps to Chemical Safety http://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/Your_Steps_to_Chemical_Safety.pdf

HSA web pages

The HSA's Chemicals webpage <http://www.hsa.ie/eng/Topics/Chemicals/>

CHAPTER 22: DISEASES AND OCCUPATIONAL ILLNESSES

INTRODUCTION

Every year, as part of the National Household Quarterly Survey, the Central Statistics Office (CSO) gathers information on occupational illness. In 2014, the most recent year for which statistics are available, 23,966 people told the CSO that they were out of work for four or more days because of a work-related illness.

The CSO figures are based on a statistically large survey and can therefore be regarded as robust. However it must be borne in mind that the cases of absence because of work-related illness are self-assessed and self-reported. They are not subject to medical vetting.

However given that currently there are no regulations requiring employers to report occupational illnesses or diseases, the CSO figures are a valuable source of information. There are two other sources of information on occupational illnesses and diseases: the Department of Social Protection's Occupational Injury Benefits claims figures and The Health and Occupational Disease Network (THOR) figures.

Over the five year period 2014-2016 a total of 30,435 valid OIB claims were admitted by the Department, that is an average of 10,141 a year. However most of the claims admitted are in respect of physical injuries. Every year only a few hundred are because of a disease, prescribed under Social Welfare legislation, as occupational.

THOR was first established in Ireland in 2005 when dermatologists and chest physicians started reporting. Occupational physicians joined the THOR network in 2007.

DEFINITION OF OCCUPATIONAL DISEASES AND ILLNESSES

There is no definition of what is an occupational disease or illness in the Irish health and safety regulations nor is there a requirement to report occupational diseases or illnesses.

So how can employers and employees identify what are considered to be occupational injuries and illnesses? The CSO figures only give an overall picture of the incidence of occupational illnesses. To get a detailed picture it is necessary to look at the THOR reports and the IOB figures.

Over the seven year period from 2007 to 2013 occupational physicians have reported 1,117 cases. The cases are reported under diagnostic headings. They have reported 572 mental health cases, 395 musculoskeletal disorder cases, 102 skin disorders and 18 respiratory cases (asthma: see Chapter 18). Other cases reported by occupational physicians over the years include four of noise induced hearing loss cases and four sleep problem cases.

Last year under the OIB scheme 270 stress claims, 53 cases of sciatica, 43 of tendonitis, 13 of eczema/dermatitis and 13 ear injury/deaf infections were admitted as valid.

RESOURCES FOR PREVENTION

The key to prevention is, if an occupational illness or disease is identified as a hazard, a risk assessment should be carried out

From the analysis of the THOR and OIB figures above it is possible to identify:

- Stress
- Asthma
- Noise
- Tendonitis
- Carpel Tunnel Syndrome
- And sciatica

as hazards. There are numerous other health hazards, such as asbestos (see Chapter 17) and

silica. Some chemicals can be carcinogenic (see Chapter 21). As is clear from the figures cited above asthma (see Chapter 18) and stress (see Chapter 30) are potential hazards and a cause of occupationally related illness.

Dermatitis and noise are two potential hazards highlighted by the statistics. The Authority's Frequently Asked Questions webpages are a good source of information on the hazards of noise and dermatitis.

For information on dermatitis visit http://www.hsa.ie/eng/Workplace_Health/Occupational_Asthma_and_Dermatitis/Occupational_Dermatitis_Frequently_Asked_Questions/. For information on noise visit: http://www.hsa.ie/eng/Topics/Physical_Agents/Noise/Noise_-_Frequently_Asked_Questions/. Another useful guidance document on preventing dermatitis is the HSA's *Dermal Exposure Information Sheet*. To download visit: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Chemical_and_Hazardous_Substances/Dermal%20Exposure%20Information%20Sheet.pdf

Employers are required to ensure employees are not exposed to noise or vibration (which can be a cause of carpal tunnel syndrome) in excess of exposure limits (see Chapter 2 for summary of the regulations under the heading Physical Agents Regulations). Employers are required to:

- Assess the risk to employees.
- Decide if employees are exposed to levels above the exposure limit values (ELVs).
- Take immediate action to reduce exposure below the ELVs.

There are no dermal exposure limit values to guide employers in relation to exposure to dermal agents. Dermatitis can be caused by exposure to hazardous substances. Dermatitis can be either allergic contact or irritant contact dermatitis. Among the measures recommended by the HSA to control exposure are:

- Elimination of hazardous substances or its substitution with a less hazardous substance.
- Follow the advice given on safety data sheets.

- Introduce engineering controls.
- Reduce the amount of wetwork.
- Provide PPE and ensure it is worn.

THE ROLE OF THE SAFETY REPRESENTATIVE

The safety representative's function is to represent the employees who have selected him/her by making their concerns about health and safety issues known to the employer and by ensuring that the employer takes action to address the concerns expressed by eliminating the risks to employees' health, safety and welfare.

Specifically safety representatives should be ensuring the employer is providing:

- Information on occupationally related diseases and illnesses.
- Details of incidents of occupational diseases or illnesses at specific workplaces.
- Is provide PPE and RPE training in the use of such equipment.
- Is monitoring and measuring noise and vibration.
- Is taking measures to eliminate or if that is not possible reduce exposure.

CHAPTER 23: ELECTRICITY

INTRODUCTION

Electricity powers our workplaces and homes, provides us with heat and light and enables us to cook. Electricity has been hugely beneficial but it is also hazardous – it can kill and maim. Over the period from 1995 to 2013 sixty-seven people were electrocuted, with 44 of the electrocutions associated with a work activity.

Every year at the Electro-Technical Council of Ireland's (ETCI) annual meeting the organisation's Safety Committee presents a report. Every year the report includes details of the fatalities.

An analysis of the ETCI reports over the period 2000-2009 presents a graphic insight in to the hazards of working with electricity, showing who is in danger and the sources of the dangers. Over the period:

- 36 people were killed in work-related electrical fatalities.
- 32 of the 36 were workers.
- 10 workers were classified as semi-skilled or unskilled, five as craft persons, four were M/C operatives mobile, four were operatives stationary, three were farmers or farm workers and two were apprentices.
- 12 of the fatal accidents occurred in buildings under construction, ten in fields, three were killed in each of the following work areas (kitchens/workshops, roads and indoor electrical substations, two were killed in outhouses and another two in yards, while one was killed in a room in a house.
- 18 of the fatal accidents were linked to overhead power lines, six to fixed apparatus, two involved circuit breakers, two flexes, while one person was killed by a power transformer and another by a socket.

Clearly electricity can be hazardous. The HSA advises the the main hazards are:

- Contact with live parts causing shock and burns.
- Faults which could cause fires.

- Fire or explosion (arcing), where electricity could be the source of ignition in a potentially flammable or explosive atmosphere.

A review of court cases, both employer liability claims and prosecutions taken by the HSA, suggests that working near overhead power lines and in adverse conditions can be dangerous (see *Table: 23.1*). Also some items of equipment, such as extension leads, involve greater risk than others.

TABLE 23.1: Case Law

Double tragedy

Two workers, a 29 year old employer and his 18 year old assistant, were electrocuted. After taking a break to have a few drinks they returned to a building site in the early hours of the morning to complete concrete levelling which they had left to set. At an inquest the Coroner's Court heard that the site was lit by an electric lamp, which had developed a fault. One of the men went to adjust the lamp, which was on a tripod. As he moved it, he was electrocuted. His employer went to help him and when he touched his friend, he also was electrocuted.

The Coroner's Court heard evidence from an electrician, who examined the scene after the accident, that there was no earth-leakage circuit breaker or safety tripswitch on the socket to which the lamp was connected. He found that the connection block had broken away from the main frame, which left the light with no earthing. As a result, it shorted and the tripod became live. (*Inquest into the deaths of Sean Flannery and Mark Hannon: Sligo Coroner's Court, 2001*)

Truck-mounted pump in contact with overhead power line

A worker on a building site was killed when a truck-mounted concrete pump contacted a 10,000 volt overhead power line. Following an investigation the HSA prosecuted two

TABLE 23.1: Case Law continued

companies, the main contractor's site manager and a director of a sub-contractor. The fatal accident occurred in 2003. The site manager and the subcontractor's director were charged under section 13 of the Non-Fatal offences against the Person Act 1997 (see footnote). The court heard evidence that an HSA inspector had twice issued directions in relation to the overhead power lines and an off-duty ESB engineer had interrupted a journey to go on site and warn of the dangers. The companies were fined €150,000 (the main contractor) and €100,000 (the sub-contractor) and the site manager and director were given suspended prison sentences. (*DPP for HSA v Cormac Building Contractors Limited, Kildownet Utilities, Joseph Byrne, Brian Molloy: Wicklow and Dublin Circuit Criminal Courts, 2006*)

Harvester in contact with overhead power lines

While an agricultural contractor was harvesting silage in a field, the jib or chute of his harvester came in contact with overhead power lines. As a result he suffered severe injuries. He sued the farmer, for whom he was working, and the ESB. He withdrew his claim against the farmer and the High Court found that the ESB was not negligent. He appealed to the Supreme Court.

Documents were produced in court which indicated that the normal height for power lines of the type in the incident would be 15 feet. Evidence was given that at the highest point of the field the height of the power line was just 13 feet above the level of the field. The Supreme Court held that given that there can be inclines and bumps in fields, the ESB had a duty of care to make sure standard machines could go safely under the power lines. The court held that the ESB was negligent to the extent of 75% but that the contractor was also negligent, to the extent of 25%. (*Cosgrove v Ryan and the ESB: Supreme Court 2008*)

Installation not earthed

An electrical contractor was prosecuted after a builder was found slumped under a sink unit where he had been installing pipes. An investigation reveals that when the electrical contractor handed over the installation to the builder, it had not been neutralised. So all the equipment would become live and remain live. The electrical contractor was prosecuted. He pleaded guilty to a number of offences, including failing to prevent danger by earthing or automatic disconnection of the electricity supply. (*HSA v Techbase: District Court 2003*)

Failure to create an exclusion zone

Two companies, a site owner and building firm, failed to put an exclusion zone around ground works or to put ducting for electrical wires in place. As a result, a worker who was laying concrete pipes and was using a machine to finish and level concrete, was electrocuted when the arm of the machine came in contact with an overhead power line. The site owner was fined €40,000 and the building contractor, who pleaded guilty to failing to provide a safe system of work, was fined €25,000. (*DPP for HSA v Murray Waste Recycling Limited and Keating and Doyle Limited: Circuit Criminal Court, Wexford, 2009*)

(Footnote. Strangely, given the title of the Act, prosecutions can be brought for offences, including work-related fatalities, under section 13 of the Non-Fatal Offences Against the Person Act 1997)

ELIMINATING OR REDUCING HAZARDS

The impact of exposure to electricity is determined by the level of voltage the body is exposed to and the resistance to the flow of electrical current offered by the body. The factors that determine the severity of the effect of electric shock are the level of voltage, the amount of body resistance, the path the current takes through the body and the length of time the current flows through the body.

Among the control measures recommended by the HSA are:

- Reduce the voltage
- Ensure fuses are correctly fitted
- Earth equipment
- Provide one or more RCDs (residual current devices)
- Visually check, maintain and if necessary replace extension cables and other flexible leads.

New installations and those that have been altered majorly or extended must be inspected and tested by a competent person. This is provided for by the General Application Regulations (regulation 89).

For a summary of the Regulations see Section 2, Chapter 2.

When carrying out such work, the ETCI's *National Rules for Electrical Installations*, the ETCI's Wiring Regulations 2008 should be followed. The standards set out in these rules should be applied for all new installations under construction and all extensions.

The testing requirements for installations are also set out and should be applied when carrying out inspection and testing in accordance with the 2007 General Application Regulations. All electrical work should be signed off by an electrician who holds a certificate for testing and verification.

Among the areas updated in the new wiring Regulations are sections on agriculture, temporary structures (such as marquees and fairgrounds) bathrooms and several others. In addition, the regulations set out a revised structure for

certification and testing of installations, which should be adhered to. If you are commissioning an electrical works in your premises, then you should check and specify that the installation is being carried out in accordance with the up to date Wiring Regulations.

When working near electricity, the HSE-GB advises:

- Carry out a risk assessment and make sure it covers electrical hazards.
- Learn how to recognise electrical wires, be they in the workplace, overhead or cables buried underground.
- If digging or disturbing the ground or cutting into surfaces use cable locators to find buried services and permanently mark the position of services you find.
- Work away from electrical wiring wherever possible.
- If you have to work near electrical wiring or equipment, ask for the supply to be turned off and make sure it is off and cannot be turned on again without your agreement.
- If the electricity supply cannot be turned off, consult a competent person who should be able to advise you on the best way to proceed.
- Identify where it is safe to work.
- Put up danger notices where there are live electric circuits and warn co-workers where it is safe and not safe to work.

THE ROLE OF THE SAFETY REPRESENTATIVE

The safety representative's function is to represent the employees who have selected him/her by making their concerns about health and safety issues known to the employer and by ensuring that the employer takes action to address the concerns expressed by eliminating the risks to employees' health, safety and welfare.

Safety representatives can bring problems with electrical work to their employers' attention and make representations on behalf of those they

represent. Safety representatives are entitled to inspect the place of work upon giving reasonable notice to their employer. When carrying out an inspection, the safety representative should look out for any electrical hazards and bring any issues to management's attention.

It may be that there has been an accident or a dangerous occurrence that has resulted from an electrical incident. Where this is the case, the safety representative should look up the resource

materials referred to below and draw to the employer's attention such guidance. This is not the same as taking on a management or advisory role. It is a helpful action alerting employers to available guidance and resources.

The *checklist below (Table 23.2)* may be helpful when carrying out an electrical safety inspection. It is derived from the HSE-GB publication *Electricity at Work: Safe Working Practices*.

checklist

Preliminary matters

YES NO

- Has an electrical risk assessment been carried out?
- Does the risk assessment cover the specific task now to be undertaken?
- Have we rules and procedures for electrical work?
- Do contractors brought in to do work have rules and procedures?
- Are the rules compliant with the ETCI's Wiring Rules?
- Are the rules written?
- Are all who may be involved in the work aware of the rules?
- Do those carrying out work understand the rules?
- If something unforeseen occurs, do the rules provide for a review?
- Are we satisfied that those carrying out the work are competent for the particular task?

Working dead or live

YES NO

- Has the equipment to be worked on been isolated (is it dead)?

There are only three valid reasons why equipment being worked on should not be isolated:

- It is unreasonable for the conductor to be dead
- It is reasonable for a person to be working at or near a live conductor
- Suitable precautions have been taken to prevent injury

YES NO

- If all three criteria are met, live work may be permitted. Are the criteria met?

Working dead or live: actions to be taken

YES NO

- Have we:
- Identified the circuits or equipment to be worked on?
 - Identified the work that needs to be done?
 - Planned the work?
 - Specified the level of supervision?
 - Provided and ensured the use of appropriate PPE?

TABLE 23.2: Electrical Safety at Work checklist *continued*

Working dead or live: actions to be taken	YES	NO
• Ensured workers have been fully instructed?	<input type="checkbox"/>	<input type="checkbox"/>
• Put in place supervision and checks?	<input type="checkbox"/>	<input type="checkbox"/>
Working dead: actions to be taken	YES	NO
Have we identified the circuit or equipment to be worked on?	<input type="checkbox"/>	<input type="checkbox"/>
Cut off supply and isolate circuit/equipment?	<input type="checkbox"/>	<input type="checkbox"/>
Working dead: actions to be taken	YES	NO
Posted caution/danger notices?	<input type="checkbox"/>	<input type="checkbox"/>
Proved circuit/equipment is dead?	<input type="checkbox"/>	<input type="checkbox"/>
Earthed circuits?	<input type="checkbox"/>	<input type="checkbox"/>
Taken precautions against adjacent live parts?	<input type="checkbox"/>	<input type="checkbox"/>
Issued permits-to-work?	<input type="checkbox"/>	<input type="checkbox"/>
Applied local earths?	<input type="checkbox"/>	<input type="checkbox"/>
Working live: actions to be taken	YES	NO
Have we identified the circuit or equipment to be worked on?	<input type="checkbox"/>	<input type="checkbox"/>
Ensured suitable precautions have been taken?	<input type="checkbox"/>	<input type="checkbox"/>
Ensured a work environment that allows safe access/egress and is adequately lit?	<input type="checkbox"/>	<input type="checkbox"/>
Restricted access to the area of live work?	<input type="checkbox"/>	<input type="checkbox"/>
Ensured workers can be accompanied, if that is necessary, by person trained to give assistance?	<input type="checkbox"/>	<input type="checkbox"/>

Users of this checklist should read the HSE-GB's Electricity at Work: Safe working practices and use the checklist in conjunction with the publication

RESOURCES

HSA guidance

The HSA's principal guidance document is *Electricity in the Workplace: HSA webpage*, visit: <http://www.hsa.ie/eng/Topics/Electricity/>

The HSA has also published *Electricity in Healthcare: Simple Electrical Safety Rules* http://www.hsa.ie/eng/Your_Industry/Healthcare_Sector/Electricity_and_Healthcare/

Electro-Technical Council of Ireland

National Rules for Electrical Installations (ETCI Wiring Rules 2008)

For more information visit www.etcie.ie

ESB

ESB Code of Practice for Avoiding Danger from Overhead Electricity Lines. The Code has been approved by the HSA. Visit: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/ESB_Code_of_Practice_for_Avoiding_Danger_from_Overhead_Electricity_Lines.html

HSE-GB

The HSE's publication *Electricity at Work: Safe Working Practices* provides overall advice on working safely with electricity. Visit: <http://www.hse.gov.uk/pubns/priced/hsg85.pdf>

Another useful publication is *Maintaining Portable Electrical Equipment*, visit: <http://www.hse.gov.uk/pubns/priced/hsg107.pdf>

The HSE's webpages *Electrical Safety at Work* can be accessed at: <http://www.hse.gov.uk/electricity/>. Another useful HSE publication is *Work near electricity*, which can be accessed at: <http://www.hse.gov.uk/electricity/nearelectric.htm>

CHAPTER 24: **ELECTROMAGNETIC FIELDS**

INTRODUCTION

Electromagnetic fields (EMFs) arise whenever electrical energy is used. EMFs arise in our homes from all sorts of electrical appliances. They arise in the workplace from electricity generation and transmission, broadcasting, radio and telephone base stations, dielectric and induction heating, welding, electric furnaces and medical equipment.

Exposure to EMFs can give rise to acute (short term) effects. The effects depend on the frequency of the radiation. The effects that occur depend on the frequency of the radiation. At low frequencies the effects will be on the central nervous system of the body whilst at high frequencies, heating effects can occur leading to a rise in body temperature. In reality, these effects are extremely rare and will not occur in most work situations.

In 2013 the European Union enacted the Electromagnetic Fields Directive (2013/35/EU). The Directive was transposed in to Irish law in 2016 when the Government enacted the Safety, Health and Welfare at Work (Electromagnetic Fields) Regulations.

THE REGULATIONS

The Safety, Health and Welfare at Work (Electromagnetic Fields) Regulations 2016 (SI 337/2016) require employers to carry out an initial assessment of the risks from EMFs.

This can be done by reference to the EU Commission guide (see below). According to the explanatory memorandum to the regulations, most employers will not be required to take further action. However those whose employees are exposed to EMF at work are required to carry out a more detailed risk assessment, which shall include the calculation or measurement of EMF levels at the place of work.

The Regulations set out exposure limit values (ELVs) and action levels (ALs). EMFs are defined as static electric, static magnetic and time-varying

electrical, magnetic and electromagnetic fields with a frequencies of up to 300 GHz. ELVs are defined as meaning values established on the basis of biophysical and biological considerations, in particular on the basis of scientifically well-established short term and acute effects, that is the thermal and electrical stimulation of tissues.

The Regulations do not cover suggested long term effects or risks resulting from contact with live conductors.

The Regulations are set out in nine regulations and three schedules. The schedules transcribe annexes from the Directive. The various exposure limit values are set out in the schedules.

Employers are required to ensure that employees' exposure to EMFs is limited to the health and sensory effects of ELVs, which are set out in schedule 2 of the Regulations for non-thermal effects and in schedule 3 for thermal effects, with some exceptions under specified conditions.

Employers are required to carry out risk assessments and to take immediate action where exposure is not in accordance with ELVs. Employers are deemed to be in compliance where it is demonstrated that the relevant ALs are not exceeded. Where ALs are exceeded employers shall, in so far as reasonably practicable, ensure the risk from exposure is either eliminated at source or reduced to a minimum. Employers shall prepare action plans comprising both technical and organisation measures designed to prevent exposure exceeding the health effects and sensory effects of ELVs.

Employers are obliged to consult with their employees and to provide information and training. They are also obliged to ensure health surveillance is made available to employees where a risk assessment reveals a health risk. Employees have a right to access to their personal records. Employers are also required to provide the HSA with copies of health records.

Where an employee's exposure exceeds the relevant ELVs the employer shall make a medical examination available to the employee.

Where as a result of health surveillance an employee is found to have an identifiable illness or adverse health effect, the registered medical practitioner shall inform the employee of the results, including advice regarding health surveillance which the employee should undergo following the end of exposure. The medical practitioner shall inform the employer of significant findings.

The employer shall, taking account of the advice of the medical practitioner, review the risk assessment and the measures taken to eliminate or reduce the risk. The employer shall arrange continued health surveillance and provide for a review of any employee similarly exposed.

GUIDANCE

There are no published figures to guide employers on the incidence of exposure to EMFs. There are however a number of very good guides on how to assess and manage exposure to EMFs.

The HSA has published a short guide to the Regulations. The guide goes through the regulations one by one, explaining each regulation. To download the guide click on the following link http://www.hsa.ie/eng/Publications_and_Forms/Publications/Physical_Agents/EMF_Guidelines_2016.pdf

The Authority has also published a web page. To access click on the following link http://www.hsa.ie/eng/Topics/Physical_Agents/Electromagnetic_Fields/

The European Commission has published three guides. A short 24 page guide for SMEs; a 212 page detailed practical guide and a 148 guide case studies guide.

The point is made in the practical guide, which incidentally the Commission states has been prepared to assist SMEs, that many activities in modern workplaces give rise to the use of EMFs. These include electrical equipment and communication devices. That said the guide states that in the majority of workplaces the levels of exposure are very low and will not give rise to risks. The point is also made that some workers are at

particular risk: they include workers wearing active implanted medical devices, those wearing passive devices those using body-worn medical devices and pregnant workers.

To assist employers carry out an initial risk assessment the practical guide includes a table of common work situations. There are three columns. One indicates solutions requiring specific assessment for workers with active implants, another workers at particular risk and a third for all workers.

The case studies guide presents case studies of work in an office, a medical setting, an automotive workplace, welding work, metallurgical manufacturing and airports. They also cover working with nuclear magnetic resonance spectrometer, electrolysis, radiofrequency plasma devices, rooftop antennas and walkie-talkies.

To download the EU Commission Non-binding guide to good practice for implementing the EMF Directive, click on the following link http://www.hsa.ie/eng/Publications_and_Forms/Publications/Physical_Agents/EU_EMF_Guide_Vol_1.pdf. To download the case studies guide click on http://www.hsa.ie/eng/Publications_and_Forms/Publications/Physical_Agents/EU_EMF_Guide_Vol_2_Case_Studies.pdf.

Another useful guide is the HSE-GB's 32 page guide, which can be downloaded by clicking on the following link <http://www.hse.gov.uk/pubns/priced/hsg281.pdf>. In a short guidance note the HSE-UK states the effects of EMFs can depend on the frequency of the radiation. At low frequencies the effects will be on the central nervous system of the body, whilst at high frequencies heating effects can lead to a rise in body temperature. However, in reality these effects are, according to the HSE-GB, extremely rare and will not occur in most day-to-day work situations.

CHAPTER 25: ERGONOMICS – MANUAL HANDLING AND DISPLAY SCREEN EQUIPMENT

INTRODUCTION: AN OVERVIEW

The essence of ergonomics is simple. In the broadest public policy sense, ergonomics has been defined as “the scientific study of the relationship between the human and their environment”. In the narrower context of the workplace, ergonomics has been defined as fitting the task to the person.

In the HSA's guide *Ergonomics in the Workplace*, the Authority adopts the definition of the writers McCormack and Saunders:

“Ergonomics applies information about human behaviour, abilities and limitations and other characteristics to the design of tools, machines, tasks, jobs and the environments for productive, safe, comfortable and effective human use”.

A number of factors play a role in physical ergonomics, including body posture, force, repetition, duration and movement (sitting, lifting, carrying, pulling and pushing). These factors are the link between ergonomics and manual handling. Then there are the environmental factors: noise, lighting, temperature and humidity. Both these factors are relevant in relation to display screen equipment.

The reasons why we should be concerned with ergonomics in the workplace are set out by the ILO in the *Encyclopaedia of Occupational Safety and Health*. The hypothesis of modern ergonomics can be stated thus: “Pain and exhaustion cause health hazards, wasted productivity and reduced quality, which measures the costs and benefits of human work”.

In the context of the workplace, ergonomics focuses on human beings and their interaction with machinery, equipment and the workplace environment. As the HSE-GB put it in their short guide *Ergonomics and Human Factors at Work*,

to assess the fit between a person and their work an employer will have to consider:

- The job/task being undertaken.
- The individual's physical and psychological characteristics.
- The organisation and the social environment.
- How ergonomics and human factors improve health and safety.

The HSA's guide *Ergonomics in the Workplace* focuses on the impact of workplace ergonomics on workplace design, manual handling and display screen equipment. Ergonomics is seen as a key factor in the prevention of manual handling injuries and is a core element in ensuring compliance with the *General Application (Display Screen Equipment) Regulations 2007*.

WORKPLACE DESIGN

According to the HSA's guide, the goal of ergonomics is to provide maximum productivity with minimal cost, which is, the HSA explains, in this context the physiological or health cost to the worker. The goal of design is to design workplaces for as many people as possible and to have an understanding of the ergonomic principles of posture and movement, which play a central role in the provision of a safe, healthy and comfortable work environment.

Corlett's ergonomic principles are:

- Joints must be in a neutral position
- Keep work close to the body
- Avoid bending forward
- A twisted trunk strains the back
- Alternate posture as well as movements
- Avoid excessive reaches
- Avoid carrying out tasks above shoulder level
- Limit the weight of the load that is lifted
- Use mechanical aids
- Avoid carrying loads with one hand
- Use transport accessories.

MANUAL HANDLING

Every year the HSA-publishes reported accident figures show that about one-third of all reported accidents are the result of manual handling incidents. And every year back injuries top the list of injuries reported to the HSA and under the Occupational Injury Benefit (OIB) scheme (see *Table 24.1*).

TABLE 25.1: Manual handling and back injuries 2013-2015

	2013	2014	2015
Manual handling injuries reported to HSA	32%	32%	33%
Back injuries reported to the HSA	23%	24%	23%
Back/neck/rib/disc injuries reported to OIB scheme	3,343	2,833	2,846

The figures show that manual handling is clearly a potential hazard and one with serious consequences. Take the case of the doctor who suffered a career-ending back injury while lifting a patient.

The doctor noticed that a patient in an ICU ward had fallen from her bed. The patient had three tubes inserted in her body and the doctor was concerned that the detachment of any of the tubes would put the patient's life at risk. She sought help and with the aid of a nurse she attempted to lift the patient from the ground onto a chair. While carrying out the manoeuvre she twisted and injured her back.

Questions were raised about whether the doctor should have tried to lift the patient in the court case that followed. Her employer argued that the doctor was guilty of contributory negligence. The employer also alleged that the doctor had a pre-existing back condition. Whatever the merits of these arguments, the case was settled on the second day of hearing. While no details of the

settlement were disclosed, given that the doctor was seeking €3.6m in special damages (loss of wages and medical expenses), it is likely that the settlement figure was substantial.

Back injuries caused by manual handling are a serious issue for employers.

Prevention

The law relating to manual handling is set out in the General Application Regulations 2007 and is summarised in Chapter 2. What is clear is that manual handling is a hazard and so employers must:

- Carry out a task-specific risk assessment.
- Put in place appropriate prevention or control measures.

Manual handling involves lifting, pulling, pushing, carrying or moving loads which involve the risk of injury, particularly back injury, because of the characteristics of the load or because of unfavourable ergonomic conditions, which provides the legal basis for the link between ergonomics and manual handling.

The law requires employers to:

- Eliminate manual handling
- If that is not possible reduce to the risk to the lowest point possible.

The risk assessment is the key to prevention. The risk assessment enables the employer to decide what tasks can be avoided and which task cannot be avoided but there is a need to reduce the risk. The regulations offer the best guide to carrying out a risk assessment. When carrying out the risk assessment it is necessary to consider is the characteristics of the load. Is it:

- Too heavy or too large?
- Unwieldy or difficult to grasp?
- Unstable or has contents that are likely to shift?
- Positioned so that it requires twisting or bending of the trunk?
- Likely to cause injury because of contours or consistency (or both) in the event of a collision?

The law requires employers to avoid manual handling, but where it cannot be avoided, to take measures to reduce the risk.

The risk assessment is the key to prevention and risk assessment enables you to decide what tasks can be avoided and which tasks cannot be avoided but there is a need to reduce the risk. The regulations offer the best guide to carrying out a risk assessment. When carrying out the risk assessment, it is necessary to consider:

- Putting in place appropriate measures to avoid or reduce the risk.
- Taking account of the risk factors in schedule 3 of the Manual Handling of Loads Regulations when conducting task-specific risk assessments.
- Is a load too heavy or too large?
- Is a load unwieldy or difficult to grasp?
- Is a load unstable or has contents that are likely to shift?
- Is a load positioned so that it requires twisting or bending of the trunk?
- Is a load likely to cause injury because of contours or consistency (or both) in the event of a collision?

It is also necessary to consider if the physical effort is too strenuous, can only be achieved by a twisting movement of the trunk, is likely to result in the sudden movement of the load or be made with the body in an unstable position.

It is necessary to understand the nature of the task being carried out, to understand the range of the risks and put in place appropriate control measures to manage the risks.

The checklist in the HSA's *Safety Toolkit and Short Guide to the General Application Regulations 2007 Manual Handling* offers users a very useful guide to risk assessment. Visit page 45 of the Toolkit at: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Toolkit_Manual_Handling.pdf

Training

Having carried out the risk assessment and decided that manual handling cannot be

eliminated, what measures should be taken?

Training is the answer that most people will come up with in the first instance and certainly, if training is not provided or the training provided is inadequate, the courts will take a poor view of it. But first, employers should consider if there are appropriate measures that could be taken to avoid or reduce the extent of manual handling.

In a court case taken by an airline worker, who alleged that he suffered a back injury, a High Court judge said that while the airline had training procedures in place, they were not followed in practice. Earlier, the court heard that stairs were brought to the door of the plane so that passengers can disembark. They were brought by a mechanical float but had to be positioned manually. On the day the accident occurred, the worker told the court he had to manoeuvre the stairs on his own. While he was doing this, he felt something slide in his back. He was taken to hospital but it was two months before he was able to return to work.

The airline argued that the worker had been trained and he had not been left on his own to manoeuvre the steps. Help was at hand and he should have requested it. The airline argued that it insisted that two people should carry out the task of manoeuvring the steps. While the judge accepted that the airline had provided training and required two people to carry out the manoeuvre, he said that on this occasion the standard set was not followed in practice. He awarded the worker €40,000 damages.

Where training is provided and it should be provided, the training should be delivered by a QQI/FETAC Level 6 qualified manual handling instructor. The training programme should meet the requirements set out in the HSA's *Manual Handling Training System 2010*. Visit: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Manual%20Handling%20Revision%202.pdf The HSA's view is that in order for training to be adequate and appropriate it needs to meet the standards of the system.

Use mechanical aids

Whilst training is an obvious must in relation to manual handling, the best course of action is to follow ergonomic principles and use mechanical aids and transport accessories to eliminate or, if that is not possible, to reduce manual handling activity.

The aids can vary and would include trolleys, vacuum lifting equipment and transport accessories to eliminate or, if that is not possible, reduce manual handling activity.

Two recent High Court judgments – the judgments in the Barry and Meus cases – highlight the importance of risk assessment, relevant task-specific training, the limitations of video training, the need to train workers in a language they understand and the importance of post-training supervision. For employees, the judgment in the Barry case, in which the injured worker was held to be one-third responsible for the injuries she suffered, highlights the importance of saying no when asked to perform unsafe tasks.

For employers there are a number of messages from the judiciary in the two judgments:

- Risk assessments must be task-specific.
- Training must be adequate to enable an employee to perform his/her duties safely, with the training comparable to the task to be performed.
- DVDs and slideshows, while a useful training tool, must be relevant to the task to be performed.
- Training must be delivered in a form, language and manner that the employee (person being trained) understands.
- Training must be followed up by supervision to ensure the employee is using the correct manual handling techniques.
- There is no point in managers offering help if that puts them at risk, as that is not a solution to the problem.
- Expecting employees to ask colleagues for help if the colleagues are busy is not a defence.
- Workers should not be expected to lift from above shoulder level.

- Judges are not impressed when plaintiffs' (injured workers) engineers go out to inspect store rooms and find them cluttered. This confirms injured workers' claims that the workspace was cluttered.

MANUAL HANDLING GUIDANCE

HSA guidance

The HSA has published an extensive range of manual handling guidance materials. Visit: http://www.hsa.ie/eng/Workplace_Health/Manual_Handling/Manual_Handling_Guidance_Documents/

This section details all guidance published by the Health and Safety Authority which relates to Manual Handling and Ergonomics:

- Guidance on the Prevention and Management of Musculo-Skeletal Disorders in the Workplace.
- Reducing the Manual Handling of Roof Panels.
- Guidance on Manual Handling Risk Assessment in the Manufacturing Sector.
- An Introduction to the Management of Manual Handling in Construction.
- Guidance on the Management of Manual Handling in Healthcare.
- Guide on the Manual Handling Training System - 2010 Revision.
- Guide on Manual Handling Risk Assessment in the Hospitality Sector.
- Guide on Manual Handling Risk Assessment in the Retail Sector.
- Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007. Chapter 4 of Part 2: Manual Handling of Loads.
- Management of Manual Handling in the Workplace.
- Caring with Minimal Lifting.
- Ergonomics in the Workplace.
- Reducing the Manual Handling of Glazing Units.

Other relevant guidance includes:

- Patient Hoist.
- Guidance on the Prevention of Upper Limb Disorders in the Financial Services Sector.

Useful Templates for download:

- Example of Information to include in a policy on Prevention and Management of Musculoskeletal Disorders.
- Example of a completed Manual Handling Risk Assessment Worksheet.
- Example of a blank Manual Handling Risk Assessment Worksheet.
- Example of a Safe System of Work Plan (SSWP)
- Example of a completed Display Screen Equipment Risk Assessment Worksheet.
- Example of a blank Display Screen Equipment Risk Assessment Worksheet.
- Example of an Internal Audit form to be used to assess the effectiveness of measures in place at workplace level to prevent and manage Musculoskeletal Disorders.

DISPLAY SCREEN EQUIPMENT (DSE)

Very few people talk about working with display screen equipment (DSE). Mostly people talk about their computers, laptops or iPads. People used to talk about VDUs (visual display units) but that is a term that seems to have fallen by the wayside. The term used in the regulations is display screen equipment.

Display screen equipment is defined in the regulations as any alphanumeric or graphic display screen, regardless of the display process involved (regulation 70, General Application (Display Screen Equipment) Regulations 2007). The definition is linked to the workstation, which is defined (also in regulation 70) as including the assembly that goes with computers: screens, keyboards, diskette drives, phones, modems, printers, work chairs, desks, document holders, the work surface and the immediate working environment.

So when we talk about DSEs that is what we are talking about. Specifically, DSE does not

include drivers' cabs or control cabs for vehicles or machinery, computer systems on board a means of transport, computer systems mainly intended for public use, calculators, cash registers or traditional typewriters.

Portable display screen equipment not in prolonged use at a workstation is specifically excluded from the scope of the regulations. Given that many workers now use laptops and iPads and similar equipment for prolonged periods with docking the equipment at a workstation, this raises issues which need careful consideration. The HSA, in its webpage guidance *Frequently asked questions*, makes it clear that laptops are not covered by the regulations. However, if a laptop is connected to a keyboard then the laptop would fall within the requirements of the regulations, as in this case the keyboard would be separate from the screen. The guidance goes on to advise that people should not work at laptops for long periods. The reality is that many people use laptops and the like for long periods and the risks have to be assessed. A workstation is defined as an assembly comprising display screen equipment with a keyboard or input device or software.

It is commonly accepted that DSEs cause health problems. The HSA's *Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007 Chapter 5 of Part 2: Display Screen Equipment* mentions health conditions associated with the use of DSE: upper limb pains and discomfort (WRULDs), the effects on eyes, fatigue and stress.

The best information available on the health effects of using DSE is an HSE-GB research report *Better Display Screen Equipment (DSE) work-related ill health data*. The survey found that:

- 73% of respondents reported one or more musculoskeletal symptoms.
- The 12 month prevalence for individual symptoms ranged from 12% for elbow and forearm to 47% for neck symptoms.
- Slightly over half reported symptoms affecting the head or eyes.
- Symptoms were reported more frequently by women than men.

- Prevalence of symptoms was higher amongst those who spent more time at their computer at work and amongst those who worked for more than an hour without a break.
- There was little difference in prevalence between companies of different sizes or different industry sectors.
- The majority of those reporting symptoms took no time off work.

Prevention

As with manual handling, the principles of ergonomics apply to the use of DSE. Ergonomic principles require that posture and movement should be considered when assessing a work task. No posture or movement should be maintained for a long time. Prolonged posture and repetitive movements are tiring.

The HSA, in its publication *Ergonomics in the Workplace*, links the ergonomic principles to the DSE Regulations, which provide that account be taken of seating requirements and environmental factors such as temperature and lighting. When carrying out a risk assessment, regard should be had to the principles of prevention.

Employers are required to carry out a risk assessment of work stations. The person carrying out the risk assessment should be competent. The risk assessment should be recorded in writing. The four stages in the risk assessment process are:

- 1) Initial consultation with the employee.
- 2) Observe the employee working at the computer workstation.
- 3) Identify the issues that need to be addressed.
- 4) Draw up an implementation plan setting out how the issues will be addressed.
- 5) Review the implementation plan.

When a worker transfers to a new workstation, a new risk assessment should be carried out. The checklist in the HSA's *Safety Toolkit and Short Guide to the General Application Regulations 2007 Display Screen Equipment* offers users a very useful guide to risk assessment. Visit page 53 of the Toolkit at: [http://](http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Toolkit_Small_Business_Edition.pdf)

www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Toolkit_Small_Business_Edition.pdf

Prevention or minimisation of risk requires that employers:

- Provide good quality equipment that meets ergonomic standards.
- Design workplaces so that DSE users can sit comfortably.
- Ensure DSE users get regular breaks.

Every employee who regularly uses DSE as a significant part of normal work has a right to opt for an eye test and an eyesight test, which the employer must pay for. Such tests should be carried out regularly. If an employee is experiencing visual difficulties due to DSE work, an eyesight test must be made available.

THE ROLE OF THE SAFETY REPRESENTATIVE

Safety representatives need to check and see that their employers are implementing the Manual Handling and Display Screen Equipment Regulations. It may be somewhat easier to check if the Manual Handling Regulations are being implemented. Generally speaking, there is an awareness that training is being carried out and if new work systems or new equipment are being introduced, there is generally discussion.

It is not easy for the safety representative to know if a person is being transferred from one workstation to another.

Safety representatives should regularly check with employers if:

- A risk assessment has been carried out
- Consult with colleagues
- Monitor accident/incident trends
- Enquire what training has been provided or is planned.

Safety representatives can question the approach to ergonomic management by asking:

- Can what we are doing now be done in a more economically effective manner?
- Are we aware of the ergonomic requirements for the task?
- Are the appropriate actions being taken to manage the ergonomic risk factors?

[Occupational Health/Workplace Health Toolkit for Small Businesses.28466.shortcut.html](http://www.hsa.ie/eng/Publications_and_Forms/Publications/General_Application_Regulations/Display_Screen.pdf)

*Display Screen Equipment
Frequently Asked Questions
[http://www.hsa.ie/eng/Workplace_Health/
Manual Handling Display Screen Equipment/
FAQs/](http://www.hsa.ie/eng/Workplace_Health/Manual_Handling_Display_Screen_Equipment/FAQs/)*

DSE FURTHER INFORMATION/ RESOURCES

HSA guidance

*Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007 Chapter 5 of Part 2: Display Screen Equipment
[http://www.hsa.ie/eng/Publications and Forms/
Publications/General Application Regulations/
Display Screen.pdf](http://www.hsa.ie/eng/Publications_and_Forms/Publications/General_Application_Regulations/Display_Screen.pdf)*

*Guidance on the Prevention and Management of Musculoskeletal Disorders (MSDs) in the Workplace [http://www.hsa.ie/eng/
Publications and Forms/Publications/Manual
Handling and Musculoskeletal Disorders/
Guide on Prevention and Management of
Musculoskeletal Disorders MSDs .pdf](http://www.hsa.ie/eng/Publications_and_Forms/Publications/Manual_Handling_and_Musculoskeletal_Disorders/Guide_on_Prevention_and_Management_of_Musculoskeletal_Disorders_MSDs_.pdf)*

*Ergonomics in the Workplace [http://www.hsa.
ie/eng/Publications and Forms/Publications/
Occupational Health/Ergonomics.pdf](http://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Ergonomics.pdf)*

*Safety Toolkit and Short Guide to General Application Regulations 2007 Display Screen Equipment [http://www.hsa.ie/eng/Publications
and Forms/Publications/Retail/Gen Apps
Toolkit Small Business Edition.pdf](http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Toolkit_Small_Business_Edition.pdf)*

*Guide to the Prevention of Upper LIMB Disorders (WRULDs) in the Financial Services Sector [http://www.hsa.ie/eng/Publications and Forms/
Publications/Healthcare Sector/Guide on
Upper Limb Disorders in Finacial Services.pdf](http://www.hsa.ie/eng/Publications_and_Forms/Publications/Healthcare_Sector/Guide_on_Upper_Limb_Disorders_in_Finacial_Services.pdf)*

*Workplace Health and Safety Toolkit to Assist Small Businesses [http://www.hsa.ie/
eng/Publications and Forms/Publications/](http://www.hsa.ie/eng/Publications_and_Forms/Publications/)*

CHAPTER 26: EXPLOSIVE ATMOSPHERES

INTRODUCTION

An explosive atmosphere is an accumulation of dust, gas, mist or vapour, mixed with air, which has the potential to catch fire or explode. If there is enough of the substance, mixed with air, then all it needs is a source of ignition to cause an explosion.

Such explosions can cause loss of life or serious injury, a point illustrated by a case taken by the HSA against an employer following an explosion at a plant, the result of which was that one worker was injured and another was blown off a ladder.

The duties of employers in relation to explosive atmospheres are set out in the *General Application Regulations (Explosive Atmospheres at Places of Work) Regulations 2007 (for a summary of the regulations see chapter 2)*. The Regulations are sometimes referred to as the ATEX Regulations.

What is ATEX? It is the name commonly given to two European Directives for controlling explosive atmospheres:

- The ATEX 137 Directive, also known as the ATEX Workplace Directive (Directive 99/93/EC), which sets out the EU-wide minimum requirements for improving the health and safety of workers potentially at risk from explosive atmospheres.
- The ATEX 95 Directive, also known as the ATEX Equipment Directive (Directive 94/9/EC), sets out the minimum standards for equipment and protective systems intended for use in potentially explosive atmospheres.

IDENTIFICATION AND RISK ASSESSMENT

The basic principles of health and safety practice as required by the SHWW Act 2005 apply: identify if explosive atmospheres are a hazard at the place of work and carry out a risk assessment.

If a hazard is identified, then the Explosive Atmosphere Regulations apply. They apply to all workplaces where workers are potentially at risk from an explosive atmosphere, with the exception of: medical treatment areas; places where appliances are used to burn gaseous fuels; the manufacture, handling, use, storage and transport of explosives or chemically unstable substances, mineral extracting industries; and the use of means of transport by land, water or air, to which ADR regulations apply.

Employers are required to classify workplaces where explosive atmospheres may occur into either hazardous and non-hazardous places. Those places identified as hazardous are to be classified into zones, and specific prevention measures detailed in the regulations are to be applied.

The regulations specify six different types of zones. There are three categories for gases and three for dusts. These are:

Zone Classification for Gases

- Zone 0** That part of a hazardous area in which a flammable atmosphere is continually present or present for long periods.
 - Zone 1** That part of a hazardous area in which a flammable atmosphere is likely to occur in normal operation.
 - Zone 2** That part of a hazardous area in which a flammable atmosphere is not likely to occur in normal operation and, if it occurs, will exist for a short period.
-

Any area that is not classified as Zone 0, 1 or 2 is deemed to be non-hazardous, as flammable atmospheres are not expected to be present. Special precautions for the construction and use of electrical apparatus or for the control of non-electrical ignition sources are therefore not required, although such an area may still be part of a greater restricted area.

The zoning above does not cover areas where combustible dusts may be present but a three-zone approach (Zones 20, 21 and 22) has now also been adopted for dusts.

Zone Classification for Dusts

- Zone 20** A place in which an explosive atmosphere, in the form of a cloud of combustible dust in air, is present continuously, or for long periods or frequently for short periods.
- Zone 21** A place in which an explosive atmosphere, in the form of a cloud of combustible dust in air, is likely to occur occasionally in normal operation.
- Zone 22** A place in which an explosive atmosphere, in the form of a cloud of combustible dust in air, is not likely to occur in normal operation but, if it does occur, will persist for a short period only.
-

The supply of equipment to Zones 1, 2 or 3 or Zone 21, 22 or 23 is regulated by the *European Communities (Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres) Regulations, 1999. S.I. No. 83 of 1999.*

The HSA's *Explosive Atmospheres Checklist* is a comprehensive walk through the intricacies of identifying if a workplace is exposed to potentially

hazardous explosions and the measures to be taken if it is.

EXPLOSION RISK ASSESSMENT

Where an explosive atmosphere is, or is likely to be present, or may arise from time to time, an employer must carry out a risk assessment. Having carried out the risk assessment, the employer must prepare an explosion protection document (see *Table 25.1*). The explosion protection document must be made available to employees.

In carrying out the risk assessment, the employer must have regard to: the likelihood and persistence that an explosive atmosphere will occur; the likelihood of ignition sources, including electrostatic discharges; installations, substances used, work processes and their possible interactions; the scale of anticipated effects; places which are, or can be, connected to places where an explosive atmosphere may occur; and such additional safety information as may be needed to complete the assessment.

The employer should record details of an explosion risk assessment in a specific explosion protection document and set out in the document the preventative and protection measures taken.

TABLE 26.1: Explosion Protection Document - contents

The Explosion Protection document must set out that:

- Explosion risks have been determined and assessed
- That measures are required by the Regulations have been taken and are adequate having regard to the risks
- Places have been classified into zones
- The workplace and work equipment have been designed with due regard for safety.

The explosion protection document should include details on:

- The operation of early warning devices
- Training, instruction and supervision
- Operational procedures, maintenance, permits to work
- Co-ordination between employers
- Classified places
- Means of escape
- The properties of substances that present an explosion hazard.

PREVENTION

Employers are obliged to take measures to prevent and protect their employees against the risk of explosion. The measures taken may be technical and organisational. They must be appropriate to the nature of the operation and, in order of priority, should ensure:

- The prevention of the formation of explosive atmospheres.
- The avoidance of the ignition of explosive atmospheres.
- The mitigation of the detrimental effects.

The HSA advises that explosive atmospheres can be avoided by:

- **Elimination:** for example, replacing a flammable substance with a substance or process that eliminates the risks.
- **Substitution:** where elimination is not possible, by replacing flammable substances with a less hazardous substance, one which might have a higher flashpoint.

Among the control measures suggested are: reducing the quantity of flammable substances used to a minimum; the avoidance or minimisation of releases; the removal of dust deposits; the control of releases at source by the use of local exhaust ventilation; process control to avoid adverse conditions; and the use of gas meters.

Where explosions do occur, there should be measures in place to minimise the effects. These measures should include the prevention of spreading by using fireproof materials and devices.

Employers must:

- Provide training in relation to explosion protection.
- Ensure that work is carried out in accordance with written instructions.
- Ensure a system of work permits applies
- Ensure that work permits are issued by a competent person.

Measures taken should be reviewed regularly and whenever significant changes occur.

DANGEROUS OCCURENCES

Dangerous occurrences can occur in explosive atmospheres. However there are many other causes of dangerous occurrences, including the collapse of buildings or parts of buildings and load bearing parts of lifts, electrical short circuits, fires, and incidents involving dangerous substances.

The literature on dangerous occurrences is sparse. The term is not a subject heading in the ILO Encyclopaedia and is only referred to in reporting terms in the standard health and safety textbooks and on official websites.

A dangerous occurrence, has been described as an unplanned and undesired occurrence (incident) which has the potential to cause injury and which may or may not cause damage to property, equipment or the environment. Sometimes it is hard to distinguish between a dangerous occurrence and an injury accident until further information comes available.

A full list of reportable dangerous occurrence is downloadable by clicking on the HSA's link to reportable dangerous occurrences: http://www.hsa.ie/eng/Topics/Accident_and_Dangerous_Occurrence_Reporting/.

THE ROLE OF THE SAFETY REPRESENTATIVE

Apart from the general obligation on employers to consult with their employees, in relation to explosive atmospheres employers have certain additional specific obligations, in particular making the explosion protection document available to employees.

The safety representative can ensure that the explosion protection document is available to employees. He/she should check regularly to see that it is revised regularly, whenever there are changes to work practices or work equipment. The

safety representative should ensure the explosion protection document is up-to-date.

Where employees have concerns, the safety representative can raise these with the employer and ensure that the concerns are addressed.

FURTHER INFORMATION/RESOURCES

HSA guidance

Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007: Part 8 – Explosive Atmospheres at Work

http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Explosive_Atmospheres.pdf

Explosive Atmospheres: Safety Toolkit and Short Guide to the General Application Regulations 2007 Explosive Atmospheres Section

http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Toolkit_Explosives.pdf

ATEX Regulations – Frequently Asked Questions

http://www.hsa.ie/eng/Topics/ATEX_and_Electrical_Apparatus/Atex_Regulations_-_Frequently_Asked_Questions/

ATEX and Electrical Apparatus

http://www.hsa.ie/eng/Topics/ATEX_and_Electrical_Apparatus/

HSE-GB guidance

ATEX and explosive atmospheres

<http://www.hse.gov.uk/fireandexplosion/atex.htm>

CHAPTER 27: FALLS FROM HEIGHTS: WORK AT HEIGHT AND FALLING OBJECTS

INTRODUCTION

Work at height is defined as working in a place (except a staircase in a permanent workplace) where a person could be injured by falling from it, even if it is at or below ground level.

Working at height can be dangerous. Over the three year period 2013-2015, twenty-two people were killed in fall from height accidents. Over the same period over 1,000 fall from height accidents were reported to the Authority. Year after year fall from height accidents are in the top five in the HSA's list of reported accidents.

The statistics can record the number of deaths and the number of accidents. What they cannot record are the consequences. Many of those who fall from heights are killed. Many others suffered injuries from which they will never recover. Many of those who do recover will suffer some form of disability.

What the statistics do show is that work at height is a cross sectoral issue (see *Table 26.1*).

THE LAW

When working at height is discussed attention focuses on the construction industry. Indeed until 2007, when the regulations governing work at height were incorporated in to the General Application Regulations, the regulations were part of the Construction Regulations. Now the regulations apply across the workplace spectrum.

The full definition of working at height is defined in the Regulations as meaning: "work in any place, including a place: (a) in the course of obtaining access to or egress from any place, except a staircase in a permanent place of work; or (b) at or below ground from which, if measures required by these Regulations were not taken, an employee could fall a distance liable to cause personal injury, and any reference to carrying out work at height includes obtaining access to or egress from such place while at work.

The Regulations are summarised in Chapter 2. Here we are concerned with the practical application of the law. The Regulations apply to all work at height where there is a risk of a fall liable to cause personal injury.

However given that some of the particular risks of work at height, such as working on scaffolds or from ladders, are normally associated with the

TABLE 27.1: Fall from height accidents report to the HSA 2013-2015

	2013	2014	2014	2013-2015
Total	330	371	388	1,089
<i>By sector</i>				
Industry	50	76	66	192
Construction	48	51	71	170
Wholesale/retail	40	41	49	130
Transport/Storage	47	35	24	106
Public Administration/Defence	38	36	29	103
Healthcare/Social Work	25	24	36	85

construction industry regard must be had to the Construction Regulations 2013. The Construction Regulations are summarised in Chapter 3, but when working at height one is only concerned with certain aspects of the regulations. For example do scaffolders or others working at height hold relevant construction skills certification scheme cards (CSCS).

The law requires employers to identify the hazards. Ask is work at height a risk in this workplace and if it is assess the risks. The put in place prevention measures to eliminate or if that is not possible minimise the risk.

PREVENTION

When considering work at height in workplaces the HSA advises employers to follow the safe work at height hierarchy:

- Avoid.
- Prevent.
- Mitigate.

Avoid working at height so far as is reasonably practicable and if work at height is not necessary, do not do it.

The regulations require employers to ensure that:

- All work at height is properly planned, organised, supervised and carried out.
- The place where the work is done is safe.
- Account is taken of weather conditions.
- Equipment is inspected.
- Injury from falling objects is prevented.

The HSA's *Work at Height Checklist* provides a step by step guide to hazard identification and risk assessment. The checklist can be downloaded at: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen Apps Toolkit Work At Height.pdf

There is an association between work at height and falling objects. The HSA has published an information leaflet *Work at Height/Falling Objects*.

As can be seen from the cases below falling objects can kill. Though not in the top five categories of reported accidents, a significant number of accidents reported each year because of falling objects.

Among the causes of such accidents are:

- Poorly loaded materials.
- Materials left lying around carelessly.
- Unsafe systems of stacking.
- The use of incorrect or damaged pallets.

Falling objects is not just an issue for the construction industry. Other sectors prone to accidents caused by falling objects are wholesale/retail, transportation/storage and mining/quarrying.

ACCIDENTS

The consequences of fall from height accidents can be catastrophic, causing death or life long disabling injuries.

Apprentice scaffolder suffers brain injuries

Take the case of the 16 year old apprentice scaffolder, who fell 63 feet from a scaffold. In the fall he suffered brain damage and other injuries. He will never work again. The accident happened when he was mounting a scaffold to replace slates on a roof of a building under construction. He fell on to hoarding.

Twelve years after the accident happened, the case came before the High Court to approve an agreed settlement of €3m. Approving the settlement, the judge said it was difficult to understand how a young person, such as the injured man, could be adequately catered for in the future.

Supervisor killed

A case brought by a family of a supervisor in an industrial plant who died when he fell five metres from a large cylindrical tank, was settled for €375,000. Because the deceased was the father of young children the case came before the High Court to approve the settlement. The court heard that the supervisor, who was aged 55, was walking on the curve of the cylinder when he fell. The cause of the fall was not known. Recommending the settlement to the court counsel for the deceased's

family said he estimated that on full liability the case would be valued in the region of €420,000. However because the deceased worked in a supervisory role there was a question of contributory negligence and the settlement offered represented the least possible reduction allowing for contributory negligence. The judge approved the offer.

Falling object killed carpenter

A carpet fitter, who was fitting carpets in a recently completed apartment block, was killed when he was struck by an L-shaped angle that fell from the sixth floor of the apartment block. The carpet fitter was walking into the apartment block when the accident happened.

Following the accident the HSA prosecuted the construction company who were building the apartment block. The accident was witnessed by a worker in a building opposite the apartment block. He told the court that he saw a construction worker knocking the galvanised angle off the roof as he was trying to dislodge a timber blank. He added that the worker did not know that the angle had fallen.

An HSA inspector told the court that the building contractor should have erected a protected walkway at ground level around the site. The company had, he said, a proper health and safety plan during the early stage of the project but had failed to update it to provide protection to pedestrians who could have been put in danger by objects falling from the roof.

The company pleaded guilty to charges under the Construction Regulations 2001, of failing to: take appropriate precautions to protect persons present or in the vicinity of a construction site (Reg 15.3); have a covered passageway so that danger would be prevented (Reg 16.1.d); and as project supervisor construction stage to make adjustments to the safety and health plan for the site (Reg 6.1).

THE ROLE OF THE SAFETY REPRESENTATIVE

While working at height is a cross sectoral issue, it is a particular issue on construction sites. Depending on whether the work is on a construction site or

in a fixed workplace, the approach of the safety representative may be different.

On a construction site the safety representative will have to liaise with the main contractor, various subcontractors and perhaps with other safety representatives.

FURTHER INFORMATION/RESOURCES

HSA guidance

Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007 Part 4 Work at Height http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Work_at_Height.pdf

Safety Toolkit and Short Guide to the General Application Regulations 2007 http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Toolkit_Work_At_Height.pdf

Safe Use of Work Platforms/Trestles Information Sheet http://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Safe_Use_of_Work_Platform_Trestles_Information_Sheet.pdf

Using Ladders Safely Information Sheet http://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Using_Ladders_Safely_-_Information_Sheet.pdf

Work at Height/Falling Objects Information Sheet http://www.hsa.ie/eng/Vehicles_at_Work/Workplace_Transport_Safety/Managing_Workplace_Priority_Risks/Work_at_height.pdf

Irish Safety at Height Association

The Irish Safety at Height Association has published a number of guides to working safely at height. To download any of the guides visit www.isha.ie and click onto the title of the publication below:

Safe Work at Height - Roofs

Safe Work at Height - Projects Involving Works to an Existing Roof

Safe Work at Height - Key Considerations

Safe Work at Height - Ladders

HSE-GB guidance

Working at Height web pages

[http://www.hse.gov.uk/construction/safetytopics/
workingatheight.htm](http://www.hse.gov.uk/construction/safetytopics/workingatheight.htm)

CHAPTER 28: FIRE

INTRODUCTION

Fire is a hazard and poses a significant risk in workplaces. The extent of the risk can be assessed by an analysis of the fire safety statistics published by the Department of Environment, Community and Local Government every year.

Every year there are fires in about 1,800 workplaces. Every year people die in fires – 38 in 2010 and 28 in 2011 – but very few die in workplace fires: two people in three years. The statistics do not give details of the number of people injured in workplace fires. In the UK, figures published by the HSE-GB there show that fire and explosion account for about 2% of all major injuries reported the HSE-GB.

As can be seen from the figures in Table 27.1 below, a wide variety of workplaces suffer fires. Though the figures do not link cause to place, it is worth noting that in 2011, the last year for which figures are available, 214 fires were caused by electrical equipment, 316 by other equipment, 136 by electrical wiring installations and 17 by explosions.

TABLE 28.1: Workplace fires attended by fire brigades in 2012-2014*

	2012	2013	2014
Outdoor storage	414	203	254
Agricultural buildings	193	196	160
Factories	105	135	126
Shops/supermarkets	125	135	124
Storage buildings/ warehouses	154	149	122
Hotels/guesthouses	93	80	94
Petrol stations/garages	32	72	89
Other institutions	81	75	81
Schools	50	50	74

TABLE 28.1: Workplace fires attended by fire brigades in 2012-2014* (continued)

Hospitals	53	36	59
Public houses	63	40	51
Offices	81	56	42
Restaurants	28	36	42
Ships/aircraft	19	14	15
Dancehalls/discos/ cinemas/theatres	20	21	14
Chemical plants	11	4	4

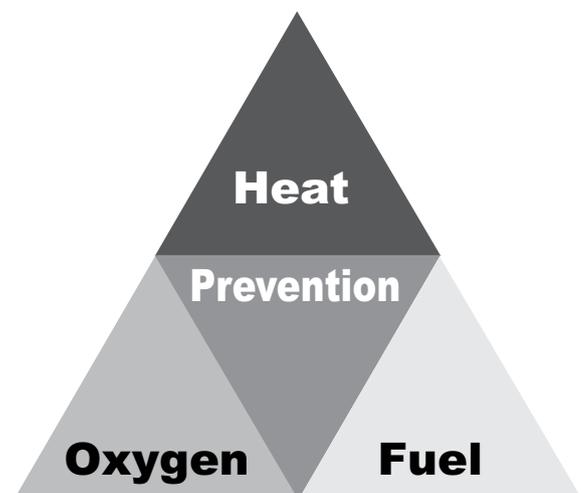
Source: Fire Services Statistics published on the Department of the Environment, Community and Local Government website

* Ranked by reference to 2015 figures

Because fire is a hazard and poses risk in workplaces, employers must assess the risk and put in place measures to prevent and, if prevention is not 100% possible, control fires.

PREVENTION

Fires need three things to start: a source of heat (sometimes described as a source of ignition), a source of fuel and oxygen (see *Fire Triangle*). Without these three elements fires will not start or spread.



Sources of ignition or heat include heaters, lighting, naked flames, electrical equipment, smokers' materials (matches, lighters, cigarettes) and anything else that can get very hot or cause sparks. Work processes can be a source of ignition or heat. In a workplace setting, soldering equipment can cause sparks. Cooking involves heat and there are very few workplaces where there is not some form of cooking, even if it is only boiling a kettle for elevenses. Boiling a kettle suggests another source of ignition. Is the wiring of the electrical kettle worn? In any building, worn electrical wiring can be a source of ignition. Dust can be another source. Human behaviour, such as using a mobile phone while filling up the tank of car or truck with fuel, can be a source of ignition.

Sources of fuel include heating materials (oil, gas), wood, paper, plastic, rubber, foam, loose packaging materials, waste rubbish and furniture.

The air around us provides the oxygen. The air about us contains 21% oxygen. However, the air about us is not the sole source of oxygen in the workplace. Oxygen gas is used in welding, flame cutting, for helping people with breathing difficulties, in decompression chambers, for food preparation and packaging, in steelworks and chemical plants.

It is impossible to envisage a workplace where the risk of fire does not exist. All employers must carry out a fire risk assessment and keep it up-to-date. A fire risk assessment can be carried out as part of an overall risk assessment or as a separate exercise. The risk assessment must be documented.

Based on the findings of the risk assessment, employers need to ensure that adequate and appropriate fire safety measures are in place to eliminate the risks and, if that is not reasonably practicable, to minimise the risk.

Quite a number of risks can be eliminated. For example, there is no need to store paper near electric heaters. Another example is to ensure heaters cannot be knocked over. Other risks can be minimised. For example, in kitchens fire blankets can be at hand to quench flames.

So what can employers do to prevent fires?
Employers can:

- Control sources of ignition (heat).
- Inspect and clean chimneys regularly.
- Ensure cooking appliances when in use are always attended.
- Ensure that smoking areas are away from flammable materials.
- Ensure that work equipment is protected against overheating.
- Have electrical equipment checked regularly by a competent person to ensure worn parts are replaced or, if required, that the equipment is removed from service.
- Ensure that all heat-producing equipment, such as boilers, heat exchangers, ovens, stoves and fryers are properly cleaned and maintained.
- Only allow hot work where there is no satisfactory alternative.
- Have a hot work permit system.
- Provide employees with information and training so that they can alert their employer to potential dangers.
- Identify all flammable materials in the workplaces.
- Where the use of flammable materials cannot be eliminated, store away from sources of ignition and provide safe storage areas.
- Train employees on the use, handling and storage of flammable materials.
- Ensure premises are thoroughly cleaned periodically and dust is not allowed to accumulate.
- Ensure passageways are kept clear of obstructions and materials that could aid ignition or the spread of fire.
- Fit the workplace with fire suppression equipment, such as sprinklers.

Employers can compartmentalise buildings. Compartmentalisation may not prevent fires occurring but it can minimise the risk of fire spreading.

DETECTION

Priority should be given to fire prevention, but even where robust fire prevention measures are in place, fires can still occur. Early detection is essential to minimise the risk of fire spreading.

Employers are required to ensure that workplaces are equipped with fire fighting equipment, fire detectors and fire alarm systems (General Application Regulations, reg 13). Detection can be a key element in preventing fires or ensuring that where a fire is detected, it is put out quickly.

A fire in the workplace should be detected quickly and a warning given so that people can escape safely. Early discovery and warning will increase the time available for escape and enable people to evacuate safely before the fire takes hold and blocks escape routes or makes escape difficult.

There are two types of detection systems: manual and automatic. When considering the best type of fire detection system, employers should read the standard *IS 3218: 2013 Fire Detection and Alarm Systems for Building – System Design, Installation, Servicing and Maintenance*. The standard sets out the requirements and recommendations for the planning, design, installation, commissioning, servicing and maintenance of fire detection and alarm systems

in premises, including those used for residential and domestic purposes.

The type of detector installation or system chosen will be influenced by the nature of the workplace. For example, in a print works, dust is a problem and while smoke detectors may be appropriate in office areas, in an area where there is paper dust a heat detector may be more appropriate than a smoke detector. Making the right choice reduces the chances of false alarm activations.

In almost all buildings, a suitable electrically operated fire warning system, with manual call points (break glass) positioned both on exit routes and adjacent to final exits should be installed. This should have sufficient sounders for the warning to be clearly heard throughout the workplace. The sound used as a fire warning should be distinct from other sounds in the workplace and, where background noise levels are high or an employee has a hearing impairment, it may also be necessary to install a visual alarm such as a distinctive flashing or rotating light.

In other buildings, where the evacuation system is based on staged or phased evacuation, or where people are unfamiliar with the fire warning arrangements, the employer might consider installing a PA voice evacuation system.

TABLE 28.2: Fire Detection and Warning Checklist

	YES	NO
Is a fire detection and alarm system installed?	<input type="checkbox"/>	<input type="checkbox"/>
Is all fire detection and alarm equipment checked regularly?	<input type="checkbox"/>	<input type="checkbox"/>
Are there instructions for relevant employees about testing equipment?	<input type="checkbox"/>	<input type="checkbox"/>
Are those who test and maintain equipment properly trained?	<input type="checkbox"/>	<input type="checkbox"/>
Can the fire detection system discover a fire quickly enough to raise an alarm for all occupants to escape to a safe place?	<input type="checkbox"/>	<input type="checkbox"/>
Can the warnings given be heard clearly and understood throughout the building?	<input type="checkbox"/>	<input type="checkbox"/>

TABLE 28.2: Fire Detection and Warning Checklist *continued*

	YES	NO
If the detection system is electronically powered, is there a back-up power supply?	<input type="checkbox"/>	<input type="checkbox"/>
Have employees been informed about the system?	<input type="checkbox"/>	<input type="checkbox"/>
Have employees been instructed on how to operate the system and action to be taken on hearing the warning?	<input type="checkbox"/>	<input type="checkbox"/>
Has the fire detection system and warning arrangements been included in your emergency plan?	<input type="checkbox"/>	<input type="checkbox"/>
Has an emergency lighting system been installed?	<input type="checkbox"/>	<input type="checkbox"/>

Source: HSA Fire web pages

If an automatic fire detection system and a manually operated electrical alarm system are installed in the same workplace, they should normally be incorporated into a single integral system. Voice evacuation systems should be similarly integrated to prevent confusion.

EVACUATION

Employers are required to prepare plans and procedures to be followed in the event of an emergency or serious and imminent danger (SHWW Act 2005, section 8.2.j). The plans and procedures should be revised as necessary. More particularly, employers are required to provide necessary measures for first-aid, fire-fighting and the evacuation of employees, arrange any necessary contacts with emergency services, designate employees to implement the plans and ensure that the number of designated employees and their training and equipment are adequate, taking account of both the size and specific hazards of the workplace (SHWW Act 2005, section 11).

In the event of an emergency, such as a fire, employers are required (SHWW Act 2005, section 11) as soon as possible to inform employees of the risks and the steps taken or to be taken to protect them – and refrain (except in exceptional cases for reasons specified in the plans) from requiring employees to carry out or resume work

while there is still a serious and imminent danger. Specifically, employers must ensure that employees who leave a place of work because of a serious and imminent danger are not penalised (SHWW Act 2005, section 11.3.b).

Fire fighting equipment

Employers must consider how the workplace will be evacuated in the event of fire. The evacuation plan should be developed in the light of the information from the risk assessment and in the context of other fire precautions that are in place.

Those other precautions may include fire fighting equipment, such as fire extinguishers, fire blankets and more advanced fire suppression systems intended to be used in the event of a fire. Such equipment must be suitable to the risks. Staff need to be trained and instructed in its proper use.

In selecting fire fighting equipment, consideration needs to be given to the work activity carried on and to the nature and size of the workplace. Such equipment should be checked regularly, maintained and serviced in accordance with manufacturers' guidance by a competent person. A record should be kept.

The escape route

Once a fire has been discovered and a warning given, the premises should be evacuated. Once workers and others at the workplace are aware of the fire, they

should be able to proceed safely along a recognisable escape route to a safe place at a pre-selected assembly point and remain there until the fire marshal has accounted for all employees and visitors.

The escape route should be clearly identified and kept clear at all times. The escape route needs to be sufficiently illuminated to allow a safe exit in the event of a power failure during an emergency evacuation, by an emergency lighting system. The assembly point should be outside the building and a safe distance from it.

LEGISLATION

While fire is an occupational health and safety hazard and risk, the *Fire Services Act 1981*, as amended by the *Licensing of Indoor Events Act 2003*, is the principal Act which deals specifically with fire safety, including fire safety at work. As the HSA states the main responsibility for fire safety rests with local authorities. The Authority has a role in monitoring employers' management of fire risk.

As we have seen, the *Building Control Regulations 1997-2013*, which are also administered and enforced by local authorities, need to be considered when planning emergency evacuation routes. The Regulations provide, among other things, for a system of Fire Safety Certificates to show that building designs comply with fire safety requirements. Developers of every new buildings, are required to obtain a Fire Safety Certificate. Developers' plans are inspected by senior fire services staff, who ensure that adequate escape facilities are present and that the building is designed in a way that prevents and limits the spread of a fire. If they are satisfied, a certificate is then issued by the building control authority.

Health and safety legislation related to fire

There are two aspects to fire-related health and safety legislation. There are the general provisions of the SHWW Act 2005, which require employers to ensure, in so far as reasonably practicable, the safety, health and welfare of their employees and to plan for emergencies (section 8) and to carry out risk assessments (section 19). The provisions of

the Act requiring employers to provide information (section 9) and training and supervision (section 10) are relevant in relation to fire safety.

Then there are specific provisions in the SHWW Act 2005, the General Application Regulations 2007 and the Construction Regulations 2006.

SHWW Act 2005: section 11

Requires employers to prepare and revise adequate emergency plans and to provide measures for fire fighting and the evacuation of the workplace. Consideration must also be given to the safety of persons other than employees (Section 12).

General Application Regulations 2007: regulation 13

Employers are required to ensure that workplaces are equipped with appropriate fire-fighting equipment, fire detectors and alarm systems which take account of the dimensions and use of the building, equipment, the physical and chemical characteristics of substances present and the maximum number of persons likely to be present. Fire detection and fighting equipment should be inspected and maintained to ensure it is in working order and serviced by a competent person.

General Application Regulations 2007: regulation 12

Employers are required to ensure that emergency routes and exits are kept clear and are free from obstruction, so that in the event of danger it is possible for employees to evacuate as quickly and safely as possible.

General Application Regulations 2007: schedule 9

Safety signs for escape routes and fire-fighting equipment are illustrated in schedule 9, parts D and E of the General Application Regulations.



*Construction Regulations 2013:
regulation 45*

Contractors are required to ensure that workplaces are equipped with appropriate fire-fighting equipment, fire detectors and alarm systems which take account of the dimensions and use of the building, equipment, the physical and chemical characteristics of substances present and the maximum number of persons likely to be present.

**THE ROLE OF THE SAFETY
REPRESENTATIVE**

Safety representatives should be provided with a copy of their employer's safety statement, which should include provisions on fire and emergency. Safety representatives should ask their employer for a copy of any relevant back-up documentation, such as copies of IS technical standards, that is not included in the safety statement.

Safety representatives should ensure that employers keep fire prevention and emergency measures up-to-date. Safety representatives can enquire about fire-fighting equipment to ensure employers maintain and service equipment. While it is the employer's duty to ensure the safety of employees, monitoring and questioning by safety representatives can help to ensure standards are maintained. Safety representatives can enquire as to the competency of service and other personnel who are involved in the installation and maintenance of fire-fighting equipment and emergency evacuations.

Safety representatives should ensure that the risk assessment includes regular fire drills, both announced and unannounced and ensure that there is an emergency lighting system installed and maintained to the required standard.

Perhaps the most difficult issue for safety representatives in relation to fire and emergencies is the provision that requires an employer to ensure that an employee who leaves a place of work because of a serious or imminent danger is not penalised. When the SHWW Act 2005 was being enacted, this provision was the subject

of considerable debate between employers representative organisations and trade unions.

FURTHER INFORMATION

The HSA fire guidance can be accessed at the following link http://www.hsa.ie/eng/Topics/Fire/Emergency_Escape_and_Fire_Fighting/. From these pages there are links to other informative websites, such as the Institution of Fire Engineers and the Fire Investigators Association.

Information on standards is available from the NSAI: www.nsai.ie

CHAPTER 29: LONE WORKING

LONE WORKING OVERVIEW

The HSA defines lone workers as those who work by themselves without close or direct supervision. Anybody who works alone, including contractors, self-employed people and employees, is classified as a lone worker.

There are no figures for the number of people who could be classified as lone workers, but it is possible to draw up a long list of occupations where lone working is the norm. Examples include bus drivers, public health/community nurses and postal delivery workers. Historically, farm workers would not have been regarded as lone workers but with the reduction in agricultural employment and changes in farming work practices, most farm work is now carried out alone.

There are also many occupations where, while lone working would not be the norm, the way work is organised means that workers are working alone. Examples include factory workers working alone in an isolated area in a factory, journalists on assignments and on occasion cashiers in petrol stations. For a non-exhaustive list of examples, (see *Table 28.1*).

As pointed out in an article in *Health & Safety Review* in 2001, historically lone working was a low profile health and safety issue. At the time the standard health and safety textbooks and even the International Labour Organisation's *Encyclopaedia of Occupational Safety and Health* did not consider the issue of lone working. The event that probably brought the issue to the public's attention was the Suzy Lamplugh case. In the late 1980s Ms Lamplugh, an estate agent, went missing when showing a prospective purchaser a house. Following Ms Lamplugh's disappearance her mother set up an organisation, the Suzy Lamplugh Trust, which has done a considerable amount of work raising awareness of the dangers of working alone.

TABLE 29.1: Non-exhaustive list of occupations involving lone working

Bus drivers
Community health workers
Electrical and telephonic engineers working in isolated locations
Estate agents
Farm workers
Forestry workers
Home workers
Insurance agents
Meter readers
Park rangers
Pest controllers
Public health/community nurse
Rent collectors
Sales representatives
Security personnel
Workers in confined spaces

Since then, lone working has become a recognised hazard, with employers being required to carry out risk assessments and put in place control measures. Both the HSA and the Health & Safety Executive in the UK have identified lone working as a possible hazard.

The literature on the issue identifies two principal risks facing lone workers as:

- 1) Attack by another person: intruders or members of the public.
- 2) Falling ill or suffering an accident.

LAW ON LONE WORKING

There is no specific reference to lone working in legislation. Lone working is not prohibited by legislation. However, there is an indirect reference. As the HSA points out in its guidance on lone work (http://www.hsa.ie/eng/Topics/Hazards/Lone_Workers/), employers are required by section 19 of the SHWW Act 2005 to carry out assessments of risk to the safety, health and

welfare of employees, including the welfare of any single employee who may be exposed to unusual or other risks.

In relation to specific tasks, such as diving operations, vehicles carrying explosives and

fumigation works, there are restrictions on lone working.

A review of the case law on work-related accidents highlights some of the risks facing lone workers.

TABLE 29.2: Lone work case law

Painter in factory

Though about safe systems of work, the case of *McSweeney v J S McCarthy* offers a typical example of how a worker can become a lone worker during the course of work. In that case McSweeney, a painter, was working on his own away from his foreman. When he could not find the foreman and he needed to move his ladder to continue painting, he moved it on his own and propped it up, unsecured, at the place where he needed it. As he climbed and tried to reach some ducting, the ladder slipped and he fell to the ground. He sustained serious injuries. The Supreme Court held that while McSweeney was 40% responsible for the accident, his employer was 60% responsible. The case was referred back to the High Court to assess damages. (*McSweeney v J S McCarthy*)

Security guard patrolling car park

Following a series of incidents of violence against staff at Cork University Hospital, an HSA investigation found that there were major shortcomings in the security provision in the hospital. The investigation revealed that the hospital has a security staff of 12, of whom only two were on duty at night. One of the security officers spent most of his time patrolling the car park in order to prevent vandalism, while the other frequently covered for the switchboard operator. Neither was given any formal training as to their duties.

As no personal alarm system was in use, if there was an emergency the security officers had to be contacted by telephone. Access to the hospital was unrestricted and uncontrolled and while there were some panic buttons, there were none in the high risk accident and emergency area. Arising from the investigation, the HSA prosecuted the Southern Health Board (the operators of the hospital) for failing to provide a safe place of work for its staff (s6 SHWW Act 1989) and under s12 of the SHWW Act 1989 for not comprehensively dealing with the issue of staff safety in the safety statement. The Board pleaded guilty and the judge imposed the Probation Act. This was, the HSA stated, the first time a prosecution had been brought on the issue of violence at work. (*HSA v Southern Health Board*)

Pest controller kicked by horse

A pest controller, who was kicked by a horse as he was laying poison in a field, was awarded damages of €8,000 by the Dublin Circuit Court. The court heard that the pest controller had been instructed by his supervisor to lay poison in a field, where three horses were grazing. As he was passing a horse, he felt a smack on his shoulder and then on the back of his head. He looked around and saw a horse a couple of feet away nodding at him. It kicked out again and hit him on the back of the knee. A third kick grazed his head. (*Doyle v Northern Area Health Board*)

Petrol station attendant beaten up

A court heard that a petrol station attendant, who was working alone in a petrol station, was beaten up during a robbery. The attendant told the court there was a knock on the door of the kiosk. He saw a youth outside. He opened the door and the youth asked for a bag of coal. He supplied the bag of

TABLE 29.2: Lone work case law continued

coal and the youth left. However, the youth returned almost immediately and said there was a rip in the plastic coal bag. When the petrol pump attendant turned his back to get a replacement bag he felt an “unmerciful crack” on his head. The youth then struck him a second time, grabbed money and ran off. The petrol station attendant told the court that he chased the youth across the forecourt but he disappeared into a housing estate. This was, the court heard, the third time he had been attacked since he started working in the station. The first attack took place in daylight, when two men in balaclavas came into the shop and put a knife to his throat and ordered him to open the till. The second attack occurred one evening as he was locking up the premises at 10pm. Two men ran at him, but he jumped into his car. As he drove off, one of the men leaped on the bonnet and the other threw an iron bar, which hit the car. After both incidents, he spoke to the owner of the petrol station. On the first occasion, the owner told him to get a big stick or a hurley and beat them with it if they come around again. The owner repeated this advice after the second incident. The attendant gave evidence that there were no CCTV cameras on the premises and that he had, at night, to open the door to sell coal or turf or complete credit card transactions. Delivering judgment, Judge Smithwick said that while the petrol station owner could not ensure the absolute safety of his employees, he had a duty of care of his staff. Awarding the injured attendant €12,650 compensation, he said the employer should have installed CCTV. It would, he said, be a deterrent to assailants. It was not, he added, up to employees to offer solutions. (*Barry v Thomas Farrell & Sons Garages*)

RISKS AND CONTROLS

Lone working is a recognised health and safety hazard, which means when employers are drawing up safety statements, they must consider if it is a hazard that affects their workplace. If it is considered a hazard at a particular workplace, the employer must then assess the risk and put in place control measures.

While, as has been noted, there is no information on the numbers of workers who work alone, the non-exhaustive list of occupations suggests, and the cases in Table 28.2 of Case Law confirm, there will be very few workplaces where working alone is not a hazard. The HSA, in its webpage guidance (<http://www.hsa.ie/eng/Topics/Hazards/LoneWorkers/>), discusses risk and control measures.

The HSA advises that where a risk assessment shows there is a risk to lone workers, measures must be taken to eliminate the risk if possible and if that is not possible, to minimise it.

When establishing safe working arrangements for lone workers, employers need to know the

law and standards that may apply to the specific activity. Employers need to consider if the activity can be safely undertaken by a lone worker. Among the questions the employer should ask and answer are:

- Does the workplace present a special risk to a lone worker?
- Is there a safe way in and out (access and egress)?
- Can plant and equipment in the work area be handled safely by a lone worker?
- Is there a risk of violence?
- Are women and young workers especially at risk if working alone?
- Is the lone worker medically fit?
- What training is required?
- How will the person be supervised?
- What provisions are in place in the case of an emergency?
- How do we monitor and communicate with the lone worker?

Having considered these questions and decided it is safe to proceed with the work, control measures

should be put in place. Such control measures include:

- Communication systems, be they by mobile phone or two-way radio.
- Periodic checks.
- Require lone workers to report in regularly.
- The use of automatic warning devices, such as panic alarms, no movement alarms, distress message systems.
- Instruction and training in proper procedures.
- Code words for potentially violent situations.
- PPE.

A particular issue employers need to consider having in place a system for the inspection of workplaces where the lone worker is going to work. Employers should be aware of a High Court judgment in which the court held that an employer, who had not inspected the premises where a salesman was working, was 30% responsible for an accident he suffered. The court heard that the salesman suffered a fall while checking stock in the supermarket. As a result of the fall he suffered back injuries, which aggravated a pre-existing degenerative condition. He was awarded damages of totalling €535,000.

Without getting into the details of the case, the judge's remarks should be noted. The High Court judge hearing the case held that both the man's employer and the store knew about the working conditions. In relation to the employer, he held that the employer supplied over 1,000 outlets with their product and that while it might be difficult, the duty of care the employers owed their employees "obliged them to ensure that the facilities afforded to their employees by their customers to enable their employees to carry out their duties did not threaten the safety of their employees". They were aware of the risks and did nothing about them. He apportioned liability between the store and the employer on the basis that the employer was 30% responsible for the accident.

In its guide for lone workers in the healthcare sector, *Guidance on Lone Working in the Healthcare Sector*, the HSA has published two very useful appendices giving examples of hazards and related controls.

HOME WORKERS

Home workers are often lone workers. It is important to remember that, as with all workers, the employer is responsible for the health, safety and welfare of homeworkers. Homeworking refers to working arrangements whereby workers use their home as their main or subsidiary place of work, or as a base from which visits are made or other work undertaken. Homeworkers are those doing paid work at or from home for an employer. Sometimes homeworking is referred to as teleworking.

Rather interestingly, while there are no figures for lone workers, the International Labour Organisation has estimated that there are 32,000 homeworkers in Ireland.

Where employers arrange for employees to work from home, the employers should inspect the home: those areas of the home that will be used for homeworking and for access and egress.

The HSE-GB is quite clear about what constitutes homeworking. According to the HSE-GB's guidance booklet, *Homeworking Guidance for Employers and Employees on Health and Safety*, homeworkers are those people employed to work at home for an employer. However, that definition may be somewhat one-dimensional.

Another definition distinguishes between home based workers – workers whose home is used as their main office base, but who may only spend part of their time working at home – and teleworkers, who make use of very sophisticated technological equipment, who can be connected to a call management system as used by a call centre and who do the majority of their work using IT networks.

This definition covers the sales representative, the maintenance technician or others who may operate most of the time from home and attend the office only for reporting and briefing purposes. It also broadens the definition, so that it becomes clear that there is a distinction between homeworkers who are teleworkers and homeworkers whose jobs might be more traditional, though aided by telecommunications, such as journalists. When an organisation has dealt with the myriad of

issues and decided that homeworking is a feasible option, the health and safety implications must be considered before making the final decision. There are two useful sources of guidance on the health and safety issues: the HSE-GB's guidance booklet and also ILO's *Encyclopaedia of Occupational Health and Safety*. Scattered throughout the Encyclopaedia are many useful pointers to the issues surrounding homeworking.

The starting point when considering the health and safety implications of homeworking is to carry out a risk assessment to: identify the hazards; then assess the risk; then decide on the control measures.

The first stage in the risk assessment will be an inspection of the employee's house/flat. Among the issues to be considered when a risk assessment is being carried out are:

- work space dimension
- work station and equipment - desk, table, chair, VDU/DSE, trailing wires
- lighting
- electrical fittings
- are harmful substances used?
- are additional fire precautions required?
- provision of first aid kit
- access/egress - work-related visitors, post delivery
- manual handling - will heavy loads be delivered, need for trolleys and steps?
- is the employee psychologically suited to work from home?
- pregnancy.

One point of advice in the HSE-GB guidelines that should be considered cautiously is that employers are only liable for injury or damage caused by substances and materials that they supply. However, if the homeworker has to procure supplies in order to do the job – say printing ink – then the employer could also be liable if the worker bought an incorrect substance and the employer had not given advice on suitable products and how to use them. In such

a situation, has the employee been trained to appreciate the importance of MSDS (Material Safety Data Sheets)?

The other aspect that is very important is checking equipment. This should be done professionally. For example, the checking of electrical installations should always be done by a qualified electrician.

THE ROLE OF SAFETY REPRESENTATIVES

Safety representatives need to be informed about the hazards and risks of lone working and homeworking. Safety representative training courses should cover the issues. Safety representatives need to be educated to discuss the issues with employers.

In organisations where there are lone workers, have the workers and their safety representatives been consulted about the type of work to be undertaken and the hazards and risks involved? Safety representatives can make the concerns of lone workers and homeworkers known to the employer and initiate discussions on how to deal with such concerns.

RESOURCES/FURTHER INFORMATION

The principal source of guidance for safety representatives is the HSA's webpage http://www.hsa.ie/eng/Topics/Hazards/Lone_Workers/.

Also, the Authority has published a guide for the healthcare sector, *Guidance on Lone Working in the Healthcare Sector*, which can be accessed at: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Healthcare_Sector/Guidance_on_Lone_Working_in_the_Healthcare_Sector.pdf

The HSE-GB's *Working Alone: health and safety guidance on the risks of lone working* is another useful reference guide. Visit: <http://www.hse.gov.uk/pubns/indg73.htm>.

Another source of information is the Suzy Lamplugh Trust: <https://www.suzylamplugh.org/>

CHAPTER 30: SLIPS, TRIPS AND FALLS

INTRODUCTION

Slips, trips and falls on the same level are the second most common cause of workplace accidents and the most common cause of employer liability claims.

In 2015 more than 1,700 slip, trip, fall on the same level accidents were reported to the HSA. The Authority's analysis of the figures discloses that a quarter of those accidents led to the injured person being off work for more than one month.

Some years ago the Injuries Board (formerly the Personal Injuries Assessment Board) published an analysis of claims, which revealed that 44% of all employer liability claims were for injuries suffered in slip, trip and fall accidents.

A survey by Retail Ireland found that nearly 50% of all claims against retailers were as a result of slip, trip and fall accidents. Many of the claims against retailers would be public liability claims (customers slipping in shops), rather than employer liability claims.

An analysis by the HSA of workplaces inspected shows 22% of all workplaces inspected across the range of industrial sectors had not carried out a slip, trip and fall risk assessment. The analysis shows that a slip, trip and fall risk assessment had not been carried out by:

- 33% of workplaces inspected in the agricultural sector
- 30% of workplaces in the retail sector
- 26% of workplaces in the accommodation sector
- 18% in both the healthcare and transport sectors
- 17% in the manufacturing and education sectors
- 14% in construction and water supply/sewerage sectors.

An earlier analysis of accidents reported to the HSA in the years 2004/2005 identified the occupations where workers were most vulnerable to slip, trip and fall accidents. The occupations were:

- Construction and maintenance labourers 15.5%
- Extraction and building trades workers 8.7%
- Personal protective services 8.1%

TABLE 30.1: Slip/trip/fall accidents (fall on same level) reported to the HSA 2013-2015

	2013	2014	2014	2013-2015
Total	1,187	1,411	1,777	4,375
<i>By sector</i>				
Health/social work	279	271	255	805
Wholesale/retail	169	309	271	749
Industry	144	183	209	536
Public administration/defence	125	157	150	432
Transport/storage	131	140	135	406
Construction	73	74	112	259

- Office clerks 7.2%
- Sales and services elementary occupations 7.1%
- Manufacturing labourers 5.7%
- Drivers and mobile plant operators 5.7%
- Machine operators and assemblers 5.2%
- Metal, machinery and related trades 4.5%
- Engineering/science professions 4.5%
- Nursing and midwifery 3.4%

A review of court cases shows that slip, trip and fall accidents can result in large court awards (see *Table of Case Law below*)

CAUSES OF SLIP, TRIP, FALL ACCIDENTS

A review of the guidance from both the HSA and the HSE-GB identifies a number of causes of slip, trip and fall accidents. The HSE-GB has developed a 'Slip Potential Model'.

The model identifies six factors in slip accidents: people, cleaning, flooring, footwear, contamination and environment. Among the factors identified by the HSA are manual handling, footpaths, corridors, halls, floor cleaning, vehicles, stairs, steps and wet surfaces.

The HSA, points out that while slips may be more numerous than trips and falls, it is very important to deal with trip risks. The point is made that ascending and descending a stairs can be hazardous and that descending a stairs is a more likely cause of accidents, the consequences of which can be more serious injury. Another risk identified is exiting vehicles. The HSE-GB has found that the majority of trip accidents are caused by obstructions in walkways. The rest are caused by uneven surfaces.

An analysis of accidents in the retail sector found that half of slip, trip, fall accidents occurred when cleaning spills. In one-third of floor cleaning accidents, a warning sign was in place.

PREVENTION OF SLIP, TRIP, FALL ACCIDENTS

Clearly slips, trips and falls are a potential hazard in all workplaces, as the figures quoted above conclusively demonstrate. Having identified the hazard, the key to prevention is risk assessment, but as has been seen above, no risk assessment has been carried out in over one-fifth of workplaces.

Taking it that a slip or a trip can cause a fall, a risk assessment model can be built around the elements of the HSE-GB's 'Slip Potential Model' and the causes of trip accidents identified by both the HSA and the HSE-GB.

The HSA, in a short four page leaflet guide, *Get a grip – slips, trips & falls*, sets out, built around the acronym 'SHOES', five key preventative action points:

- Spills
- High risk areas
- Over-used signs
- Environmental cleanliness
- Shoes.

To download the leaflet, visit: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Get_a_Grip.pdf

The starting point for the risk assessment is to consider the risks in the workplace that could result in a slip or trip accident and to decide on what control measures can be put in place to eliminate the possibility of such accidents or, if that is not possible, to minimise the possibility. When carrying out a risk assessment, the employer should consult the safety representative and his employees.

The risks will depend on the workplace, but any risk assessment should cover the following elements:

- Flooring
- Stairs
- Footwear
- Obstructions on floors and in walkway

TABLE 30.2: Slip, trip, fall checklist

	YES	NO
Outdoor areas		
Can anything be found in the paths, steps and fire escapes that could cause slips?	<input type="checkbox"/>	<input type="checkbox"/>
Are paths and steps prone to ice buildup during winter?	<input type="checkbox"/>	<input type="checkbox"/>
Are there changes of level on paths?	<input type="checkbox"/>	<input type="checkbox"/>
Are there holes, potholes, uneven paving/surfaces on footpaths?	<input type="checkbox"/>	<input type="checkbox"/>
Doorways and entrances		
Are floors wet at the entrance?	<input type="checkbox"/>	<input type="checkbox"/>
Is there water on the floor from rain or wet footwear?	<input type="checkbox"/>	<input type="checkbox"/>
Is the water making the floor slippery?	<input type="checkbox"/>	<input type="checkbox"/>
Are there trip hazards in the entrance area?	<input type="checkbox"/>	<input type="checkbox"/>
Corridors and offices		
Are there changes in floor levels, for example slopes or small steps?	<input type="checkbox"/>	<input type="checkbox"/>
In areas where contamination can be found, are floors smooth?	<input type="checkbox"/>	<input type="checkbox"/>
Are tiles loose or missing?		
Is the anti-slip floor coating or grip tape worn smooth or damaged?	<input type="checkbox"/>	<input type="checkbox"/>
If there are carpets, are they worn and/or torn?	<input type="checkbox"/>	<input type="checkbox"/>
Are there trip hazards around workstations, in corridors and walkways?	<input type="checkbox"/>	<input type="checkbox"/>
Is there good lighting?	<input type="checkbox"/>	<input type="checkbox"/>
Stairs and ramps		
Is step nosing hard to see, damaged or slippery?	<input type="checkbox"/>	<input type="checkbox"/>
Are there handrails on stairs?	<input type="checkbox"/>	<input type="checkbox"/>
Are handrails easy to reach?	<input type="checkbox"/>	<input type="checkbox"/>
Are potentially hazardous activities, such as the use of handheld devices, allowed on stairs?	<input type="checkbox"/>	<input type="checkbox"/>
Work areas		
As part of the work process, does the floor become contaminated?	<input type="checkbox"/>	<input type="checkbox"/>
Are there spillages?	<input type="checkbox"/>	<input type="checkbox"/>
Does condensation form and drip onto the floor?	<input type="checkbox"/>	<input type="checkbox"/>
Is drainage poor?	<input type="checkbox"/>	<input type="checkbox"/>
Are walkways obstructed?	<input type="checkbox"/>	<input type="checkbox"/>
Toilets/shower rooms		
Does water get onto the floor?	<input type="checkbox"/>	<input type="checkbox"/>
If water gets on the floor, is the floor slippery?	<input type="checkbox"/>	<input type="checkbox"/>
Cleaning		
Is there a spill clean policy?	<input type="checkbox"/>	<input type="checkbox"/>
Are warning signs put out when floors are being cleaned?	<input type="checkbox"/>	<input type="checkbox"/>
Are warning signs removed when floor is dry?	<input type="checkbox"/>	<input type="checkbox"/>
Can cleaning equipment leads be easily seen and are they cordoned off?	<input type="checkbox"/>	<input type="checkbox"/>
Are floors wet cleaned at times when there is little or no pedestrian traffic?	<input type="checkbox"/>	<input type="checkbox"/>
As far as possible is access to wet floors restricted by, for example, the use of a cordon system?	<input type="checkbox"/>	<input type="checkbox"/>

- Cleaning
- Contamination.

Among the measures employers can take to prevent slip, trip and fall accidents are:

- Stopping floors becoming contaminated.
- Using the correct cleaning methods.
- Consideration of the flooring and work environment: is the floor surface suitable for the work being performed and is lighting good?
- Wearing the right footwear: is the footwear worn suitable with adequate slip resistance for the floor surface in the work area and the type of work?
- Considering people and organisational factors.

THE LAW: LEGISLATION AND CASE LAW

Employers are required by the SHWW Act 2005 (section 8 and 19) to identify slip, trip and fall hazards, to carry out a risk assessment and put in place control measures. Apart from those duties there are a number of specific provisions in the General Application Regulations 2007 and the

Construction Regulations 2013 that are relevant when considering slip, trip and fall hazards.

General Application Regulations 2007

Lighting: regulation 8

Employers are required to ensure, as far as possible, that workplaces receive sufficient natural lighting and are equipped with artificial lighting adequate to protect the safety and health of employees. Emergency lighting should be provided where employees are especially exposed to risks if artificial light fails.

Floors: regulation 9

Employers are required to ensure that there are no dangerous bumps, holes or slopes on floors and that floors are, in so far as reasonably practicable, not slippery.

Escalators and travelators: regulation 15

Escalators and travelators should function safely, be equipped with safety devices and be fitted with emergency shutdown devices.

TABLE 30.3: Slip, trip and fall employer liability cases

Cables on office floor

A civil servant, who tripped over wire cables in the office where he worked, was awarded damages of €64,000 by the High Court. The court heard that the accident occurred because of what was described as the chaotic arrangement of VDU wires and cables in the office. As a result of the fall, the civil servant suffered neck, back, arm and ankle injuries. Delivering judgment, the judge said the chaotic conditions had continued for six months and the civil servant had complained to his superiors on three occasions. The judge awarded the civil servant €80,000 but reduced the award by 20% because he held the man was guilty of contributory negligence, in that while he had reported the chaotic conditions to his superiors, he had not contacted his employer's network unit. (*Lynch v Department of Social, Family and Community Affairs: High Court, 2003*)

Nosing fitting on steps

Holding that the metal nosing on the steps of an hotel caused a woman to fall, a Circuit Court judge awarded the woman, who suffered bruising and discomfort, €5,000. The judge said she had heard expert evidence that the anti-slip nosing should have been rebated flush with the steps when initially fitted. This had not been done and that was why the accident happened. The judge rejected the woman's claim that she had suffered more serious injuries and limited her costs to the District Court scale. (*Redmond v Jurys Green Isle Hotel: Dublin Circuit Court, 2004*)

TABLE 30.3: Slip, trip and fall employer liability cases *continued*

Wet floor

A court heard that there had been a deluge of rain and water had leaked through a roof onto the top floor of a hospital. A midwife slipped on the wet floor. As a result of the fall, she suffered a wrist injury and her right knee and hip were also sore. She was awarded damages of €48,820. (*Rose v HSE South East Area: High Court, 2013*)

Icy steps

A physiotherapist, who sustained serious muscle injuries to her lower back, was awarded damages of €1m. The court heard that the physiotherapist, who worked in Baggot Street Community Hospital in Dublin, noticed an elderly lady on the steps and went to warn her of the dangerous conditions because of snow and ice. As she did so she slipped, fell and hit off a number of steps. She suffered severe injuries and will, the court heard, require lifetime support for pain and will be unable to work as a physiotherapist.

The court also heard that before the accident, a security guard who was concerned about the state of the steps went to a shop to buy rock salt, but it was sold out. Another security guard tried to clear the ice and snow with boiling water. The security guards placed warning signs in the area. Later in the day, the steps were gritted.

Delivering judgment, the judge said legislation places an onus on employers to ensure all exits and entrances should be kept clear. The employer had, the judge said, failed in its duty of care. (*Ikram v HSE: High Court, 2014*)

Loading bays and ramps: regulation 16

Loading ramps should be, in so far as reasonably practicable, safe enough to prevent employees from falling.

General welfare requirements: regulation 18

Floors should be cleaned by a suitable method as frequently as necessary to maintain an appropriate level of safety and health.

Outdoor places of work: regulation 23

Employers are required, in so far as possible, to arrange outdoor workstations so that employees cannot fall.

Construction Regulations 2013

Lighting of work areas

Contractors are required to ensure that workplaces are adequately and suitably lit, with

particular reference to falls where there are dangerous openings at work.

Floors: regulation 46

Contractors are required to ensure, in the case of indoor work stations, that floors have no dangerous bumps, holes or slopes and are not slippery.

Escalators and travelators: regulation 50

Escalators and travelators should function safely, be equipped with safety devices and be fitted with emergency shutdown devices.

Case law

Slip, trip and fall accidents frequently give rise to employer liability claims. The cases in the table are illustrative of the types of claims, the safety issues and the levels of compensation awarded (see *Table 29.2*).

THE ROLE OF THE SAFETY REPRESENTATIVE

Safety representatives should enquire if their employer's safety statement addresses the issue of slips, trips and falls. If it does, they should review the safety statement and check it against the reality on the ground. If it does not, they should request the employer to carry out a slips, trips and falls risk assessment and put in place control measures.

Safety representatives should monitor the workplace and bring to the employer's attention any slip or trip hazards. They should follow through to make sure the employer eliminates the hazards, if that is possible – or if not, that the risks are controlled.

FURTHER INFORMATION/RESOURCES

The HSA's slips, trips, falls webpages, which are the gateway to a range of guidance documents and advice, can be accessed at: http://www.hsa.ie/eng/Topics/Slips_Trips_Falls/

The HSE-GB webpages can be accessed at: <http://www.hse.gov.uk/SLIPS/index.htm>

CHAPTER 31: STRESS (WORK-RELATED)

INTRODUCTION

A quarter of European workers report being stressed at work all or some of the time. Over half of all work-related illnesses reported by occupational physicians who are members of the Irish THOR (The Health and Safety Occupational Network) have been diagnosed as cases of mental ill-health. A survey of human resource managers carried out by Laya Healthcare, the health insurance provider, identified stress as the top workplace health issue in Ireland.

Stress is an occupational issue. It has been identified as such since the *Walker v Northumberland Council* case in 1994 when the English High Court found that Mr Walker, who claimed he suffered stress because of his employer's negligence, was entitled to recover damages for the psychological injury suffered. Since then stress cases have been a fruitful field for litigation and an extensive body of case law has been built up.

The point is often made that stress is part of life, but what we are concerned with here is work-related stress, which prompts the question: what is work-related stress? In the HSA's *Work-Related Stress: A Guide for Employers*, work-related stress is defined as "stress caused or made worse by work".

The concluding words of the guide set a worthwhile rationale for seeking to prevent work-related stress. "While addressing work-related stress can be challenging, it can also be a vehicle for positive change, for better and more productive relationships at work and for increased creativity and productivity".

DEFINING WORK-RELATED STRESS

Stress is not defined in legislation, so we have to look to authoritative guidance and case law for a definition, or rather definitions. As noted above, the

HSA defines work-related stress as "stress caused or made worse by work".

The closest one can get to a legal definition of stress is the definition in the *Framework Agreement on Work-Related Stress*. In 2004 European employer and trade union representative organisations signed this agreement to tackle workplace stress, in which stress is defined as "a state, which accompanied by physical, psychological or social complaints or dysfunctions and which results from individuals feeling unable to bridge a gap with requirements or expectations placed on them". Importantly, the agreement states that stress is not of itself a disease, but prolonged exposure to stress may cause ill-health.

The European Agency for Safety and Health at Work (EU-OSHA) defines stress in terms of the interactions between employees and exposures to hazards in their workplaces. Stress can be said to be experienced when the demands from the work environment exceed the employee's ability to cope or control them.

In legal terms, as will be seen in the case law review below, while the courts recognise stress, for an employee who suffers stress to recover damages, the employee has to establish that he/she suffered a medically identifiable illness.

THE CAUSES OF WORK-RELATED STRESS

The causes of work-related or work-aggravated stress are many and varied. In a recent report published by EU-OSHA and The European Foundation for the Improvement of Working and Living Conditions, *Psychosocial risks in Europe: Prevalence and strategies for prevention*, the most common causes of stress were identified as the types of tasks workers were asked to perform and work intensity. Other factors identified include job insecurity, long working hours and irregular schedules.

Even though the European Framework Agreement on Work-related Stress specifically states that violence and harassment did not come within the

scope of the Agreement, violence and harassment were identified as causes of workplace stress in some countries.

A survey by the Irish Bank Officials Association (IBOA) published in 2014 identified increased workloads, demands to meet unrealistic targets and abuse by customers as among the factors causing workplace stress.

The HSA Guide states that there are different underlying causes and triggers of work-related stress for everyone. However, according to the Guide, some workplace factors are more likely to lead to stress than others. These include badly designed shift work, poor communications and poor or even non-existent systems for dealing with bullying and harassment. In a guide for employees, *Work-Related Stress Information Sheet for Employees*, the HSA makes the point that it is important to accept that most causes of stress are in our personal lives, but also that there are aspects of work that are more likely to lead to stress than others.

The causes of occupational stress identified by occupational physicians reporting to the THOR scheme record that the most frequently cited factor associated with such illnesses was factors intrinsic to the job. These factors included workload, travel, and organisational factors. Next on the list of precipitating events was interpersonal relationships at 39%, which included 61 cases of bullying. Other precipitating events were traumatic events at 24%, which included assaults at work, verbal abuse, witnessing suicides on railway tracks and changes at work at 4%.

THE EFFECTS OF WORK-RELATED STRESS

The effects on the individual

Stress is a natural reaction to excessive demands or pressure, the effects of which the HSA guide states can be categorised as follows:

- Mental: how the mind works.
- Physical: how the body works.
- Behavioural: the things we do.

- Cognitive: the way we think and concentrate.

The effects differ from person to person.

If pressure is prolonged, too frequent or out of control, physical ill-health problems may develop, such as: appetite loss; comfort eating; weight gain or loss; indigestion or heartburn; constipation or diarrhoea; sleeplessness; sweat bouts; headaches; back pain; nausea; breathlessness; fainting spells; impotence/frigidity; fatigue and eczema.

Stress can also cause emotional and mental health problems. Psychological conditions triggered by prolonged stress include: fatigue; anxiety; panic attacks; depression; hostility and aggression; psychosomatic complaints and neuroses.

The symptoms can be: irritability; indecision; suppressed anger; loss of concentration; inability to complete one task before starting another; feelings of paranoia; feelings of inadequacy; tearfulness at minor problems; lack of interest in people and things outside work; and constant tiredness and a feeling that sleep does no good.

Short-term symptoms can develop into much more serious long-term ill-health conditions, such as hypertension (high blood pressure); coronary thrombosis (heart attack), strokes, digestive problems, lowered resistance to infections, chronic asthma, chronic dermatitis and a possible increased risk of cancer.

Stress is also linked with health-damaging habits, such as smoking, over-consumption of alcohol and escapist eating, all of which are associated with other diseases. The coping mechanisms that people use to deal with stress, such as smoking, over-consumption of alcohol and comfort eating, can themselves lead to ill-health.

The effects on the organisation and society

Calculating the cost of work-related stress and psychosocial risk, a literature review published by the European Risk Observatory, a division within EU-OSHA, provides an insight into the cost of work-related stress to society and organisations. In 2002 the European Commission calculated that work-related stress was costing the then 15

members of the EU €20bn a year. Based on work by researchers, it was calculated that 10% of work-related illness was stress-related.

In Britain, research by the Sainsbury Centre for Mental Health (published in 2007) found that the overall cost to British employers of stress, anxiety and depression was £1,035 per year. Factors in the cost to employers were absenteeism, presenteeism and staff turnover.

THE SCALE OF WORK-RELATED STRESS

It is clear from the literature that work-related stress is a significant workplace issue. As we have seen, a report published by EU-OSHA and the European Foundation for the Improvement of Working and Living Conditions, *Psychosocial risks in Europe: Prevalence and strategies for prevention*, found that 25% of European workers reported feeling stressed at work, all or most of the time.

The report is the most recent in a series of reports published by EU-OSHA showing the scale of the problem of work-related stress. An opinion poll published in May 2013 found that 51% of workers believed that cases of work-related stress are common. However, seven in ten workers said they believed stress was rare in their workplaces, while 72% said it was controlled well. But 58% of workers who said work-related stress was common in their workplaces believed it was not controlled well.

At the national level in Ireland, apart from surveys, there are three sources of statistical information on work-related stress:

- The Quarterly National Household Survey (QNHS) carried out by the Central Statistics Office (CSO).
- The Occupational Injury Benefits (OIB) claims figures published by the Department of Social Protection.
- The Health and Safety Occupational Network (THOR) figures.

The CSO QNHS figures, which are based on workers' response to questions, show that in 2012, 16,122 people stated they suffered illness

as a result of stress, depression or anxiety. Of the 11,428 OIB admitted as being valid, 350 were as a result of stress. The THOR figures, which are drawn from reports to the reporting network by occupational physicians, show that over the period from 2007-2013 mental health cases, at 572 out of 1,117, topped the list of occupational illness. Of the 190 cases reported in 2013, 50 were mental health-related.

THE LAW ON WORK-RELATED STRESS

There are two aspects to the law on work-related stress: legislation and case law. While, as we have already noted, there are no specific legislative rules, given that work-related stress is clearly a health and safety issue, the general body of health and safety law applies. Though of relatively recent origin, there is an extensive body of work-related stress case law.

Legislation

While there is no specific reference to work-related stress in legislation, it is clear from the HSA's guide for employers that employers should consider any workplace hazard where there is a reasonable probability that it could cause work-related stress. EU-OSHA, in the literature review on calculating the costs of work-related stress and psychosocial risks, states: "Employers have a legal responsibility to reduce risks to workers' health and safety stemming from the Framework Directive (89/391/EEC), and this also includes psychosocial risks".

In *Safety, Health and Welfare at Work Law in Ireland*, Raymond Byrne writes that section 8 of the SHWW Act 2005 imposes a specific duty on employers to manage and conduct their activities to prevent any improper conduct or behaviour. There is a corresponding duty on employees not to engage in improper conduct or behaviour (section 13).

Mr Byrne then links the duty to prevent improper conduct and behaviour to the *General Principles of Prevention (SHWW Act 2005, schedule 3)*. General principle 4 requires employers to alleviate monotonous work and work at a predetermined

work rate and to reduce the effect of this work on health. This, he writes indicates the need to design working methods with the view to avoiding the impact of the known stressors set out in General Principle 4. These duties clearly include behaviour which would be regarded as coming within the definition of stress.

Mr Byrne also points out the relevance of the Organisation of Working Time Act 1997, in relation to hours worked, which protects workers from the risks associated with long hours of work.

Case law

Raymond Byrne writes that since the 1980s there has been a growing emphasis on the need for employers to focus on managing psychological illnesses of employees arising from what is usually described as stress at work. Much of this was, he writes, in reaction to a series of civil claims seeking compensation for stress-related illnesses.

The landmark case, which expanded the common law doctrine of employer's liability and established the right of workers who suffered a psychological injury to recover damages was the *Walker v Northumberland County Council* case. Since then, an extensive body of case law has been built up. Though an English case, the case set the precedent which has been followed in Ireland.

Since the Walker case there has been a number of stress cases. The cases discussed below, whether Irish or English, are ones that are significant in terms of setting legal precedent. Often when the case law on stress is discussed, cases that involved bullying, which can be a cause of stress, are mentioned. Cases taken because of bullying are discussed in Chapter 20.

Walker v Northumberland County Council: English High Court (1994)

Though this is not an Irish case, it is the case in which stress was recognised as actionable because of the nervous breakdowns suffered by Mr Walker and it is the base on which the case law relating to stress claims has been built.

Mr Walker was a social worker with Northumberland County Council. He had an enormous workload. He suffered a stress-induced nervous breakdown and took three months off work. When he returned to work, he was promised his workload would be reduced. However, it was not and he suffered a second nervous breakdown.

He sued his employer. The English High Court accepted the argument that his employer owed Mr Walker a duty of care to prevent harmful stress and was in breach of that duty. The court awarded him damages of £200,000. The Council appealed the case, but settled before the appeal was heard.

Quinn v Servier Laboratories: High Court (1999)

The first Irish case to come before the courts was *Quinn v Servier Laboratories*, five years after the Walker case. In 1999 Mr Quinn, a salesman, brought a case against his employer, Servier Laboratories. The case opened in the High Court. Mr Quinn claimed he suffered two nervous breakdowns due to work overload.

The first breakdown occurred after his sales territory was expanded. Mr Quinn's doctor gave evidence that because of work pressure, Mr Quinn suffered severe depression. When Mr Quinn returned to work he was given a new assignment, visiting 450 general practitioners and calling on county hospitals in the North-East. His doctor told the court that the work his patient was given was contrary to what the doctor recommended in a letter to the company. Mr Quinn collapsed again. He sued his employer and the case was settled during the hearing. It was reported at the time that the settlement was for a six-figure sum.

The Hatton principles: English Court of Appeal (2002)

Though an English case, the Hatton case is important, because the courts established what are known as the Hatton principles (*see Table 30.1*), which have since been applied by the Irish courts. The Hatton case was heard by the English Court of Appeal, along with three other cases. For present purposes the details of the cases are not important: what is important is that the principles

applied by the English Court of Appeal have been followed by the Irish courts, in the *McGrath v Trintech* and *Maher v Jabil* cases.

While the judgment has generally been seen as placing limits on employers' liability in work-related stress cases, it also makes clear the issues

employers will have had to address if they want to avoid liability in such cases.

McGrath v Trintech: High Court (2004)

Mr McGrath, who was employed by Trintech in April 2000, suffered bouts of illness while abroad on assignment. While he was on sick leave during

TABLE 31.1: Synopsis of the Hatton judgment propositions

- 1) No special control mechanisms apply to claims for psychiatric or physical injury arising from stress doing work – the ordinary principles of employers' liability apply.
- 2) The threshold question is whether the kind of harm to the particular employee was reasonably foreseeable – there are two components of this: (a) injury to health as distinct from occupational stress and (b) the harm is attributable to work.
- 3) Foreseeability depends on what the employer knows or ought reasonably to know about the individual employee – an employer is entitled to assume an employee can withstand the normal pressures of the job unless he knows of a particular vulnerability.
- 4) The test is the same whatever the employment.
- 5) Factors relevant to answering the threshold question include the nature and extent of the work, is the workload much more than normal for the particular job, is the work particularly emotionally demanding when compared to others, are there signs that others doing this job are suffering harmful levels of stress, is there an abnormal level of sickness or absenteeism, are there signs from the employee of impending harm, has the employee already suffered illness attributable to work, have there been recent uncharacteristic frequent or prolonged absences and is there reason to think these are attributable to work?
- 6) The employer is entitled to take the employee at face value and, unless there are good reasons to the contrary, does not have to make searching enquiries or further enquiries of the employee's medical advisers.
- 7) To trigger a duty to take steps, the indications of impending harm must be plain enough for any employer to realise he should do something about it.
- 8) An employer is only in breach of duty if he fails to take steps which are reasonable, bearing in mind the magnitude of the risk of harm, the gravity of the harm which may occur and the costs and practicability of preventing it.
- 9) The size and scope of the employer's operation and its resources are factors in deciding what is reasonable.
- 10) An employer can only be expected to take steps which are likely to do some good.
- 11) An employer who offers a confidential advice service, with referral to appropriate counselling, is unlikely to be in breach of the duty of care.
- 12) If the only reasonable step would be to demote or dismiss an employee, an employer will not be in breach of his duty by letting a willing employee continue to work.
- 13) It is necessary to identify the steps which an employer both could and should have taken before finding the employer in breach of his duty.
- 14) The employee/claimant must show that the breach of duty caused or materially contributed to the harm suffered.
- 15) Where the harm suffered has more than one cause, the employer should only pay for that proportion attributable to his wrongdoing.
- 16) The assessment of damages should take account of any pre-existing disorder or vulnerability.

October and November 2002, he was requested to go on an assignment to Uruguay, where he worked from January 2003 to June 2003. Following his return to Ireland in June, he was absent on sick leave. In August 2003 he was informed he was being made redundant.

He did not accept that Trintech was entitled to make him redundant. He initiated proceedings, claiming amongst other things damages for personal injury and loss of good health. He alleged that during his period in Uruguay he was subject to grave work-related stress and pressure, which resulted in injury to his psychological health and well-being.

Delivering judgment, Ms Justice Laffoy said Mr McGrath's claim essentially boiled down to two issues:

- 1) whether he had a claim for wrongful dismissal and other breaches of the terms of his contract.
- 2) whether he had established a claim in tort for personal injury.

The contractual issues are not relevant for our purposes, save to note that Ms Justice Laffoy awarded McGrath damages of €69,026 for breach of contract, €10,500 for holidays due and €3,000 for expenses incurred. His claim for personal injury was, Ms Justice Laffoy said, grounded on both an alleged breach of the common law duty of care and an alleged breach of statutory duty.

He alleged Trintech was in breach of its duty to ensure, in so far as is reasonably practicable, the safety, health and welfare of its employees (*SHWW Act 1989, s6, now SHWW Act 2005, s8*) and that the company's safety statement did not address the issue of stress in the workplace.

Dealing with the claim for damages for personal injury, Judge Laffoy noted the Hatton judgment. In the Hatton judgment the English Court of Appeal laid down 16 practical propositions (see *Table 30.1*). Setting out her approach to the case, Judge Laffoy said she would deal with the allegations of breach of duty, then consider the issue of foreseeability and then apply the Hatton propositions.

Judge Laffoy concluded that the medical evidence established that Mr McGrath suffered from a recognisable psychiatric illness. Applying the Hatton propositions, she concluded that Trintech did not have any actual knowledge of his vulnerability to psychological injury. He had not apprised the company of his psychological history and he had made no complaints about work-related stress before he went to Uruguay. The medical certificates submitted by Mr McGrath "were silent on the existence of psychological injury". Judge Laffoy concluded Trintech had not fallen below the standard to be expected of a reasonable and prudent employer.

Dealing with the alleged breach of statutory duty, Judge Laffoy stated that the issue was whether the stress-induced injury was a consequence of a breach of statutory duty. Even if Trintech had taken all the steps Mr McGrath argued it was statutorily obliged to take (dealing with stress in the safety statement, having a monitoring system in place, having an EAP, providing further training), Judge Laffoy said it could not be concluded that he would not have suffered psychological injury. Accordingly, she dismissed McGrath's claim for damages for personal injury.

The effect of the judgment is that the Irish courts recognised that employers were under a duty to deal with stress in the safety statement, based on a risk assessment.

Maier v Jabil: High Court (2005)

Mr Maier was employed by Jabil Global Services as a supervisor. In August 2001 he was appointed shift manager for a shift. After taking up the position of shift manager, Maier began to suffer from what was initially diagnosed as heart trouble, but was subsequently diagnosed to be, as Mr Justice Clarke described it, "stress".

He was off work for a period and when he returned he was assigned to another shift. He worked on that shift for about three months and then went on, what Judge Clarke described as, "relatively permanent sick leave". He terminated his employment in October.

He then sued Jabil, claiming damages for negligence and breach of duty which caused him

personal injury in the form of psychological harm, which Mr Justice Clarke described as coming “within the rubric of stress, harassment and bullying in the workplace”. He claimed that during his time as manager on the first shift, he was put under pressure by management to achieve unrealistic targets, which caused him stress. He claimed Jabil knew or ought to have known that the pressure was likely to cause him harm. He did not bring his concerns to the attention of management.

He claimed that the second shift job was in effect a “non-job”, which exposed him to humiliation. He claimed that he only agreed to work on that shift for a short period, as a means of re-integrating himself into the workforce.

Having considered the evidence, Judge Clarke, cited the *McGrath v Trintech* case, in which he said Ms Justice Laffoy “reviewed the authorities in relation to an employer’s liability for psychiatric illness induced by stress and pressures at work”. Taking the Hatton case, cited by Judge Laffoy, “as the starting point for the consideration of liability”, Judge Clarke posed three questions:

- 1) Had Mr Maher suffered an injury to his health, as opposed to what might be called ordinary occupational stress?
- 2) If so, was the injury attributable to the workplace?
- 3) Was the harm to the particular employee reasonably foreseeable?

Based on the medical evidence, Judge Clarke concluded that Mr Maher had suffered injury to his mental health that went beyond ordinary occupational stress. Significantly, he noted that ordinary stress in the workplace does not give rise to a claim for damages. Again, based on the medical evidence, the judge concluded that Mr Maher’s injury was attributable to work.

On the issue of foreseeability, Judge Clarke held that while the work on the first shift was demanding for Mr Maher, there was no evidence that the employer should have been aware of this. The demands made on him were not unreasonable when compared to other jobs. While the position during the second shift job was more complex,

Judge Clarke said he was not satisfied that there was a concerted effort by Jabil to exclude Mr Maher from his employment. In relation to point 11 of the Hatton propositions, on the provision of an EAP service, Judge Clarke said he was satisfied that there was a counselling service available to Mr Maher. He concluded that Mr Maher’s injuries were not foreseeable and his claim must fail.

Berber v Dunnes Stores: Supreme Court (2009)

Mr Berber was employed by Dunnes Stores as a store manager from 1980 to 1988. In 1988 he was appointed to be a buyer, initially of footwear and finally of men’s readymade clothes. A performance review in February 2000, which rated Mr Berber’s performance as effective, also noted that he was colour blind. Following this appraisal, Mr Berber claimed Dunnes’ attitude towards him changed. He was only sent on one buying trip abroad and there was an increased interest in his health, despite an excellent attendance record.

Though Mr Berber had been diagnosed with Crohn’s disease in 1978, it only recurred twice while he was with Dunnes: once in 1995 and again in early spring 2000. In July 2000 he was not sent on a buying trip and in October he was transferred back to store management. He considered this a demotion and after a meeting, it was agreed he would be transferred to a flagship store and undergo training with a view to being fast tracked as a store or regional manager.

After this agreement a series of incidents followed and by December 2000 his solicitors were writing to Dunnes stating that the stress generated by the incidents resulted in his becoming ill. After being off work ill, he returned but there were further incidents. He finished working for Dunnes in May 2001.

Mr Berber sued Dunnes, claiming that he suffered a recognised psychiatric illness. He was awarded damages of €40,000 by the High Court for the psychiatric injury suffered and €32,622 for breach of contract. Dunnes Stores appealed the High Court judgment to the Supreme Court.

Delivering judgment on behalf of a three-judge Supreme Court bench, Mr Justice Finnegan cited

the *McGrath v Trintech, Maher v Jabil* and *Quigley* cases and the *Hatton* case. According to Mr Justice Finnegan, the English Court of Appeal in the *Hatton* case held that “special problems attend claims for psychiatric injury”. Such cases give rise to difficult issues of foreseeability, causation and breach of duty.

Commenting on foreseeability, he said the issue in most cases will be whether the employer should have taken positive steps to safeguard the employee from harm and the threshold to question is whether the kind of harm sustained by the particular employee was reasonably foreseeable.

During the course of the judgment, Mr Justice Finnegan made a number of comments, which offer useful guidance in relation to liability for stress. He stated:

- The test concerned is not with the person of ordinary fortitude.
- Stress is merely a mechanism whereby harm may be caused.
- An employer may be alerted to stress by uncharacteristic frequent or prolonged absences from work, but there must be a good reason to think that the underlying cause is stress generated by work.
- Where an employee is certified fit for work by his doctor, the employer will usually be entitled to take the medical certificate at face value, unless there is good reason to think to the contrary.
- If there has been a breach of duty, the employee must show that the breach caused the harm complained of.

In Mr Berber's case, Mr Justice Finnegan said causation was not an issue in that the personal injury arose out of circumstances at the place of work. A reasonable employer would have been aware of his vulnerability, but not to mental illness, but rather by reason of changes in occupation from buyer to store management. By December 2000 Dunnes Stores was aware that Mr Berber was suffering from stress and so had a duty to take reasonable care not to cause harm.

The question for the court to determine was whether Dunnes Stores took reasonable care.

What is reasonable depends on five factors:

- foreseeability
- the magnitude of the risk of that harm occurring
- the gravity of the harm
- the cost and practicality of preventing it
- and the justification for running the risk.

Mr Justice Finnegan concluded that Dunnes had acted reasonably and that the injury suffered was not foreseeable. Accordingly, the Supreme Court overturned the award of €40,000 for personal injury, but allowed a portion (€9,079) of the award of damages for breach of contract.

PREVENTION

So clearly work-related stress is a health and safety issue and, as the review of court cases shows, failure to eliminate - or at the very least reduce the risk - can be costly. As the HSA puts it, all employers are legally required to assess the working environment for systems and practices which lead to health and safety hazards, including stress, and put in place preventative measures. Among the preventative measures suggested by the HSA in the guide are:

- Respect the dignity of each employee.
- Regular feedback and recognition of performance.
- Clear goals for employees in line with organisational goals.
- Employee input into decision making and career progression.
- Consistent and fair management actions.

The HSA guide outlines three types of management interventions used in organisations:

- Primary, which is looking at the issue of stress at source in order to prevent it occurring.
- Secondary, which is described as management focusing on the employee throughout his/her time with the organisation and which includes training and support.

- Tertiary, with the focus on employee assistance programmes.

To help organisations carry out a risk assessment and establish if there is a work-related stress problem in the organisation, the HSA has developed the *Work Positive Tool*. This was developed in partnership with the HSE-GB, where it is known as the Management Standards. The tool is a 42-item questionnaire surveying six areas:

- Demands
- Control
- Support
- Relationships
- Roles
- Change.

The purpose of the survey is to provide a well-being profile of the organisation, showing how employees rate their working environment.

THE ROLE OF THE SAFETY REPRESENTATIVE

Implicit in the finding of the recent EU-OSHA/ European Foundation report, which stresses the importance of worker input in to the development of stress prevention policies, is that safety representatives have a critical role to play in focusing management's mind on the issues of work-related stress.

The safety representative needs to monitor the workplace to identify if stress problems are manifesting themselves. If they are, the safety representative should raise the issue with the employer.

Safety representatives can ensure that employers address stress as part of the safety statement and if the safety representative feels the issue is not adequately dealt with in the safety statement, the safety representative must raise the issue with the employer. If an employer does not have an EAP, it could be suggested that the employer establish such a programme.

RESOURCES/FURTHER INFORMATION

As we have seen, the HSA has a well developed suite of guidance documents, which can be accessed at:

- *Work-related Stress – A Guide for Employers* http://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Work_Related_Stress_A_Guide_for_Employers.pdf
- *Work-related Stress Information Sheet for Employees* http://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Work_Related_Stress_Information_Sheet.pdf
- *Work Positive* http://www.hsa.ie/eng/Workplace_Health/Workplace_Stress/Work_Positive/Work_Positive_Project_2008-2009/
- *Workplace Stress HSA web pages* http://www.hsa.ie/eng/Workplace_Health/Workplace_Stress/Overview/

The EU-OSHA/European Foundation report, *Psychosocial risks in Europe: Prevalence and strategies for prevention*, can be downloaded at: [file:///C:/Documents%20and%20Settings/Administrator/My%20Documents/Downloads/EF1443EN%20\(4\).pdf](file:///C:/Documents%20and%20Settings/Administrator/My%20Documents/Downloads/EF1443EN%20(4).pdf)

The EU-OSHA report, *Calculating the cost of work-related stress and psychosocial risks*, can be downloaded at: https://osha.europa.eu/en/publications/literature_reviews/calculating-the-cost-of-work-related-stress-and-psychosocial-risks

The HSE-GB web pages on work-related stress can be accessed by clicking on the following link: <http://www.hse.gov.uk/stress/>

The *Framework Agreement on Work-related Stress* can be downloaded at: <http://www.travailler-mieux.gouv.fr/IMG/pdf/StressAccordCadresEuropeen.pdf>

CHAPTER 32: VIOLENCE, HARRASSMENT AND AGGRESSION

INTRODUCTION

Workplace violence is defined in the HSA's publication *Violence at Work*. The definition states "Workplace violence occurs where people, in the course of their employment, are aggressively verbally abused, threatened or physically assaulted.

In 2010 the European social partners agreed guidelines to help tackle third party violence and harassment at work. In the agreement harassment and violence are defined as unacceptable behaviour by one or more individuals some of which may be more easily identifiable than others.

The agreement defines harassment as "when someone is repeatedly abused, threatened and/or humiliated in circumstances relating to work". Violence occurs when one or more workers or managers are assaulted in circumstances relating to work.

Violence or harassment may be carried out by one or more managers, workers, service users or members of the public with the purpose or effect of violating a manager or workers, affecting his/her health and/or creating a hostile work environment.

The European agreement recognises that harassment and violence can be:

- Physical, psychological or sexual.
- Be one off incidents or more systematic behaviour (here it should be noted that in Irish law bullying is repeated behaviour: see Chapter 20).
- Be amongst colleagues, between superiors and subordinates, or by third parties such as clients, customers, patients or pupils.
- And can range from minor cases of disrespect to more serious acts, including criminal offences which require the intervention of public authorities.

It is possible to glean an idea of the scale of the issue from the HSA's Summary of Workplace Injury, Illness and Fatality Statistics reports. The 2014-2015 report shows that 6% of all three day plus absences from work reported to the Authority in 2015 were as a result of aggression, shock or violence.

A detailed sectoral analysis show that 15.4% of all reported accidents in the health and social work sector were as a result of aggression, shock or violence. The public administration and defence sector reported 791 injuries. Of these 7.1% were as a result of aggression, shock or violence.

Some years ago the Authority published a detail analysis of the sectors where violence at work was experienced. The analysis shows that:

- 148 cases were reported by the public administration/defence sector.
- 113 by the health and social work sector.
- 16 by the financial/insurance sector.
- 11 by the transport and storage sector.
- 14 from other service sectors.

The HSA's guide, *Violence at Work*, which was last revised in 2007 states that over 5% of all reported workplace accidents are due to violence. Broken down by sector 17% of all accidents reported by the public administration/defence sector were because of violence, 16% in the case of the health and social work sector, 7% in education, 7% in financial and retail services, 3% in hotels and restaurants and 3% in transport, storage and communications.

Violence and aggression is an issue for many trade unions. Unions with members in the hospitality, financial services, public sector services, education and communications sectors have specific concerns. There are reports of verbal abuse towards call centre workers.

A review of cases law reports gives an idea of the type of incidents that occur (*see also Chapter 20 Bullying, for related type cases*)

TABLE 32.1: Examples of violence and aggression from reported court cases

The hospital worker

A man who punched a hospital worker at an infectious disease clinic, because he was not been seen quickly enough, was given a one year suspended prison sentence by the Dublin Circuit Criminal Court recently. The court heard that the man had been at a party the previous night and helped someone who was cut by glass. Later he heard the person suffered from HIV. He went to the Mater Hospital Clinic but after he was waiting for what he felt was too long, he “lost the plot” and attacked the hospital worker whose job it was to register patients. He accused the worker of not doing his job properly. When the worker tried to calm him and asked him to take a seat, he punched the worker twice in the face. The worker lost his balance, fell off his chair and hit his head off the floor.

As a result of the assault the worker’s upper lip was torn and bleeding. He suffered jaw pain, constant headaches, tooth and lip pain. He told the court he still feels unsafe at work. He was diagnosed with post-traumatic stress disorder. He had to pay €1,400 in medical costs and suffered a net €11,400 loss of income. Imposing a 12-month suspended jail sentence and ordering the attacker to pay €500 to Crumlin Children’s Hospital. Judge Mary Ellen Ring said the victim had been doing his job when set upon by a stranger. (*DPP v Casey: Dublin Circuit Criminal Court, June 2014*)

Hospital security guard attacked

On a Sunday night in October 2010, a young man stood over a hospital security guard, as the guard was assaulted on the ground by his friend. The young man had accompanied his friend, who was seeking medical help, to the hospital. The court heard that both men had been abusive and obnoxious prior to the assault. Giving evidence, a garda who was in the hospital A&E department accompanying a prisoner who needed treatment, observed the two men. When they entered the emergency room he observed that they were carrying on and behaving in an obnoxious manner. He noted one of them had an injury to his arm. The injured man, referring to the garda and his prisoner, said he did not want to share a room with ‘rats and pigs’. When the security guard arrived, the injured man took off a bandage and threw it at the receptionist. When asked by the security guard to leave, the injured man thumped him on the face, knocked him to the ground and continued to attack him.

At an earlier hearing, the injured man was given an 18-month suspended sentence. At a later hearing, his companion, who stood over the security guard while he was being attacked, pleaded guilty to assaulting the security guard. The court heard that the security guard suffered soft tissue injuries and had been out of work for two weeks. He suffered no long term effects. The court heard that the accused had been drinking and had taken ‘snow blow’. He had, counsel told the court, since settled down and is now drug free. He had recently qualified as a commis chef and wished to pursue a career in the catering trade. He had, the court heard, no previous convictions.

Putting sentencing back to a later date, Judge Mary Ellen Ring asked the Probation Service for a report. Expressing a view on the type of sentence she would like to impose, she said she wished she could impose six months, watching what staff in A&E departments have to deal with. “Hospitals should not have to have security staff but that is the sorry state that has arisen”. (*DPP v Brennan: Dublin Circuit Criminal Court, February 2013*)

TABLE 32.1: Examples of violence and aggression from reported court cases *continued*

Security guard on building site attacked

A security guard on a building site, who was stabbed and beaten with an axe and a hammer, was awarded damages of €106,000 by the High Court. The court heard that the security guard was attacked and beaten while guarding a site. The attack, which was carried out by two men wearing balaclavas .

Following the attack, the security guard, who suffered multiple stab wounds to his face, head, forearm and legs, was taken to hospital. As a result of the attack, the security guard was scarred and had a permanent cosmetic deformity of his face. He was also, counsel told the court, suffering psychologically from the incident. He was, counsel added, hospitalised for two weeks and unable to work for six months.

Counsel for the injured security guard, who sued both his employer and the construction company, argued that both the man's employer and the construction firm whose site he was working on had failed in their duty to ensure that the security guard was not exposed to unreasonable risk. Both defendants denied liability. Both pleaded that if there was negligence, they were not negligent: it was the other defendant. And both alleged contributory negligence on the part of the security guard.

Awarding the injured security worker €106,000, Mr Justice Lavan held that there was negligence on the part of both defendants and that he would give his decision on the defendants' claims of indemnity against each other at a later date. (*Muhametgalijvs v Moran t/a Night Security and Gama Construction: High Court, Dublin, May 2007*)

Postman attacked

A postman, who was knocked to the ground and attacked by a husky-type dog, was awarded damages of €55,000 by the High Court. The postman was delivering post to a mailbox outside a house in a rural area when he was knocked over by the dog and bitten in the face. The postman brought a claim against the owners of the house, alleging that they were negligent in permitting the dog to escape through a hedge onto the road outside their front gate. He alleged that the owners had failed to fence their property so that the dog could not escape. He further alleged that the owners failed to warn of the dangers of delivering post to their house.

As a result of the attack, the postman who was also bitten on the leg, suffered lacerations to his face and needed 22 stitches. A nerve was also damaged in the attack. Following the accident, the postman had to attend a plastic surgeon. Awarding the injured postman damages totalling €55,000, Mr Justice Michael Moriarty said the postman had returned to work at a commendably early stage after what was a particularly frightening incident. (*Dunne v Dalton and another: High Court, October 2013*)

Postman attacked

On the basis that there had been previous attacks on postal workers on a delivery route, the President of the High Court has awarded damages to a postman injured in an attack. The court heard that on the night of the attack, the postman had volunteered to do overtime to deliver mail on a route, where the post had not been delivered for a couple of days. The postman was not familiar with the route.

TABLE 32.1: Examples of violence and aggression from reported court cases *continued*

On the day of the incident (in November), at about 3.30 in the afternoon, the postman commenced delivering the post on a bicycle in a Dublin suburb. At about 8.55 that night he was attacked by four youths, who struck him from behind. They hit him with an iron bar on the back of his head and stole the bag of mail he was carrying. He chased the youths and managed to grab one of his attackers. Using his mobile phone, he also managed to call the gardai. However, the three other youths came back and, in order to free their companion, attacked him again.

In his action the postman claimed that his employer was negligent and in breach of its duty of care, on the grounds that it had failed to adequately warn him about the dangers of delivering post at night, thereby exposing him to unnecessary risk. He also alleged they failed to supply him with a safe place of work.

On the basis that there had been previous attacks on postal workers on that route, Mr Justice Kearns said he was satisfied that the employer was in breach of its duty towards the injured postman, who he said was entitled to succeed with his claim. Awarding the injured postman €20,000 damages, Mr Justice Kearns said he had suffered some “nasty injuries”. (*Abudusalmn v An Post: High Court, Dublin, January 2011*)

Shop assistant attacked

When awarding IR£67,375 to a shop assistant who resisted armed raiders, Mr Justice Budd said the employer should have warned his employees “not to resist when people come in waving guns around the shop premises”. The action arose out of an incident in which a shop assistant was injured by a ladder as he resisted armed raiders. The judge considered the duty an employer owes to employees who worked in a premises that might be attacked by armed raiders, which was the key essential point on which the judgement turned. The employee worked in a late night shop in a Dublin suburb, which had been attacked by armed raiders on a previous occasion. On that occasion the raiders had been beaten off by the proprietor and his staff. After the raid the employer took a number of precautions. He installed panic buttons and an overhead camera, had lights put up outside, put a cash control system in place and always made sure to have at least one man in the shop.

However, in the judge's view, the shop owner should also have considered the personalities of his employees and their likely reaction in the event of an armed raid. He should also have taken advice which was readily available from the Gardai on the inadvisability of resisting armed raiders. Commenting that such raids were all too frequent, he stated that “the rub of the case was the failure to advise employees not to take on armed raiders”.

PREVENTION

The objective of health and safety management is to eliminate risk posed hazards or if that is not possible to reduce it to the lowest reasonably practicable level.

The HSA's guide *Violence at Work* offers guidance on how to find out if there is a problem.

This involves going around the workplace and finding out if there are problem areas. This is classic hazard identification and risk assessment. The HSA suggest talk to staff, learn from similar workplaces, pay attention to any attacks that have occurred previously and consider the circumstances under which they occurred.

The Authority lists a number of potential risk areas:

- Providing care, advice or training.
- Working with the mentally disturbed.
- Working with drunk populations or drug addicts.
- Handling money or valuables.
- Working alone (see Chapter 28: Lone Working).

When reviewing the workplace it is helpful to think of the attacker, the victim, the work environment and how these might combine to create a violent situation. Issues around the work environment are lone working, job location, cash, where people waiting for a service have been kept waiting and time of day. An example of time of day is petrol stations being robbed at night.

Among the prevention measures suggested by the HSA are screens, video surveillance, cash free systems. It is suggested placing signs warning that violence or aggression will not be tolerated and incidents will be reported to the Gardai.

Training should be provided. Training should cover matters such as how to recognise warning signs, conflict resolution and familiarisation with security measures. Support and counselling should be available to victims of attacks.

There should be a system in place to ensure incidents are recorded and reported to management.

THE ROLE OF THE SAFETY REPRESENTATIVE

The principal issues for safety representatives are those identified by the HSA's analysis of the reported accident statistics, by the Injuries Board's report and by the trade unions with members in the sectors. Beyond that the issues are broadly speaking, the same as for safety representative in other sectors. For further information see Section 4: The Role of the Safety Representative.

Safety representatives should:

- Put in place a system to ensure fellow workers make them aware of incidents.
- Raise the potential for such incidents with management and discuss what, if any, action is needed.
- Ensure that the employer's safety statement addresses the issues of violence, harassment and aggression at work and that prevention policies are in place.
- Ask about the provision of counselling services for employees who are victims of violence, harassment or aggression.

Violence towards workers, particularly those in the public sector but also contract workers in utilities, is a concern raised by union members. Verbal abuse, to workers in call centres, is another issue that is raised by employees. .

RESOURCES

HSA guidance

The HSA has published a number of guidance documents.

There is the guidance booklet, *Violence at Work*, which looks at the topic from a broad cross sectoral perspective. To download visit: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Violence_at_Work.pdf

Then there are two sector specific guidance documents. A webpage, *Violence and Aggression in Healthcare*, which can be downloaded by visiting: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Information_Sheets/Violence_in_Healthcare_Information_Sheet.pdf and the *Safety Health and Welfare at Work Guidelines for Employers, Employees and Clients involved in the Cash in Transit Industry*, which can be downloaded by visiting: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Cash_in_Transit.pdf

HSE-GB guidance

The HSE-GB webpages can be accessed at:

<http://www.hse.gov.uk/violence/>

European Agreement

The European Agreement, Preventing Workplace Harassment and Violence can be downloaded

at: <http://www.hse.gov.uk/violence/preventing-workplace-harassment.pdf>

CHAPTER 33: WORK-RELATED VEHICLE SAFETY: IN THE WORKPLACE AND ON THE ROAD

INTRODUCTION

In 2010 the HSA published the *Work-Related Vehicle Safety Five Year Plan 2010-2014*, with the objective of a sustainable reduction in the number of people killed or seriously injured as a result of the use of vehicles in connection with work.

Those with long memories of the concept of work-related vehicle safety will appreciate how much the plan and the campaign waged by the Authority to raise awareness of the issue has changed the concept of what work-related vehicle safety is about. Once it was about the dangers of forklift trucks in factories, warehouses and yards. Now it is quite clear that there are at least three aspects to work-related vehicle safety:

- Transport in the workplace, including construction sites, quarries and farms.
- Driving for a living on public roads, whether the driver is van or lorry driver, a sales executive, a service engineer, a courier or a managing director on the way to a meeting.
- Working at or near roads, be it construction of roads, school wardens or refuse collectors carrying out their duties.

The publication of the Plan was the culmination of many years work by the Authority, when working with the Road Safety Authority (RSA) and An Garda Síochána, and an analysis of statistics which identified the issues around work-related vehicle safety was undertaken. At a conference in 2009 the Road Safety Authority presented an analysis of accidents from its database which showed:

- 22% (683 out of 3,166) of fatal road traffic collisions involved a work-related vehicle which was used in connection with travelling to and from work.
- 16% (1,347 out of 8,595) of serious injury collisions involved a work-related vehicle

which was used in connection with travelling to and from work.

- 14% (6,985 out of 49,893) of minor injury collisions involved a work-related vehicle which was used in connection with travelling to and from work.

In the Plan the Authority published an analysis of workplace fatal accidents which disclosed that in the period 2003-2008, of the 367 people killed in workplace accidents, 170 were killed in accidents which were due to work-related vehicles. More recent figures from the HSA show that over the period 2009-2015, almost half of the deaths reported to the Authority arose from accidents that were vehicle-related.

A further analysis of the 2003-2008 figures gives details of the sectors in which the 170 fatal accidents occurred:

- 52 in agriculture/forestry
- 50 in construction
- 25 in transport
- 15 in wholesale/retail
- 11 in manufacturing
- 6 in water supply/waste
- 5 in the public administration/defence sector.

Among all the other sectors, six work-related vehicle deaths were reported.

What the figures show is that while three sectors account for 75% of the deaths, the issue is one that is cross-sectoral. What the HSA reported accident figures do not show - and this is where the figures from the RSA are important - is that about 20% of accidents which are recorded as road traffic accidents are work-related. What the RSA figures do not do is give a breakdown of the work activity being undertaken at the time of the work-related fatal road traffic accident.

Before looking at the three aspects of work related vehicle safety we should consider the risks from vehicles.

VEHICLE RISKS

According to the HSA, the most common types of work-related vehicle risks are:

- People being hit by moving vehicles.
- People falling from vehicles.
- People being injured by objects falling from vehicles.
- People being injured by vehicles overturning.
- People being injured during vehicle maintenance.

A review of court cases, which follows, illustrates the different types of accidents that can occur.

People being hit by moving vehicles

People can be hit by a moving vehicle in the workplace or on the public roads.

Struck by a loading truck in yard

An example of an accident in a workplace is one in which a worker was killed while he was crossing a yard when he was struck by loading truck. The court heard evidence that the truck driver's view was obstructed by another truck on a weighbridge and that there were no road markings segregating traffic. The court heard that the worker, as he was walking across the yard to the canteen, was struck by a loading truck that had taken a "wide turn" to avoid two other trucks. The driver had not seen his colleague walking across the yard. The worker fell under the wheel of the loading truck and was killed. He suffered cardiac respiratory failure due to the shock. The court also heard that the driver of the loading truck had not been trained. The court heard that pedestrians and some vehicles were allowed to move counter to the one-way system.

The company was prosecuted by the HSA and pleaded guilty to failing to, in so far as reasonably practicable, manage and conduct its work activities so as to ensure the safety and health of its employees (contrary to the SHWW Act 2005, section 8.2.a), in that loading shovel operations were carried out without any adequate measures to provide for the segregation of pedestrians from vehicular traffic.

A number of safety failings on the company's part were identified by an HSA inspector who visited the site following the accident. The inspector told the court there was no system in place by which pedestrians were segregated from vehicular traffic. He said the driver of the loading shovel truck had not been given formal training, there were no road markings or dedicated pedestrian crossings marked out and some vehicles were allowed move counter to the one-way system. The company was fined €40,000. (*DPP for HSA v Mr Binman: Limerick Circuit Court*)

Falling from a moving vehicle

Paramedic falls from ambulance

Imposing fines totalling €500,000 on the Health Service Executive (HSE), a judge said that if problems which had been identified in 2007 had been dealt with, the man who was killed, a paramedic employed by the HSE, might be still be alive.

The court heard that during the transfer of a patient from Cavan to Dublin by ambulance, a paramedic was wrenched out of the ambulance as it was being driven on the N3 near Cavan town. The court heard that the paramedic was in the back of the ambulance when he heard wind coming into the vehicle, indicating that the door was not properly shut. He went to close the door and as he put his hand on the lever the door opened and "wrenched him out".

Following an investigation by the HSA, the HSE was charged with failing to provide information, instruction, training and supervision to ensure, in so far as is reasonably practicable, the safety of its employee, the paramedic (SHWW Act 2005, s8.2.g), and of failing to have a written risk assessment relating to the rear hinge side door of the ambulance (SHWW Act 2005, s19). The court was told that the HSE was aware of the risk. The court heard that in 2007 a similar incident occurred in Kerry. In that incident a paramedic suffered serious head injuries. The court heard that following the Kerry incident, several recommendations were made to the HSE. The recommendations were not implemented.

The manufacturers offered to alter the doors to remove the danger, but the HSE refused. An HSA inspector told the court that after the 2007 incident, the HSE hired an engineer to make recommendations on making the doors safer. The engineer advised that warning signs should be placed in the ambulance, that an improved door alarm system be put in place and that a visual alarm should be mounted in the cab to indicate if the door was open. The court heard that warning signs had been put in place and an improved door alarm had been installed.

During its investigation the HSA discovered that none of the paramedics they interviewed had been formally briefed on the dangers of the door. Counsel for the HSE told the court that the rejection of the manufacturer's offer to alter the doors was not fiscally driven. He told the court that since the accident in 2010, all ambulances had been altered to include front facing hinges and that other safety measures had been taken. (*DPP for HSA v Health Service Executive: Dublin Circuit Criminal Court*)

Falling objects

A pipelayer suffered serious back injuries when an excavator bucket separated from an excavator fell, hitting him on the back, as he was working in a trench laying pipes. The excavator was being used to remove clay from the trench. The company pleaded guilty to charges of failing to provide a safe system of work and was fined €500.

Overtuning vehicles

Dumper truck cases: prosecutions

Two cases involving dumper trucks illustrate the type of work-related vehicle accidents that can occur on construction sites.

In one case, a local authority was prosecuted after a dumper truck driver was killed when the truck he was driving toppled over an embankment which was not protected, on a site where roadworks were being carried out. In the other case, an employer was prosecuted after a dumper truck driver was killed. The dump truck driver had been filling a hole with tarmac, tree stumps and other rubble when the dumper overturned. The dumper ran over the

edge of the excavation and the driver was trapped under the dumper.

In the local authority case, the Council was fined €50,000, while in the other case the employer, whose business had failed, was given a 12 months suspended prison sentence.

Damages claims

Two employer liability claims give a further insight in to how such accidents occur, with the size of the settlement in one case giving an indication of how serious the injuries suffered can be.

The High Court approved a settlement of €670,000 for the family of a construction worker who was killed when the dumper truck he was driving overturned. The court heard that the worker was killed when the dumper he was driving went down a steep incline on a construction site on a section of the M3 motorway.

The difficulties employees can face when trying to recover damages are illustrated by the case of an injured farm worker, who was awarded damages by the High Court. The case arose as a result of an accident when the farm worker was driving a front loader. The vehicle overturned when it failed to stop after he applied the brakes. However, the employer failed to enter any appearance in the case and the court heard that the injured employee may have difficulty recovering the award.

Injured during vehicle maintenance

A crane is a work vehicle as defined in the HSA's five year Plan. A coroner's court heard that a maintenance fitter died after he was crushed between a moving crane and a roof beam. At the time of the accident, he was carrying out maintenance work on the crane. The crane was being controlled by a colleague at ground level, who was moving it along its tracks. The fitter stood up out of the cab of the crane and was crushed in an eleven centimetre gap between the top of the crane and a fixed roof beam. The coroner's jury found that an unsafe system of work and inadequate training, which could have been identified by a basic risk assessment, were factors in the death of the maintenance worker on the crane.

TRANSPORT IN THE WORKPLACE

The HSA's definition of what workplace transport safety is about: it is about the management of the hazards and risks associated with any vehicle or piece of mobile equipment that is used by an employer, employee, self-employed person or visitor in a fixed or temporary workplace but excludes work-related road safety.

Workplace transport safety involves the use of vehicles and mobile plant and machinery in the workplace. The term covers all types of vehicles used, including bicycles, forklift trucks and telescopic material handles. Workplace driving activities include driving in a fixed or temporary workplace, riding/being a passenger, loading/unloading, coupling/uncoupling.

Examples of transport in the workplace include:

- The flow of vehicles around a workplace car park, as workers and customers park cars, motor bikes and bicycles.
- The use of forklift trucks to move pallets in the workplace.
- An ambulance bringing patients to a hospital
- Goods vehicles being unloaded by a forklift truck in a warehouse bay.
- Tractors and jeeps on farms.
- The manoeuvring of quarry vehicles at a quarry face.

Clearly workplace transport could be a hazard and employers are required to consider if it is and if so, to carry out a risk assessment. The HSA has published two very useful guidance documents on risk assessment: a *Workplace Transport Safety Risk Assessment Information Sheet* and a *Workplace Transport Checklist*. Another useful tool when carrying out a risk assessment is the EU-OSHA factsheet 16: *Preventing Vehicle Transport Accidents at the Workplace*.

When identifying if workplace transport is a hazard, the factors to be considered are:

- Are vehicles used?
- The types of vehicles

- The vehicle and work activities
- The workplace
- The driver
- Who else is likely to be present in the work area?

Then think of what could happen. Could a person be crushed? Could the vehicle overturn? Could a person fall from the vehicle? Could an object fall from a vehicle?

Having identified the hazard, the employer must put in place control measures to eliminate the risk or, if that is not reasonably practicable, reduce it to the lowest possible level. Employers should apply the general principles of prevention.

A key issue in preventing workplace transport accidents is to have workplaces clearly marked out, with traffic and pedestrian areas clearly distinguished and with pedestrian crossings and priority signs and similar control measures in place. There should be speed limits. Visibility at all points on traffic routes should be checked.

Loading bays and vehicles should be checked regularly and properly maintained. In temporary workplaces, such as building sites or on workplaces such as farms, quarries and docks, factors that change should be reviewed.

Two issues that require particular attention are:

- 1) The use of forklift trucks in the workplace.
- 2) The loading and securing of cargos.

Forklift trucks

Forklift trucks are, according to the HSA, among the most hazardous types of vehicles in the workplace and incidents involving forklift trucks are usually serious and often fatal. In the period 2001-2006 six people were killed in accidents involving forklift trucks.

The most common types of accidents are: being struck by a forklift, being struck by a load which falls from the forklift, and forklifts overturning. Three of the six people killed were killed by loads falling off the truck and two were killed by cages falling off

the trucks, with another killed when he was crushed to death between the truck and shelving.

The HSA's *Code of Practice: Rider-operated Lift Trucks* sets out the training that should be provided to operators of forklift trucks.

Securing loads

The failure to secure loads can result in serious and indeed fatal accidents. A haulage company was fined €1m following an accident in which two passing motorists were killed when an insecure load fell off a lorry.

Giving evidence about the security of the load, an HSA inspector told the court that after the accident, the Health & Safety Laboratory (HSL) in the UK were commissioned by the Gardai to carry out a technical examination of the load involved in the accident and the method of load restraint used. The webbing straps used to restrain the load were sent to the HSL laboratory to be examined and tested. The webbing straps failed at loads considerably less than would be expected for straps restraining steel coils and visual examination of the straps showed that they were frayed, had failed previously and were repaired by knotting together. None of the straps were marked to indicate their rated load.

The inspector said the level of load restraint was grossly inadequate, irrespective of the condition of the straps, as only three straps were used to restrain six steel coils for both sea and road transport. She said it was obvious from visual inspection that the condition of the straps was inadequate and the type of damage was grounds for their removal from service. None of the straps had manufacturing labels indicating their lashing capacity or bracing point. She said that an expert commissioned by the HSA formed the opinion that each coil (the lorry was carrying a load of steel coils) should have been considered as an individual item and secured individually. She also gave an opinion that the upturned pallets used as cradles, as in this case, are not recommended because the pallet structure is not designed to carry loads in this manner.

The inspector told the court that it appeared that the primary causes of the accident were that the

cradles utilised on the day of the accident, coupled with the absence of an intermediate bulkhead and insufficient and deficient webbing straps, were the causes of the accident.

Figures published by the HSA show that in period from 2006 to 2011 a total of 509 accidents involving loading, unloading and securing loads were reported to the Authority. Twelve of the accidents resulted in death.

When loading trucks the HSA advises:

- Use a suitable vehicle for the type and size of load.
- Position the load correctly to maintain adequate stability, steering and braking and not to overload tyres and axles.
- Use suitable restraint equipment, which is strong enough for the type of load being carried and is in good condition.

DRIVING FOR A LIVING

In the five year Plan the HSA defines driving for a living as driving on the road for work purposes. It excludes commuting, unless the worker's journey starts from home and the worker is travelling to a workplace that is not his/her normal place of work. An example would be an HSA inspector, whose workplace might be the local HSA office, but who sets out on a round of inspections from his/her home. It should be noted that in many continental EU member states commuting to and from work is considered to be a work-related activity.

Drivers of commercial vehicles such as lorries, vans and buses are clearly driving for work. So also are drivers in what is called the 'grey fleet': commercial travellers, civil servants driving in connection with work trade union officials/organisers driving to meetings, the journalist driving to an event, the electrician or plumber who uses his/her private car when going from job to job. A farmer driving a tractor on the public road from one farm building to another is driving for work, as is the construction worker who drives a digger on a public road.

As with workplace transport, employers should consider if driving for work is a hazard and if it is

identified as a hazard they should carry out a risk assessment. Driving is of itself hazardous, though in general people do not tend to think of it as a hazard, but rather as a task to be undertaken. The position of employers is different: employers are under a legal duty to eliminate and, if that is not possible, control hazards.

Again, when it comes to considering the hazards and the risks employers should think about the three elements identified by the HSA: the vehicle, the driver and the workplace.

The vehicle

The vehicles used by drivers will vary: some will drive cars, others vans, lorries or buses. Yet others will drive farm or construction vehicles. Whatever the vehicle type the following applies:

- The vehicle should be properly maintained and serviced in accordance with manufacturer's recommendations.
- Before setting out on a journey, the driver should check the vehicle to make sure things like windows are clean, tyres are properly pumped and that wing mirrors are working.
- The journey route should be planned, with, depending on the length of the journey, breaks scheduled.

The driver

The HSA has published a very useful driver's handbook, *Safe Driving for Work*. The handbook deals with the employer's responsibilities and also the driver's responsibilities. The point is made that 'at-work drivers' have a higher collision rate than the general driving population.

The employer's legal duties are to make sure:

- The driver is legally entitled to drive the vehicle he/she is using.
- That the vehicle is safe and roadworthy.
- That the driver is informed, trained, competent and fit to drive safely.
- That the vehicle is used safely.

Drivers are required to hold a valid driving licence for the type of vehicle they are driving. When

driving they must carry the licence. Drivers must understand and obey the rules of the road and keep up to date on road safety. Drivers should never drink and drive or drive under the influence of drugs (whether prescribed, over-the-counter or illegal). Drivers should never drive when tired and should always wear a seatbelt.

Before taking a vehicle on the road the driver should carry out 'pre-drive' checks. Walk around and see that things like windows are clean, tyres are properly pumped and that wing mirrors are working. Look for any defects. It is recommended that drivers have a mobile phone and that it is fully charged, in case it is needed for use in an emergency. However drivers should not use a mobile phone while driving and while it is legally permissible to use a hands-free phone, best practice advises against doing so. There is research to show that it is unsafe.

An aspect of mobile phone use that may catch the unwary is that it is illegal to stop on a motorway or motorway hard shoulder and use a mobile phone. The Road Safety Authority has published advice on this point, making it clear that the only time a mobile phone can be used legally on a hard shoulder is in the event of an emergency or if a car is broken down and cannot be restarted.

Driver fatigue

Fatigue has emerged as a serious contributory factor in road collisions. In the late 1990s researchers from Loughborough University's sleep research laboratory published research showing that drowsiness accounts for between 15% to 20% of all accidents on monotonous roads, especially motorways. According to the International Labour Organisation, "driver fatigue is one of the biggest issues facing the road transport industry".

The evidence is that "thousands of crashes are caused by tired drivers". Such accidents are unusually severe because a sleeping driver cannot brake or take avoidance action, so the impact generally occurs at high speed. Fatigue-related conditions often result in very serious injuries or death.

When drawing up a risk assessment the following points should be noted. Drivers are most likely to feel sleepy when driving:

- On long journeys.
- Between 2am and 4am.
- Between 2pm and 4pm.
- After having less sleep than normal
- After drinking alcohol.
- After taking medicines which can cause drowsiness.
- On journeys home after night shifts.
- On journeys after a very long working day.

Among the measures suggested to tackle driver fatigue are:

- Reducing road journeys.
- Avoiding driving at the most dangerous times.
- Reducing driving time.
- Making sure the driver is well rested.
- If drivers feel tired they should stop.

Drivers who are concerned about any of these points should discuss their concerns with their manager.

The Loughborough University researchers found that a 15-minute break, when drivers might take a short nap and a cup of coffee, can be very effective in combating fatigue. Continuing to drive and relying on in-cab methods such as cold air to the face or turning up the car radio are of limited benefit and should only be used to enable drivers to find a safe resting place.

The workplace

When driving in connection with work, the vehicle is work equipment and it is also the workplace, as is the road on which the vehicle is being driven.

Employers and drivers are advised that journeys should be planned.

WORKING ON OR NEAR ROADS

From an occupational health and safety perspective when considering the issue of working on or near a road the question arises: what type of work is being carried out?

Often the work is construction work or construction related work.

However, other work is carried out on roads: for example waste collection, Gardai and ambulance crews working at the scene of an accident and postal workers delivering post.

THE LAW

Three branches of the law must be considered in relation to work-related vehicle safety. From an occupational health and safety perspective, the principal branch is health and safety law. Working time law must also be considered in relation to driving hours and breaks. Where employees and other workers are driving on the public roads, road traffic law applies.

Health and safety law

As with any aspect of work activity the provisions of the SHWW Act 2005 apply. Employers are required to manage and conduct their work activities to ensure, in so far as reasonably practicable, the safety, health and welfare of their employees, to identify the hazards, assess the risks and put in place control measures (*see Chapter 1*).

In relation to work-related vehicle safety the starting point is that a vehicle is defined as a place of work (section 2.1.c).

A number of provisions in the General Application Regulations apply. Regulation 14 is concerned with the movement of pedestrians and vehicles in danger areas. Workplaces should be organised in such a way that pedestrians and vehicles can circulate in a safe manner. Pedestrian and traffic routes should be clearly identified and sufficient clearance should be allowed for pedestrians. Where there are danger areas, and there is a risk of employees or objects falling, the areas should

be clearly indicated, unauthorised employees should be prevented from entering such areas and measures should be taken to protect employees who are authorised to enter these areas. The regulation relating to loading bays and ramps, regulation 16, is also applicable.

There are specific though similar provisions in the regulations concerning the management of health and safety on construction sites and in mines and quarries. There are similar provisions in the *Construction Regulations 2013*. Regulation 33 is concerned with traffic routes and danger areas, while regulation 36 is concerned with loading bays and ramps. Regulation 25 of the *Quarries Regulations 2008* is concerned with traffic routes, while section 42 of the *Mines and Quarries Act 1965* sets out the rules for the safe use of vehicles in mines.

Working time law

Apart from the general provisions governing the hours people can work, the hours drivers of lorries can work are regulated by the *Road Transport Act* and regulations on drivers' hours under working time regulations. Drivers of transport lorries must not drive for more than 11 hours in a 24-hour period. Continuous driving is limited to five and a half hours. Drivers must have 10 hours consecutive rest.

For more a detailed summary of the Regulations see Section 1, chapter 6, sub-section road transport workers.

Road traffic law

Drivers who drive for work must obey the general body of road traffic law. It is an offence to drive an uninsured vehicle, under the influence of alcohol or drugs, to break the speed limit, to use a handheld mobile phone, or to drive a defective vehicle.

If you are an employer who employs workers who drive in connection with work, while you will not be liable for dangerous driving or speeding offences, you may be liable for offences committed because a vehicle is defective or uninsured.

THE ROLE OF THE SAFETY REPRESENTATIVE

There are a number of positive steps that safety representatives can take to raise awareness and tackle problems with work-related transport. Consideration should be given to approaching employers to provide advanced driver training for those who cover extended mileage each year.

Ask your employer for risk assessments on work-related road safety to be undertaken if they have not already done so. After an accident, check that risk assessments are revised in consultation with safety representatives.

Make sure that workplace transport is included in all workplace inspections, and develop appropriate resources, especially checklists that relate directly to the work undertaken. Ensure that the employer's risk assessments are "suitable and sufficient", and have identified all the hazards and assessed the severity of risk.

Risk assessments should cover the site conditions and organisation, vehicle standards and the tasks. Ensure that control measures are effective, and look for ways that controls can be improved.

Try to eliminate particular hazards that pose the most risk – for example, try as far as possible to eliminate reversing; improve floor maintenance, especially where floors can become contaminated with oil or other substances; improve separation for pedestrians, pedestrian crossing sites and improve lighting if necessary.

Ensure that the employer has an effective operator training policy in place that deals with selection of operators, the content and extent of training programmes, any update or refresher training, and familiarisation when moving from one vehicle to a different kind of vehicle or different kind of work.

In workplaces where there is a lot of internal vehicle movement, make sure internal transport is a standing item on joint safety committee agendas.

Check back against the risk assessment when incidents happen to see if they have been covered.

Investigate incidents, as soon as possible after they happen, to establish causes, and ensure they are not repeated. Joint investigation with a safety officer or transport manager can be helpful, as issues can be discussed as the investigation proceeds. Ensure there is an effective incident reporting and record-keeping procedure in place.

[Forms/Publications/Machinery and Work Equipment/CoP.pdf](#)

EU-OSHA

EU-OSHA Facts Preventing Vehicle Accidents at the Workplace can be downloaded at: <https://osha.europa.eu/en/tools-and-publications/publications/factsheets/16>

RESOURCES/FURTHER INFORMATION

HSA guidance

The HSA has published *Safe Driving for Work Driver's Handbook*, which can be downloaded at: [http://www.hsa.ie/eng/Publications_and_Forms/Publications/Work_Related_Vehicles/Safe_Driving_for_Work_Handbook .pdf](http://www.hsa.ie/eng/Publications_and_Forms/Publications/Work_Related_Vehicles/Safe_Driving_for_Work_Handbook.pdf)

The Authority has published a number of useful web pages:

- *Work Related Vehicle Safety*: http://www.hsa.ie/eng/Topics/Work_Related_Vehicle_Safety/
- *Workplace Transport*: http://www.hsa.ie/eng/Vehicles_at_Work/Workplace_Transport_Safety/Workplace_Transport.html
- *Driving for work*: http://www.hsa.ie/eng/Vehicles_at_Work/Driving_for_Work/Driving_for_Work.html
- *Workplace Transport Risk Assessment Information Sheet*: http://www.hsa.ie/eng/Vehicles_at_Work/Workplace_Transport_Safety/Driver_Checklist.pdf
- *Workplace transport checklist*: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Work_Related_Vehicles/Workplace_Transport_Checklist.pdf
- *Professional driver checklist*: http://www.hsa.ie/eng/Vehicles_at_Work/Workplace_Transport_Safety/Driver_Checklist.pdf
- *Driving for work – your questions answered*: [http://www.hsa.ie/eng/Vehicles_at_Work/Driving_for_Work/Driving_for_Work_Your_Questions_Answered_Version_2 .pdf](http://www.hsa.ie/eng/Vehicles_at_Work/Driving_for_Work/Driving_for_Work_Your_Questions_Answered_Version_2.pdf)
- *Code of Practice Rider-operated lift trucks*: http://www.hsa.ie/eng/Publications_and

CHAPTER 34: WORK EQUIPMENT/MACHINERY

INTRODUCTION

Work equipment is defined in the General Application Regulations 2007 as meaning any machinery, appliances, apparatus, tool or installation for use at work. As the HSA comments in the Guide to the Regulations, work equipment ranges from complex machinery, such as a printing machine, to hand tools, such as a hammer. Work equipment also includes lifting equipment.

It is accepted that work equipment can be dangerous, but it is difficult to establish the statistical evidence to support that.

The HSA's statistical reports, which give figures for the triggers or causes of accidents, do not have a classification for machinery. The classification loss of control of hand tool, machine or object being worked obviously covers machinery accidents. In the 2012/2013 Statistical Report accidents triggered by loss of control of hand tool, machine or object being worked accounted for just 1.7% (just over 100) of the accidents reported to the HSA. However, when one considers that of the injuries reported to the Authority 9% (585 injuries) were finger injuries and 8% (520) were hand injuries, both of which type of injuries are associated with the use of machinery, it would seem many more injuries are caused by or linked to the use of machinery.

In the UK the HSE-GB does not publish figures for machinery-related injuries, but in an analysis of accidents in the manufacturing sector, the Executive noted that 14% of reported major injuries and 11% of over seven day injury absences involved contact with moving machinery.

The strongest statistical evidence from official sources on the scale of machinery accidents is a statistical analysis published by the Injuries Board. The analysis found that 10% of all workplace claims assessed by the Board in 2013 involved machinery and work equipment. The Board found that those

injured suffered crush injuries, fractures, lacerations, and severed digits and in severe cases amputations were required. In one case a person was killed.

Health & Safety Review has published an analysis of the information available on finger injuries. This analysis of HSA statistics found that finger injuries ranked second only to back injuries as the part of the body most often injured in work-related accidents. The analysis found that over a three-year period, 11% of all accidents reported to the Authority were accidents in which fingers were injured. An analysis of court cases found that finger injuries were by and large associated with machinery.

In three of the court cases the awards were over €500,000, which indicates the injuries suffered were extremely severe. The Injuries Board analysis disclosed that, in 2013, the Board awarded compensation totalling €3.1m. The average compensation award for injuries resulting from the use of machinery and work equipment was €39,472.

At the human level, machinery accidents can have a huge personal impact. The personal impact of finger injuries is captured in a compelling case study in the HSA's report *The Costs and Effects of Workplace Accidents: twenty case studies from Ireland* (by Hrymak and Perezgonzalez). The study concerns the case of a young cabinet maker whose fingers were caught in a circular saw. As a result of the accident the young man ended up with extensive damage to his right hand, which is now shorter than his left hand, and having to change his career.

Clearly machinery can be hazardous and therefore employers must carry out risk assessments and put in place control measures.

HAZARDS

In the standard textbook, *Safety at Work* by Ridley and Channing, an approach to identifying hazards is set out. This involves identifying the hazards at all stages of the equipment's use. Given the wide range of machines and tools that fall within the definition of work equipment perhaps a better approach to hazard identification is the list of

hazards mentioned:

- Crushing
- Shearing
- Cutting or severing
- Entanglement
- Drawing in or trapping
- Impact
- Stabbing or puncturing
- Impact

- Friction or abrasion
- High pressure fluid ejection
- Electrical shock
- Noise and vibration
- Contact with extreme temperatures.

The following review of case law highlights some of the hazards associated with machinery (see *Table 33.1*).

TABLE 34.1: Court cases identify machinery hazards

Hazard: drill bit kills worker

A court heard that a worker was killed when an extension bar and drill flew out of a machine and hit a worker on the head. Imposing a fine of €50,000 on the company, the judge said the company had bypassed interlock guards, used homemade extension bars, used grub screws, ignored manufacturer’s warning on the machine about the speed of operation (rpm), carried out no inspections or supervision and ignored a previous incident. The company’s three directors were also charged. The company and the directors pleaded guilty to charges of failing to, in so far as reasonably practicable, ensure the safety, health and welfare of employees. The directors were each given a one year suspended prison sentence. (*DPP for HSA v Technical Engineering and Tooling Services Limited and John Hunt, Tommy Kelly and Eugene Sheil*)

Hazard: Saw slipped

A 16-year-old schoolboy, who cut his hand with a saw in a woodworking class, was awarded damages of €22,500 by the Circuit Court. The court heard that the injury happened when the pupil was sawing wood and the saw slipped, lacerating the index finger joint. The pupil was taken to hospital where he was treated. The court heard that he has been left with a small superficial scar and has suffered no functional disability. (*Carroll v The Donahies Community School: Dublin Circuit Court, June 2010*)

Hazard: cleaning machine

A food processing company, which pleaded guilty to breaches of health and safety regulations, was fined €65,000 by the Circuit Criminal Court after the court heard how an employee’s hand was severed from his arm when it became entangled in machinery. The court had heard that the worker, who was aged 21, had been working with the company as a general operative for six months at the time of the accident. For the two months before the accident he was working on a grinding and blending line.

On the day of the accident his left forearm became entangled in the machinery. At the time of the incident, the grinder and a vertical auger were separated and being cleaned out by the worker. Part of the worker’s hand became entangled in the screw of the vertical auger and was severed from his arm. He suffered an amputation of the left forearm and hand at the mid forearm level.

The court heard that there was a multiplicity of defects in the machinery being operated for the grinding and blending process at the plant. The machinery was inadequately guarded and was unsafe for use. Emergency stops were not operating effectively. There were no labels on the operator control panel and there was no timed safety interlock to prevent access to moving parts. There was no preventative maintenance or inspection of the machinery and faults that had previously been noted had not been acted on.

TABLE 34.1: Court cases identify machinery hazards *continued*

The company pleaded guilty to failing, in so far as reasonably practicable to: manage its work activities so as to ensure the safety of its employees; in the design and maintenance of safe machinery, where there was a risk of physical contact with moving parts of work equipment which could lead to accidents, to ensure that guards of protection devices are provided to prevent access to the danger zones or halt movement of dangerous parts before the danger zones are reached. The company was fined a total of €65,000. (*DPP for HSA v Dawn Farm Foods Limited: Circuit Criminal Court, Naas*)

Hazard: forklift

An injured mechanic was awarded damages of IR£634,500 (€805,180) by Mr. Justice Johnson, after an accident in which the young woman motor mechanic's leg was crushed between a forklift truck and a wall. He held that her employers were 100% responsible for the accident. The judge held that whether the cause of the accident was as the mechanic said, that she slipped off the seat and that a colleague de-stabilized the forklift and crushed her or, as the defendant claimed, a colleague drove it at her request, the employer was negligent. Following the accident the mechanic had to have 12 operations, which culminated in an operation for the removal of her leg below the knee. Another result of the accident was that she became depressed and lost her zest for working as a mechanic.

Hazard: falling skip

Imposing a fine of £75,000 on a local authority, following the death of a worker who was struck by a large waste skip which fell from a lorry as it was being lifted, a judge said management could not escape its share of the blame for the death. The judge said that the Council's management did not ensure that systems were in place to keep up with safety guidance, which had been in place three years before the accident. Earlier the court heard that the worker was picking up waste from the back of the lorry on which a skip was hooked. However, neither the worker nor the lorry driver were aware that the hook had not engaged properly and that given the size and weight of the skip when it hit the back rollers of the lorry, the hook ripped free. The worker was crushed to death when the skip toppled backwards on top of him. (*HSENI v Coleraine Borough Council: Antrim Crown Court, October 2013*)

Hazard: falling weight

Following an accident in which a worker was paralysed, a company was fined a total of €70,000 by the Circuit Criminal Court. The court heard that the worker, who was aged 17 at the time of the accident, was working for the summer for a farm machinery supply firm. One day, while he was assisting a mechanic to assemble a cultivator, a weight of 980kg fell on him, paralysing him from the waist down.

The company was found guilty of failing to provide information training and supervision as required by the SHWW Act 2005, section 8(2)(g) and was fined €25,000 in relation to the offence. The company was also found guilty of failing to comply with the SHWW (Children and Young Persons) Regulations 1998, by not assessing the risks because of the young person's lack of experience and absence of awareness and was fined €10,000. The company pleaded guilty to failing to manage and conduct its activities to ensure, in so far as reasonably practicable, the safety, health and welfare of employees. The company was fined €35,000 on this charge. (*DPP for HSA v J R Perry Limited, Circuit Court, Naas, March 2009*)

RISK AND CONTROL MEASURES

The HSE-GB publication, *Why is machinery safety important*, advises before using a machine that employers and operators need to think about the risk that may occur and how the risks can be managed. This requires:

- Checking that the machine is complete with all safeguards fitted and free from defects.
- Having a safe system of work for using and maintaining the machine.
- Ensuring static machines are installed properly and are stable.
- Choosing the correct machine for the job.
- Ensuring that the machine is switched off and isolated or locked off before taking any action to remove blockages, clean or adjust the machine.

There is also a need to identify risks from electrical, hydraulic or pneumatic power supplies.

When thinking about how to make a machine safe, among the measures to be considered to prevent access to dangerous parts are:

- The use of fixed guards.
- If fixed guards are not practical, the use of interlocks to ensure that the machine cannot be used before the guard is closed and which cannot be opened while the machine is still moving.
- Where guards cannot give full protection, use measures such as jigs, holders or push sticks.

Operators must be provided with information, instruction, training, supervision and safety equipment.

The HSA advises on the elimination and control of risks from machinery used on farms, construction sites, quarries and fishing vessels. While some of the advice is sector-specific, much of the advice has cross-sectoral application.

For example, the guidance on clearing blockages safety on agricultural machines, in which the Authority advises:

- Firstly consider is the person competent to unblock the machine safely.
- Then consider has the person been trained to clear the blockage.
- Before attempting to clear the blockage, stop the machine.
- Read the operator manual before attempting to clear the blockage.
- Never use hands or try to kick a blockage free
- Ensure the worker has the correct tools for the job.
- Secure anything which may fall on the workers or others in the vicinity.
- Replace all guards before restarting the machine.

A case that came before the Supreme Court, where the issue was whether the manufacturer of a farm machine was liable for injuries suffered by a farm worker, illustrates the dangers of not following the HSA's advice on clearing blockages. To clear the blockage the farm worker climbed under the harvester and removed knobs retaining an inspection plate. There was a hatch at eye level and when he removed the panel, he was faced with a solid wall of grass. He started pulling out the grass with his hands. He was pulling out grass for about four or five minutes when he felt something come down and squash his left hand which he then pulled out of the chute. All of his fingers were badly crushed but were intact. He told the High Court (the evidence was given in the High Court and came before the Supreme Court in the form of transcripts) that the engine was running (idling) but that the blower box was switched off: that is that the clutch was not engaged.

The HSA sets out the precautions to be used when working around PTO shafts. PTO shafts should be fully enclosed and should be disengaged before clearing blockages. Advice that is applicable in all situations: loose or torn clothing should never be worn when working near machinery. It is best practice to wear well-fitting overalls with zipped pockets and safety boots with steel toecaps.

The HSA's *Use of Mobile Machinery on Construction Sites Information Sheet* also includes advice that has cross-sectoral relevance. When using mobile machinery, control measures might include:

- Planning routes.
- Limiting the number of vehicles on site.
- Setting speed limits.
- Providing segregated pedestrian walkways that keep pedestrians and vehicles apart.
- Use signs.
- The use of reversing alarms/beacons, convex mirrors and reversing cameras.

LIFTING EQUIPMENT

Though now covered by the Use of Work Equipment Regulations there are particular characteristics with the use of lifting equipment, which is defined as work equipment for lifting, lowering loads or pile driving, and includes anything used for anchoring, fixing or supporting such equipment.

The definition covers items such as cranes, hoists and lifts, winch-operated hoists and lifts. The regulations impose obligations to carry out periodic checks and thorough examinations of such equipment (*see Table 33.2*), as well as requiring that the persons who carry out such examinations are competent. The regulations also impose duties on those who hire out lifting equipment for use by others.

A case taken by the HSA against a plant hire company, which was found guilty of failing to provide information regarding the attachment of a Niftylift cherry picker which was involved in a fatal road traffic accident, illustrates the application of the regulation. The case arose as a result of an accident in April 2010, which occurred when the cherry picker which was attached to a van was being driven on a public road. While being driven on a public road the cherry picker became

detached from the van and crossed the road into the path of an oncoming car. The driver of the car was killed.

At the time of the accident the cherry picker was being returned to the plant hire company. The van to which it was attached was owned by a carpenter who was renovating his aunt's house. A garda public service vehicle inspector told the court that in his opinion a breakaway cable, which would have connected to the cherry picker to the van, was not present. He explained that the breakaway cable would have applied the brakes on the cherry picker in the event of the van and cherry picker separating.

Evidence was given by a Mr Finnegan, who collected the cherry picker, that he had been given no instructions on how to use it. He did not see any safety instructions on the basket of the machine and there was no breakaway cable on the cherry picker. However, an employee of the plant hire company told the court that he had asked Mr Finnegan if he knew how to use the machine and was told by him that he had used it before. He was, he said, certain that the breakaway cable was on the machine, as it was the "most obnoxious colour pink". He added that instructions on the use of the machine were in a pocket in the basket.

The plant hire company was charged with failing to provide information regarding the attachment of the cherry picker to a towing vehicle and information relating to the use of the breakaway cable and failing to ensure that the cherry picker was maintained in a safe way so as to reduce the dangers to users and that it had no breakaway cable or secondary coupling device.

Imposing sentence, Judge Keenan Johnson said there had been a failure on the part of the hire company's employee to insist on giving instructions. Imposing a fine of €24,000 and ordering the company to pay costs of €6,000, Judge Johnson said "Laxity and safety breaches will not be tolerated in any court".

TABLE 34.2: Time periods for thorough examinations

Examinations at six monthly intervals

- Hoist and lifts
- Suspended access equipment
- Mast climbing work platform
- Lifting accessories: including chains , ropes, rings, hooks, shackles, clamps, swivels, spreader frames and beams, , vacuum lifting devices
- Mobile elevated work platforms
- Tower crane climbing rig
- Lifting machines (personnel) (see also Schedule D of Work Equipment Regulations)
- Patient hoist

Examinations at 12 monthly intervals

- Items for support of lifting equipment
- Fork lift truck: including interchangeable accessories
- Telehandler: including interchangeable accessories
- Vehicle lifting table
- Hoisting equipment on fishing vessels
- Winches used for lifting loads.

THE MACHINERY REGULATIONS

As with any aspect of work activity the provisions of the SHWW Act 2005 apply. Employers are required to manage and conduct their work activities to ensure, in so far as reasonably practicable, the safety, health and welfare of their employees, to identify the hazards, assess the risks and put in place control measures (see Chapter 1).

In relation to work equipment, which as the definition quoted above sets out, includes machinery Chapter 2 of Part 2 of General Application Regulations (Use of Work Equipment) sets out the rules on the use of work equipment, are outlined in Section 2, Chapter 2.

The *European Communities (Machinery) Regulations 2008* (SI 407/2008) and the European Directive on which they are based could be described as hybrid legislation. At the core of the Directive and Regulations is the concept of CE marking. The CE mark is effectively the manufacturer's/suppliers statement that a machine complies with the requirements of the Machinery Directive.

The origins of the Regulations and the Directive lie in the EU's single market policy, which recognised the need to ensure consistent health and safety standards throughout the European Community. Hence the essential health and safety provisions in the Directive and the Regulations.

More particularly the essential health and safety requirements address the design of machinery for safe handling, use and maintenance; controls and control systems; protection against contact with moving parts; protection against noise, vibration and emission of hazardous substances; particular provisions for mobile machinery, machinery for lifting persons/goods and lifting accessories; portable machinery; machinery for foodstuffs/ pharmaceuticals, machinery for underground work and machinery for pesticide application. There are also provisions relating to the marking of machines and the contents of user instructions.

Manufacturers have to carry out a risk assessment. As well as carrying out a risk assessment, a risk evaluation must be carried out. Manufacturers are also required to take more account of ergonomic factors.

A manufacturer or a manufacturer's authorised representative who breaches a duty set out in the Regulations (regulations 4 to 11) or commits an offence (for example forges CE certification) or breaches a prohibition or contravention notice commits an offence. If convicted the person faces

a fine and/or imprisonment or both. If convicted in the District Court, the person may be fined up to €5,000 and sent to jail for up to six months. If convicted in the Circuit Court, the person may be fined up to €500,000 and be jailed for a maximum period of two years.

THE ROLE OF THE SAFETY REPRESENTATIVE

Safety representatives can play a positive role by bringing to the employer's attention problems with work equipment. Take the example of a sagging running board in a line in print works. It is in the employer's interest that it is fixed. If it is not fixed, productivity can be interrupted and there is the possibility workers could be injured. The safety representative, by bringing the problem to the employer's attention, can ensure the running board is fixed, helping the employer to maintain productivity and reducing the possibility that those he/she represents will suffer injury.

Safety representative should ask the employer for work equipment risks assessments to check if they have been carried out and are up-to-date. If not they should request that the employer carries out or updates the risk assessment. After an accident check that risk assessments are revised in consultation with safety representatives.

Make sure that work equipment/machinery is included in all workplace inspections, and develop appropriate resources, especially checklists that relate directly to the work undertaken. Ensure that employer's risk assessments are "suitable and sufficient", and have identified all the hazards and assessed the appropriate severity of risk.

Impress on the employer the need to eliminate particular hazards that pose the most risk and ensure that the employer has an effective operator training policy in place and provides information, instruction and training when new machinery is brought into use.

Check back against the risk assessment when incidents happen to see if they have been covered. Investigate incidents as soon as possible after

they happen, to establish causes, and ensure they are not repeated. Joint investigation with a safety officer/production manager can be helpful, as issues can be discussed as the investigation proceeds. Ensure there is an effective incident reporting and record-keeping procedure in place.

RESOURCES/FURTHER INFORMATION

HSA guidance

The HSA has published a *Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007*, which can be downloaded at: http://www.hsa.ie/eng/Publications_and_Forms/Publications/General_Application_Regulations/Work%20Equipment%20updated%20version.pdf

The HSA has also published a number of web pages

- *Guidance on the Purchase of New Machinery Information Sheet:* http://www.hsa.ie/eng/Publications_and_Forms/Publications/Information_Sheets/Guidance_on_the_Purchase_of_New_Machinery.pdf
- *Use of Mobile Machinery on Construction Sites:* http://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Use_of_Mobile_Machinery_On_Construction_Sites.pdf
- *Clearing Blockages on Agricultural Machinery:* http://www.hsa.ie/eng/Safety_Alerts/2011/Agricultural_Machinery_Blockages/
- *Machinery (PTO shaft precautions):* http://www.hsa.ie/eng/Your_Industry/Agriculture_Forestry/Vehicles_Machinery/Vehicles/

HAZARDS: SECTION 7

VULNERABLE WORKERS

Irish health and safety legislation identifies young workers and children, pregnant employees, and shift and night workers as workers who form a group, classified in legislation as sensitive risk groups. The particular need to protect workers in these groups has long been recognised and in the General Application Regulations 2007 the special protections to be afforded to these workers are set out in Part 6 of the Regulations.

However the three groups are not the only workers who have particular issues. In recent years scientific and other evidence has highlighted the risks faced by other groups of workers, in particular older workers and disabled workers. While there are no specific health and safety regulations, there is legislation in relation to disabled workers, which while it falls under different headings should be considered and acted upon by employers.

In Britain the HSE-GB has identified these groups of workers as 'vulnerable'. In this section we review the legislation enacted to protect sensitive groups and we review the guidance on protecting those workers who are vulnerable but are not afforded specific protection under the health and safety legislation.

CHAPTER 35: SENSITIVE RISK GROUPS

THE PROTECTION OF CHILDREN AND YOUNG PERSONS

The International Labour Organisation, in the *Encyclopaedia of Occupational Health and Safety*, cites research showing that temporary workers have 2.5 times the accident rate of permanent workers. Temporary workers are, the research found, predominantly young inexperienced workers. Extrapolating from the research, the ILO concludes that young workers are at highest risk of accidents because of inexperience, lack of training and inadequate preparation.

The HSA in its elearning education programme, *Choose Safety Young People at Work*, makes the same point in a rather less academic manner. The Authority notes that starting a new job can be a nerve-wracking time, trying to learn the ropes, find your way around and even remembering everyone's name.

An analysis of reported accident figures by the HSA in 2007 found that in that year 10% of reported injuries were suffered by workers in the 15 to 19 year old age group, which is considerably in excess of the numbers of that age group as a percentage of the workforce. The CSO figures suggest that workers in that age group represent about 4% of the workforce.

Over the years the number of accidents in which children and young persons, either working or just being on farms, have been killed or injured has been a cause of serious concern to the HSA. The Authority estimates that 20% of all fatal accidents on farms involve children or young persons.

Laws have been enacted to protect young persons. While the *Protection of Young Persons (Employment) Act 1996* is primarily an employment law measure, it is the basis for the protection of the health and safety of young employees and children. There are restrictions on

the hours both young persons and children can work and on the types of work they can undertake.

Young persons are persons aged 16 and 17; children are persons under the age of 16. They are not allowed to do work that:

- Exceeds their physical or mental capacities
- Exposes them to toxic substances
- Exposes them to radiation
- Involves extremes of heat or cold
- Involves risks that they are unlikely to recognise or avoid because of their lack of experience or training.

The *Protection of Young Persons (Employment) Act 1996* gives effect to an EU health and safety directive on the protection of young workers. The Act, which is concerned with workers under 18 years of age, places limits on the hours they may work. Those under 18 may not be employed for more than 40 hours per week or eight hours per day.

Those aged 14 may not work during school term time, nor may they work more than 35 hours a week at other times – unless on a work experience programme when they may work 40 hours a week. Fifteen-year-olds may, during term time, work eight hours a week and otherwise the same hours as 14-year-olds.

There are also limits on night, early morning and evening working. Those under 16 may not start work until 8am, while if over 16 they may start at 6am. They may not work later than 8pm (or 10pm if over 16) when there is school the next morning - or 10pm (11pm if over 16) if there is no school. Rest periods must be allowed, after 4 hours for those under 16 and after 4.5 hours for those over 16. All young employees are entitled to two days off every week and 12 hours off between work periods, or 14 hours if they are under 16. A young person who is employed on a fishing vessel between 10pm one day and 6am the next day must be allowed equivalent compensatory rest time.

Regulations permit a full-time bar apprentice, who is a young person, to work up to midnight, provided he/she is not required for work before 8am the

following morning. Young persons working on general bar duties may work until 11 pm, provided the following day is not a school day and/or the young person is not required to work before 7am the next day.

As well as the statutory protections, the HSA has published the *Code of Practice on Preventing Accidents to Children and Young Persons in Agriculture*.

Employers must assess any risk to a child or young person's health and safety. When carrying out the assessment the employer must take account of the child/young person's lack of experience, absence of awareness of risks, lack of maturity and exposure to harmful physical, chemical or biological agents and work processes. Other factors to be considered are the layout/fitout of the work station, work equipment, working arrangements and training and supervision provided. If the assessment reveals a risk that the child/young person would not understand or that exposes them to extremes of heat, cold or vibration they must not be employed to do that work.

Where a risk is identified and preventative measures are taken, the young person and in the case of a child, the child's parent/guardian, must be informed of the measures taken. Where a risk assessment reveals a risk to safety and health or to the physical or mental development of a child an employer must make health surveillance available. The employer must inform the young person or the child and in the case of a child the child's parents or guardians of the results of health surveillance or assessment.

A schedule to the *Safety, Health and Welfare (Children and Young Persons) Regulations 1998* sets out a non-exhaustive list of agents and processes to be considered when carrying out a risk assessment. The agents include carcinogens, explosives, dangerous animals, liquid petroleum gas and high voltage electricity.

Employers must display an abstract of information on the Act and regulations. A register must be kept of young persons employed in mines. A child may not be employed below ground in a mine.

THE PROTECTION OF PREGNANT, POST NATAL AND BREASTFEEDING EMPLOYEES

The *Maternity Protection Act 1994* established the right of pregnant employees to maternity leave and the right of pregnant employees, employees who have recently given birth and breastfeeding employees to health and safety leave.

The measures to be taken by an employee when she knows she is pregnant and her employer when notified of the pregnancy are set out in the *General Application (Protection of Pregnant, Post Natal and Breastfeeding Employees) 2007 (Part 6, Chapter 2, regulations 147-152)*.

When an employee knows she is pregnant she should, as soon as is practicable, notify her employer of her condition. She should give her employer a medical certificate confirming her condition. As the earliest stages of pregnancy are the most critical one for the developing child, the HSA advises it is in the employee's best interest to let her employer know of the pregnancy as soon as possible.

When a woman tells her employer that she is pregnant, the employer must assess any risks to the health and safety of the woman and the unborn child. If the assessment reveals a risk, then the employer must inform the employee of the risk. It is important to note that the HSA advises that the employer's safety statement should already have identified the hazards and risks at the workplace that might affect pregnant employees. Therefore the risk assessment specifically required by the Pregnancy Regulations should be a reappraisal of the hazards as they affect the particular employee.

When a woman tells her employer that she is pregnant, the employer must assess any risks to the health and safety of the woman and the unborn child. If the assessment reveals a risk, then the employer must inform the employee of the risk.

Then the employer must see if the work or hours of work can be adjusted so as to eliminate the risk. If this cannot be done, then the employer must, if possible, next offer the employee suitable

alternative work. If this option is not possible, then the employer must grant health and safety leave.

Health and safety leave must also be granted to employees who are breastfeeding, if there is a risk to the mother or child. Employees who are pregnant, or mothers who are nursing, are entitled to time off, without loss of pay, to attend ante or post natal care.

The factors to be considered when assessing if there is a risk to the health and safety of the pregnant woman, the nursing mother or the child (born or unborn) are: physical, biological or chemical agents, some industrial processes and underground mining work. Special attention must be paid to night work.

Reference to the HSA's *Guide to the Pregnant Employees Regulations* is advisable. The Guide makes it clear that risks to pregnant employees "are part of the routine risk assessments" at workplaces and should not be left until pregnancy is notified.

The risk assessment should cover the general hazards, hazards specific to the pregnancy and hazards specific to breastfeeding. The general hazards are described in Schedule 8 of the Regulations as physical agents regarded as agents causing foetal lesions or likely to disturb placental attachment or both. Physical agents include noise and vibration, extremes of cold and heat, handling of loads entailing risks, shocks, ionising and non-ionising radiation, movements and postures travelling inside or outside the workplace, mental or physical fatigue and other physical burdens connected with the activity of the employee.

The hazards specific to pregnancy are pressurisation chambers, rubella (unless adequately immunised), toxoplasma, lead and lead substances, underground mine work, and certain physically demanding tasks, such as heavy lifting. The hazards specific to breastfeeding are lead and lead substances and underground mine work.

In the HSA publication *Pregnant at Work Frequently Asked Questions* the HSA mentions that there are no specific risks to expectant

mothers or to the foetus from noise but that prolonged exposure may lead to increased blood pressure and tiredness. Nor are there any particular risks to mothers who have recently given birth or are breastfeeding. The Authority advice is that there are no specific problems working in extreme cold but warm clothing should be provided. However heat is different. Exposure to heat can lead to heat stress and fainting.

Work with non-ionising radiation presents no greater risk for expectant or breastfeeding mothers. On the other hand, the HSA notes that ionising radiation is harmful to the foetus and work practices should be designed to keep exposure below the statutory dose limit for pregnant employees.

Biological agents are known to cause abortion of the foetus, so reference needs to be made to the *Biological Agents Regulations 2013*. The agents which can cause harm are agents in groups 2, 3 and/or 4.

One right to which pregnant, post natal and breastfeeding employees are entitled, and which falls outside the Maternity Act Protection Act and part 6 of the General Application Regulations, is the right to rest in appropriate conditions. Regulation 24 of the General Application Regulations requires employers to ensure that such employees are able to lie down to rest in appropriate conditions.

A case which came before the Employment Appeals Tribunal illustrated the issues that can arise with risk assessment and health and safety leave (see *Table 34.1*).

NIGHT WORK AND SHIFT WORK

As far back as 1919 the first International Labour Organisation convention proposed an upper 48-hour limit to the working week, and in 1935 the ILO proposed a 40-hour working week. In Ireland working time is now limited by the *Organisation of Working Time Act 1997* and regulations made under the Act. These are set out in detail in Section 1, Chapter 6.

TABLE 35.1: Unfair dismissal claim by pregnant employee

The Employment Appeals Tribunal has held that an employer does not have to carry out a health and safety leave risk assessment with the employee's full participation.

This decision was made as part of the Tribunal's rejection of a claim brought under the Maternity Protection Act 1994-2004 by a pregnant woman, who had been refused a certificate in order to go on health and safety leave.

The employee was employed to make sandwiches for a company. Her work involved lifting buckets of ingredients weighting up to 15kg and getting boxes weighing up to 20kg from the cold storage room. When the employee's pregnancy was confirmed by her GP, she asked for lighter duties.

In her evidence, she told the Tribunal that her employer said she was not the first pregnant woman to work for the company, so he did not see why she was concerned. She said there was lighter work in the packing area and she asked for alternative work.

She asked for a certificate to go on health and safety leave, if alternative work was not available. The employer refused to provide a certificate, saying he had contacted her GP and was assured there was no danger. The doctor denied such a conversation took place.

She again requested a certificate and gave her employer permission to contact her doctor. Following a letter from her solicitor, she was called to a meeting with her employer and was asked for a cert to say she was fit for work. The certificate she provided contained recommendations, which were not implemented. A risk assessment was carried out but she was not consulted about it.

The employer gave evidence that he had carried out a risk assessment and identified the risks to the employee. As there were no extremes of temperature (the work area was a consistent 12 degrees) and assistance could be given for any lifting required, he could not justify completing a health and safety leave certificate.

He said that at meetings with him, the employee said she no longer wanted to work and he took this as her resignation. He sent her P45 to her. A further meeting followed at which the employee said she wanted to come back to work if her conditions were changed. He agreed to remove lifting duties but said he would need confirmation from her doctor that she could not work with the temperature at 12 degrees. This was not forthcoming.

The employee brought a claim under maternity protection legislation. In its determination, the Tribunal, citing the SHWW Act 2005, section 18, noted that there is no onus on an employer when carrying out a risk assessment of the workstation of an employee that requires the risk assessment be carried out with the "the full participation" of the employee. In this regard, it is interesting to note that the determination makes no reference to the General Application (Protection of Pregnant Employees) Regulations 2007.

The case came before the Tribunal by way of an appeal by the employer against a Rights Commissioner's decision that the employee had been unfairly dismissed. There is no mention in the

TABLE 35.1: Unfair dismissal claim by pregnant employee *continued*

determination of whether the Pregnant Employees Regulations were pleaded, nor is it mentioned if HSA guidance was considered.

It is worth looking at the guidance from the Authority on its website. The answer to the question of “what should the employer do when he/she becomes aware that that an employee is pregnant?” is that once an employer becomes aware that an employee is pregnant, the employer must assess the specific risks from the employment to that employee and take action to ensure that she is not exposed to anything which would damage either her health or that of her developing child. (*Canavan v Bakowsak: EAT ref, P/72010, October 2012*)

There is an extensive volume of research on the health effects of long working hours, shift work and night work. One such study, which has received widespread publicity internationally, has found that shift work impairs cognition. The level of cognitive decline seen in people who worked irregular shifts for 10 years was equivalent to six and a half years' worth of natural, age-related cognitive decline, said researchers from the universities of Toulouse and Swansea. Researchers found that stopping shift work was linked with an improvement in cognitive function – suggesting that any ill effects are reversible – but said that it took five years out of shift work for this effect to be seen. The research was carried out by researchers from the Universities of Toulouse and Swansea.

Other research, has found:

- Regular shift work by pregnant women is associated with foetal loss (*Journal of Environmental and Occupational Medicine*).
- Shift work is associated with an increased risk of type 2 diabetes (*Journal of Occupational and Environmental Medicine*).
- Rotating night shift work linked to type 2 diabetes in women (*Plos Medicine*).
- Shift workers suffer increased risk of vascular disease (*British Medical Journal online*).
- Shift work which involves circadian disruption is probably carcinogenic to humans and for painters is definitely carcinogenic (*The Lancet*).

The HSA's *Guidance for Employers and Employees on Night and Shift Work* lists the effects of night and shift work as including:

- Disruption of the internal body clock (circadian rhythms).
- Sleeping difficulties.
- Fatigue.
- Health effects.
- Social and family effects.
- Leads to errors and accidents.

Given that it is estimated that about 15% of the workforce in Ireland works shift work and night work, managing the hazards and controlling the risks associated with night work and shift work is a significant challenge.

What the law requires

There are two aspects to the law protecting workers from the effects of shift work and night work. There are the limits on hours as set out in the Organisation of Working Time Act and regulations made under the Act and the protection afforded by the provisions of the General Application (Night Work and Shift Work) Regulations 2007 (Part 6, Chapter 3).

Employers are required to take appropriate steps to protect the safety and health of nightworkers and shiftworkers, to carry out a health assessment of the health and safety risks that attach to nightwork to determine if the work involves special hazards or heavy physical or mental strain.

Before employing a person as a nightworker, employers must make available an assessment of the health effects of such work. Such assessments must also be made available at regular intervals while a person is doing night work. The assessment must be carried out by a registered medical practitioner or a person operating under his/her supervision.

If an employee becomes ill or exhibits symptoms of ill-health that are recognised as being connected with nightwork, the employee must, if it is possible, be transferred to day work.

THE ROLE OF THE SAFETY REPRESENTATIVE

The health and safety issues faced by people who fall into the sensitive risk group category are complex. Safety representatives need to be informed about the complexities. They should ensure that the training they receive as health and safety representatives equips them to deal with the concerns of their co-workers about these issues. If they feel that the training they have received does not adequately prepare them to deal with these concerns they should ask their employer to send them on further training courses.

Safety representatives should review their employer's safety statement to ensure the risks to workers in the sensitive group are addressed in the safety statement. One particular area that they might highlight to employers is the HSA's guidance to employers on assessing the risks to pregnant employees in their safety statement, so that when a pregnant employee notifies her employer that she is pregnant the risk assessment at the time is a reappraisal.

Where they believe issues are not addressed in the safety statement they should raise these with the employer.

RESOURCES/FURTHER INFORMATION

HSA guidance: Young Persons

Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Children_Young_Persons.pdf

Choose Safety Young People at Work: http://www.hsa.ie/eng/Education/Teacher_Support_and_Resources/Choose_Safety/Choose_Safety_Students_Workbook.pdf

Code of Practice on Preventing Accidents to Children and Young Persons in Agriculture: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Codes_of_Practice/Code_of_Practice_on_Preventing_Accidents_to_Children_and_Young_Persons_in_Agriculture.pdf

Children and Safety on Farms: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Agriculture_and_Forestry/Children_and_Safety_on_Farms.pdf

HSA guidance: Pregnant, post natal and breastfeeding employees

Guide to the Safety, Health and Welfare at Work (General Application) (Pregnant, Post Natal and Breastfeeding Employees)) Regulations: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Pregnant_Post_Natal.pdf

Pregnant at Work Frequently Asked Questions: http://www.hsa.ie/eng/Workplace_Health/Sensitive_Risk_Groups/Pregnant_at_Work_Frequently_Asked_Questions/

HSA guidance: Night work and shift work

Guide to the Safety, Health and Welfare at Work Act (General Application) (Night Work and Shift Work) Regulations 2007: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Night_Shift_Work.pdf

Guidance for Employers and Employees on Night Work and Shift Work: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Night_Shift_Work.pdf

[ie/eng/Publications and Forms/Publications/Healthcare Sector/Night and Shift Work 2012.pdf](#)

Night and Shift Workers Frequently Asked Questions: [http://www.hsa.ie/eng/Archived_Material/FAQs/Night and Shift Workers/](http://www.hsa.ie/eng/Archived_Material/FAQs/Night_and_Shift_Workers/)

HSE-GB guidance

New guidance on managing shift work: <http://www.hse.gov.uk/humanfactors/resources/articles/managing-shift-work.htm>

Good practice guidelines for shift work: <http://www.hse.gov.uk/humanfactors/topics/good-practice-guidelines.htm>

CHAPTER 36: VULNERABLE RISK GROUPS

Older workers and those with a disability are classified by the HSE-GB as vulnerable workers. In this chapter we consider the particular health and safety issues faced by older workers, those with a disability and migrant and temporary/casual workers.

OLDER WORKERS

The term older worker is generally taken as referring to workers aged 55 and over, although The National Economic and Social Forum in a report, *Labour Market Issues for Older Workers*, extended the definition to include workers aged from 45 to 65. However, taking the normal classification 55 to 64, CSO figures for 2011 show that there were 226,643 older workers at work in Ireland.

That figure can be expected to increase. EU-OSHA, summarising the European Strategy 2020, states the aim of EU policy is to increase the employment rate of the population aged between 20 and 64 to 75%, which will the agency says mean European citizens will have to work longer. According to EU-OSHA an opinion poll shows that a large majority of EU citizens believe that good health and safety practices are very important to work for longer before they retire.

The HSA states “older workers are generally less likely to have accidents than their younger counterparts”. However, when an accident occurs it tends to result in more serious injuries (i.e. permanent disability, dismemberment or death). As some functional capacities, mainly physical (e.g. decreased ability to judge the speed of moving objects) and sensory (e.g. vision or hearing) decline as a result of the natural ageing process, account needs to be taken of this with older workers”.

EU-OSHA addresses concerns that age-related declines in functional capacities and health automatically leads to worsening performance and decreased productivity among older workers. There is, the Agency says, no consistent evidence that

older workers are generally less productive than younger workers.

The HSE-GB states the key elements of cognitive performance important for workplace health and safety, such as intelligence, knowledge and use of language, do not generally show any marked decrease until after the age of 70. Indeed the evidence is that safe performance of tasks is unlikely to be affected, as older individuals can generally compensate for them with experience, better judgment and job knowledge. Mirroring the HSA’s comments, the HSE-GB states there is little conclusive evidence that older workers have an increased risk of occupational accidents, though where there are accidents they are likely to be more serious. Older workers may experience more slips, trips and falls than younger workers and recovery following an injury may take longer. The wider European experience, as commented on by EU-OSHA, confirms those findings and adds that sick leave decreases with age.

However there are a number of studies on how the ability to work changes with age. Physical changes, such as loss of muscular strength and range of joint movement, decreased ability to maintain good posture and balance, reduced vision and auditory capabilities, can have a significant effect. The efficiency of the cardiovascular system decreases significantly with age and changes associated with the cardiovascular and respiratory systems may make it difficult to perform some physically-demanding tasks. Osteoporosis is more commonly found in individuals aged over 50.

Guidance for employers

The HSE-GB advises that employers should:

- Review risk assessments if anything significant changes, not just when an employee reaches a certain age.
- Not assume that certain jobs are physically too demanding for older workers, indeed many jobs are supported by technology which can absorb the physical strain.
- Think about the activities older workers can do, as part of your overall risk assessment and consider whether any changes are needed.

- Consult older workers when considering control measures.
- Utilise the knowledge and skills of older workers by having them work alongside colleagues in a structured programme to capture knowledge and learn from their experience.

EU-OSHA recommends carrying out age-sensitive risk assessments, which take account of differences in functional capacity and health. The risk assessment should consider the work demands in relation to the individual's functional capacity and health status. The Agency promotes good workplace design as an aid, which will benefit all age groups, but targeting older workers. Changes in vision can be addressed by lighting and regular eye-sight tests. Hearing can be helped by reducing noise levels and regular hearing tests are recommended. Measures to address functional capacity include job-redesign, good ergonomic design, use of equipment and other assistive technologies and more frequent short breaks.

WORKERS WITH DISABILITIES

There are two definitions of disability. One is found in the *Employment Equality Acts 1980-2011*, which defines disability as meaning employers are required to provide reasonable accommodation for employees with disabilities. The other is the definition in the Disability Act 2005.

The HSA, in its publication, *Employees with disabilities: an employer's guide to implementing inclusive health and safety practices for employees with disabilities*, states one in ten Irish workers suffer from a disability. Disabilities range from the physical to intellectual or mental health conditions. Examples of disability are impairment of vision and/or hearing, asthma, depression and anxiety.

The law, which is reviewed in more detail below, requires employers to ensure that places of work are organised to take account of people with disabilities and to make 'reasonable accommodation' to enable people with disabilities to have access to employment, to advance in

employment and to undergo training. Reasonable accommodation measures may include:

- Making workplaces more accessible for people with disabilities.
- Adapting work equipment, by for example having a talking lift with tactile floor buttons
- Ensuring good lighting.

An EU-OHSA guide, *Ensuring the health and safety of workers with disabilities*, advises that a risk assessment should cover:

- Task: the design of the job, work activities.
- Individual: specific needs with respect to the disability.
- Work equipment: for example assistive technologies whether workstations and/or equipment adjusted to the individual's requirements.
- Work environment: for example the layout of the premises, lighting, heating, access, exiting
- Work organisation: how work is organised and schedules.
- Physical hazards such as dangerous substances for example asthma sufferers may be more sensitive to chemicals used at work.
- Psychosocial hazards such as stress or bullying: for example disability may be used as an excuse for bullying.

Risk assessment should be disability-sensitive and co-ordinated with anti-discrimination actions. They should also take account of individual workers' differences, taking into account both the nature and extent of the disability and the working environment.

The HSA guide states a risk assessment should take account of particular risks for employees with disabilities and identify if there are any particular hazards or risks for staff members with conditions such as restricted mobility, limited dexterity, impaired vision, impaired hearing, limited understanding, and health conditions such as heart problems, epilepsy or asthma.

THE LAW

The law in relation to older workers and workers with disabilities is more complex than most aspects of the law concerned with occupational safety, because it involves three branches of law:

- Health and safety legislation.
- Equality legislation.
- Disability legislation.

As with any aspect of work activity the provisions of the SHWW Act 2005 apply. Employers are required to manage and conduct their work activities to ensure, in so far as reasonably practicable, the safety, health and welfare of their employees, to identify the hazards, assess the risks and put in place control measures (see *Chapter 1*).

The General Application Regulations 2007 requires employers to ensure that places of work are organised to take account of persons with work disabilities, in particular as regards: doors, passageways, staircases, showers, washbasins, lavatories, and workstations used or occupied directly by persons with disabilities (Regulation 25).

Age and disability are two of the nine grounds of discrimination under the *Employment Equality Acts 1998 and 2011*.

Under section 16(3)(b) of the Act employers are required to do all that is reasonable to accommodate the needs of a person who has a disability by providing special treatment or facilities. In the Employment Equality Act, disability is defined as meaning the total or partial absence of a person's bodily or mental functions, including the absence of part of a person's body, the presence in the body of organisms causing or likely to cause chronic disease or illness, the malfunction, malformation or disfigurement of a part of a person's body, a condition or malfunction which results in a person learning differently from a person without the condition or malfunction or a condition which affects a person's thought processes, perception of reality, emotions or judgment or which results in disturbed behaviour. Disability shall be taken to include a disability which exists at present, or which previously

existed or which may exist in the future or which is imputed to a person.

In the *Disability Act 2005* disability in relation to a person, is defined as meaning a substantial restriction in the capacity of the person to carry on a profession, business or occupation in the State or to participate in social or cultural life in the State by reason of an enduring physical, sensory, mental health or intellectual impairment. The Disability Act 2005 requires public bodies to ensure that their buildings and services are accessible to people with disabilities.

The link between health and safety and the Disability Act is made in a booklet – *Promoting Safe Egress and Evacuation of People with Disabilities* – published by the National Disability Authority. The booklet includes references to the SHWW Act 2005:

- Section 8: General duties of employers.
- Section 9: Information for employees.
- Section 10: Instruction, training and supervision of employees.
- Section 11: Emergencies and serious and imminent dangers.
- Section 12: General duties of employers to persons other than their employees.
- Section 19: Hazard identification and risk assessment.
- Section 20: Safety Statement.

MIGRANT, TEMPORARY AND CASUAL WORKERS

Employees, whether they are Irish nationals or migrant workers, have equal rights under Irish health and safety law. Temporary or casual workers, whether they are Irish nationals or migrants, have equal rights under Irish health and safety law as fulltime permanent employees.

It has been estimated that about 10% of the workforce in Ireland are migrant workers. There are estimates that as many as 30% of workers in the horticultural sector are migrant workers. A

review of fatality statistics by the HSA shows the fatality rate among non-Irish workers and Irish workers is about the same.

The rate was:

- 2.6 per 100,000 Irish workers in 2011 and the same among non-national Irish workers
- It was 2.3 compared to 2.2 in 2012
- It was 2.0 compared to 2.9 in 2013.

Some years ago the HSA published a report *Irish and non-Irish national construction workers: Research on differences in approach to health and safety at work*. The report can be downloaded by clicking on the following link. http://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/Irish_and_Non-Irish_National_Construction_Workers.pdf.

The HSE-GB guidance webpages on migrant workers can be accessed by clicking on the following link <http://www.hse.gov.uk/migrantworkers/employer.htm>.

THE ROLE OF THE SAFETY REPRESENTATIVE

The health and safety issues faced by older workers and people with disabilities are complex. Safety representatives need to be informed about the complexities. They should ensure that the training they receive as health and safety representatives equips them to deal with the concerns of their co-workers about these issues. If they feel that the training they have received does not adequately prepare them to deal with these concerns, they should ask their employer to send them on further training courses.

Safety representatives should check their employer's safety statement to see that the risks to older workers and workers with disabilities are adequately addressed. They should check to see if:

- The risk assessment covers the work being carried out by older workers and those with disabilities.

- That the control measures required are in place.
- That issues affecting older workers and those with disabilities are brought up and addressed at safety committee meetings.
- Older workers and those with disabilities are informed and trained and that if work practices or work stations need to be adapted that is done.
- That occupational health services to address the needs of older and disabled workers are available.

RESOURCES/FURTHER INFORMATION

HSA guidance

Employees with Disabilities: An employer's guide to implementing inclusive health and safety practices for employees with disabilities: http://www.hsa.ie/eng/employees_with_disabilities.pdf

EU-OSHA

Ensuring health and safety of workers with disabilities: <https://osha.europa.eu/en/publications/factsheets/53>

EU-OSHA web pages: https://osha.europa.eu/en/priority_groups/ageingworkers

HSE-GB

Health and safety of older workers web pages: <http://www.hse.gov.uk/vulnerable-workers/older-workers.htm>

Vulnerable workers web pages: <http://www.hse.gov.uk/vulnerable-workers/index.htm>

NATIONAL DISABILITY AUTHORITY

Promoting Safe Egress and Evacuation for People with Disabilities.

HAZARDS: SECTION 8

WORKPLACES

In this section we look at workplaces. We examine the reported accident figures to see what are the hazards and risks of these workplaces and we look at the resources available to help guide us towards the elimination of those hazards.

CHAPTER 37: CONSTRUCTION

THE SECTOR

The construction industry is hugely diverse. It covers a multiplicity of activities ranging from domestic extensions to infrastructural projects. At the height of the Celtic Tiger economic boom over 270,000 were employed in the sector, which accounted for over 20% of gross national product (GNP) (see *Table 36.1*).

During the recession the industry contracted and, in 2012, accounted for just 6% of GNP. Employment fell significantly to under 100,000 in 2011. The industry is now recovering from the low point, with its share of GNP growing and employment at 138,000, according to the latest Central Statistics Office figures.

TABLE 37.1: Definition of Gross National Product

Gross national product (GNP) is the market value of all the products and services produced in one year by labour and property supplied by the citizens of a country.

The Government in its *Construction 2020* plan, citing a Forfas report, states that the sustainable level of activity for the sector in an economy like Ireland's is about 12% of GNP. In the plan the Government predicts that over the period to 2020, employment in the industry will grow by about 60,000.

It is against this background that the health and safety challenges and issues facing the industry must be considered.

HEALTH AND SAFETY ISSUES

As the construction industry emerges from the recession there is concern that the accident rate in

the industry, which declined during the Celtic Tiger years, will increase.

There have been safety challenges facing the industry since the late 1990s. There was the scaffolding collapse at St Martins House in Dublin's Waterloo Road. There were horrific deaths as a result of falls from heights. Some of these resulted in prosecutions and court proceedings by the HSA.

The first health and safety prosecution to be taken in the Circuit Criminal Court was taken against a construction company in 2000. Zoe Developments was prosecuted as a result of an accident in which a worker's legs were crushed when a stone wall cracked and fell on him. The company was fined IR£5,000 (€6,348). Zoe Developments featured in two other cases that year. In one following the death of a worker in a scaffolding accident, the company was fined IR£15,000 (€19,046), then a record fine. In the other case, the HSA took High Court injunction proceedings against the company to close a site following the death of a worker. Calling the directors of the company before the court, Mr Justice Kelly told them the court had power to close their site. He told the directors "You are entitled to make profits on the sweat of your workers, but you are not entitled to make profit on the blood and lives of your workers". The company then entered an agreement with the HSA to improve its practices and procedures and the injunction was lifted.

The industry responded to these challenges. New training schemes, Safe Pass and Construction Skills Certification Schemes were pioneered and later put on a statutory footing. Both sides of the industry, with the encouragement and involvement of the HSA, came together to form the Construction Safety Partnership. The objectives of the Partnership were:

- The mandatory appointment of safety representatives on all sites with more than 20 workers.
- Basic safety training for all construction workers under the FAS Safe Pass scheme.
- A construction skills certification scheme for all semi-skilled construction workers to be made mandatory.

- A doubling by the year 2001 of the number of HSA construction site safety inspections.
- A major safety awareness campaign by the HSA during 2001 to include safety in construction.
- The establishment of a joint safety council for the industry.

At the time the fatality rate in the industry was in the region of 10 to 11 per 100,000 workers. At the peak of the Celtic Tiger boom the fatality rate had dropped to between five and six per 100,000 workers. During the recession the rate fell to below five per 100,000 but rose again, reaching 9.8 per 100,000 workers in 2013. It is this increase that gives rise to the current concerns being expressed. However, it should be noted that the numbers killed in accidents on construction sites fell in 2014.

As the industry emerges from the recession the nature of the work being carried out is changing.

With many of the large scale projects planned by the Government awaiting a start date, a lot of current work is what is described as refurbishment and maintenance work. That is where the majority of fatalities occurred in 2013. Also falls from heights are again emerging as a major cause of fatalities, accounting for six of the 11 fatalities in 2013.

Every year the HSA carries out a considerable number of inspections in the construction sector. The figures provide us with an overview of what is happening in relation to health and safety in the sector (see *Table 36.2*), while the detailed analysis of the outcome of inspections published by the HSA provides us with an insight into the causes of accidents and how health and safety is being managed in the industry (see *Table 36.3*). The analysis of the triggers or causes of accidents suggests that the main safety topics are:

- Manual handling
- Falls on the same level
- Falls from height.

TABLE 37.2: Fatalities, injuries and illnesses in construction – statistical overview

	2013	2014	2015
<i>Number employed</i>	102,000	109,425	125,435
<i>Fatalities</i>	11	8	11
Fatality rate per 100,000 workers	9.8	5.5	8.0
<i>Accidents/Injuries/Illnesses</i>			
HSA reported accidents	454	420	409
Injuries: CSO reported – rate per 1,000	12	18	n/a
Illnesses: CSO reported – rate per 1,000	15	19	n/a

TABLE 37.3: Analysis of HSA construction inspection findings

	2013	2014	2015
Inspections/investigations	3,622	3,328	3,932
<i>Enforcement actions</i>			
Prohibition Notices	126	175	245
Improvement Notices/directions	66	90	89
Written advice	1,253	1,249	1,468

TABLE 37.3: Analysis of HSA construction inspection findings *continued*

	2013	2014	2015
<i>Top three triggers/causes of non-fatal accidents*</i>			
Manual handling	21.3%	28.1%	30.4%
Fall on same level	17.8%	16.8%	18.6%
Fall from height	11.7%	11.6%	11.8%
<i>Safety Management</i>			
Safety Statement prepared/present	n/a	79%	77%
Consultation arrangements	n/a	94%	93%
Safety Representative appointed	n/a	17%	21%

The Construction Workers Health Trust is the best source of information on the health of construction workers. The Trust was established by the Construction Group of Unions attached to the ICTU. The Trust is dedicated solely to the promotion of better health and lifestyles among construction workers.

In a study carried out in 2007, *Patterns of Ill Health Amongst Construction Workers*, it was established that the principal causes of absenteeism in the industry were injuries and musculoskeletal disorders. The survey found that the average length of illness was, at 22.5 days, comparatively long.

In 2013 the Trust examined details of a sample of workers claiming early retirement. The examination found that 29% of early retirements were due to musculoskeletal disorders, 18% to cardiac conditions and 6% to cancer.

A review, by the magazine *Health & Safety Review*, of inquests at the Dublin City Coroner's Court into deaths from asbestos found that most of those who died from asbestos-related diseases were former construction workers.

THE ROLE OF THE SAFETY REPRESENTATIVE

There are specific regulations regarding the selection of safety representatives on construction sites. The regulations reflect the unique characteristics of how work on construction sites is organised. The details of the regulations are set out in Chapter 11 on Safety Representatives and Safety Committees.

The results of the HSA inspections suggests that there is a high level of consultation by employers with employees but that a safety representative has only been appointed in one out of five sites. At a recent conference in Dublin, where it was stated that the industry is the only one where the appointment of safety representatives is mandatory, it was claimed that there are 1,500 safety representatives in the industry. That is about one for every 74 workers.

However, while it may be mandatory to have safety representatives on sites, trade unions find that on many sites the appointment of safety representatives is not encouraged.

The safety representative's function is to represent the employees who have selected him/her by making their concerns about health and safety issues known to the employer and by ensuring that the employer takes action to

address the concerns expressed by eliminating the risks to employees' health, safety and welfare. The overall aim of the safety representative has been described as being: "To help achieve and influence safe and healthy workplaces to protect workers' health and safety".

The Safety Representatives Facilitation Project is a joint employer trade union forum established to promote and support the education and work of safety representatives.

RESOURCES

The HSA and others involved in the Construction Industry have published a huge number of guidance and information documents, both online and in hard copy.

HSA resources

The HSA has published 29 guidance documents on various aspects of construction work. To access the documents visit: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Construction/?pageNumber=3

Construction Safety Partnership

The Construction Safety Partnership Advisory Committee has published a number of guidance documents, which can be downloaded from its website. Its website is also a gateway to other useful publications. To access the Partnership's website visit: www.csponline.ie.

Safety Representatives Facilitation Project

The Safety Representatives Facilitation Project has published *Operational Guidelines for Safety Representatives in the Construction Industry*. To download the third edition, visit: <http://csponline.ie/wp-content/uploads/2014/08/guidelinesmay05.pdf>

CHAPTER 38: EDUCATION

THE SECTOR

Primary, secondary and third level colleges are currently educating over 1.3m students, with a total of 156,000 people working in the education sector.

Education establishments range from pre-school nurseries and Montessori schools to large universities and high-tech colleges. Apart from classroom activities, teachers in primary and secondary schools are engaged in a wide range of sporting and cultural activities.

It is against this background that the health and safety issues facing those responsible for management and working in the sector must be considered.

HEALTH AND SAFETY ISSUES

The statistical information on health and safety in schools is limited, which makes the identification of issues difficult. While one death is one death too many, the fatality rate in the sector is low: three deaths over the six-year period from 2008 to 2013. In 2009 a pilot and a trainee were killed

in an aircraft accident. In 2013 one worker was killed as a result of a loss of control of transport/handling equipment.

Over the three-year period 2013 to 2015, a total of 583 accidents were reported to the HSA. The Authority's analysis of the reported accidents shows falls on the same level as the most frequent causes of accidents, manual handling and violence/aggression.

However, given the numbers employed and the numbers attending educational establishments, it is possible that accidents in the sector are under-reported.

This means one must look at other sources of information to identify the health and safety issues affecting the sector. The HSA, in the reports for 2011 and 2012, list 22 different triggers of accidents. Two that are not listed are asbestos and bullying. While these may not be reported as the triggers or causes of accidents they are issues that come up in motions at trade union conferences and in court cases.

Some years ago the Department of Education and Skills undertook a programme to remove asbestos from school buildings. The programme has been successful but there have been incidents. One incident resulted in the prosecution a company removing windows. When taking out windows,

TABLE 38.1: Fatalities, injuries and illnesses in education – statistical overview

	2013	2014	2015
<i>Number employed</i>	146,375	149,900	151,250
<i>Fatalities (employee)</i>	1	0	0
Fatality rate per 100,000	0.7	0	0
<i>Accidents/Injuries/Illnesses</i>			
Reported to HSA	174	197	212
Injuries: CSO reported – rate per 1,000	15	15	n/a
Illnesses: CSO reported – rate per 1,000	48	25	n/a

asbestos boards were found behind the windows. The company specialised in fitting aluminium facades.

When the final window was taken out an employee of the company went to place it in a sealed container. He found the original lock on the container had been replaced by a new lock. He did not have a key for the new lock, so he placed the asbestos board on a trestle near the container. A couple of weeks later a painter came along and used the board, which he thought was plasterboard, to level the ground under his ladder. The asbestos board broke under the weight and contaminated the school yard.

The company, Hodgins Aluminium Facades Limited, pleaded guilty to exposing persons not in its employment to asbestos during the removal and replacement of windows at the school, and was fined €10,000 by the Galway Circuit Criminal Court.

Bullying is also an issue that comes up in the courts. In the case *Sweeney v Ballinteer Community School*, a teacher who alleged that she was harassed was awarded damages of €75,000 by the High Court. (See Section 6, Chapter 20; *Bullying*, for more details). In another case, *Ruffley v The Board of Management of St Ann's School*, a school's special needs assistant was awarded damages of €255,276. A High Court judge described her employer's conduct as persistent inappropriate behaviour that undermined the special needs assistant's dignity at work and resulted in her

suffering a definite and inappropriate psychiatric injury.

The HSE-GB's online guidance identifies a number of other issues: school trips, science experiments and sport. The HSE-GB's advice in relation to these issues is that health and safety legislation does not prevent such activities and indeed the HSE-GB encourages schools to allow students to take part in school trips, carry out science experiments and take part in sports. What employers should do is carry out risk assessment and put in place control measures.

The HSA's figures on safety management suggest that while the vast majority of schools have a safety statement and have consultation arrangements in place, there is scope to increase the number of safety representatives.

THE ROLE OF THE SAFETY REPRESENTATIVE

The safety representative's function is to represent the employees who have selected him/her by making their concerns about health and safety issues known to the employer and by ensuring that the employer takes action to address the concerns expressed by eliminating the risks to employees' health, safety and welfare. The overall aim of the safety representative has been described as being: "To help achieve and influence safe and healthy workplaces to protect workers' health and safety".

TABLE 38.2: Analysis of HSA education inspection findings

	2013	2014	2015
Inspections/investigations	67	53	61
<i>Enforcement action</i>			
Prohibition Notices	3	3	0
Improvement Notices	3	0	2
Written advice	30	33	32

The role and the legal rights of the safety representative are discussed in detail in Section 4, Chapters 10 to 14. In the education sector the safety representative needs to be aware of the issues that most affect employees and other workers in the education sector.

RESOURCES

HSA guidance

Guidelines on Managing Safety, Health and Welfare in Primary Schools

The guidelines have been published by the HSA in association with the Kilkenny Education Centre and the Department of Education and Skills. To download the guidelines, visit: http://www.hsa.ie/eng/Education/Guidelines_on_Managing_Safety_Health_and_Welfare_in_Primary_Schools.pdf

Guidelines on Managing Safety and Health in Post Primary Schools (Part 1)

The guidelines have been published by the HSA in association with the State Claims Agency, the Department of Education and Skills and the Schools Development Planning Initiative. To download the guidelines, visit: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Education/Guidelines_on_Managing_Safety_and_Health_in_Post_Primary_Schools.pdf

Guidelines on Managing Safety and Health in Post Primary Schools (Part 2)

The guidelines have been published by the HSA in association with the State Claims Agency, the Department of Education and Skills and the Schools Development Planning Initiative. To download the guidelines, visit: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Education/Guidelines_on_Managing_Safety_and_Health_Post_Primary_Part_2.pdf

CHAPTER 39:
HEALTHCARE

THE SECTOR

The healthcare sector is one of the largest employers in the country. Nearly 260,000 people work in the sector. Their workplaces are diverse, ranging from major university hospitals to GPs and dentists' surgeries and district nurses visiting patients in their homes.

The range of occupations working in the sector is extensive: doctors, nurses, radiologists and ambulance crew, to mention just a few. Nurses are the main occupational group, representing a quarter of all employees in the sector.

It is against this background of a large number of employees in a diverse range of occupations, often using highly complex equipment and carrying out inherently difficult procedures on hundreds of thousands of health service patients and users, that the health and safety challenges facing the sector have to be considered.

HEALTH AND SAFETY ISSUES

The fatality rate in the sector is low: two fatalities in three years. However, while the fatal accident rate is low, the accidents suffered can be serious, as a review of court cases shows:

- Doctor's multi-million euro claim for career ending injuries settled.
- Physiotherapist who slipped on icy steps and suffered back injury that will required lifelong support awarded €1m damages.

- Nurse whose career was ended by injury awarded IR£375,000 by Supreme Court.
- Nurse who suffered back injury awarded IR£106,000.

The HSA analysis of accidents identifies manual handling (including patient handling and the handling of inanimate loads), slips/trips/falls on the same level and violence as the three main triggers or causes of reported accidents. Given that there is a high level of accident reporting in the sector, the figures can be taken as reliably measuring the causes of accidents. Injuries from sharps is a major concern and regulations were introduced last year to address the concerns.

Citing research by the European Agency for Safety and Health at Work (EU-OSHA), the Authority states that the main risk factors and related problems in the sector are:

- Musculoskeletal loads
- Biological agents
- Chemical substances
- Radiological hazards
- Changing shifts, work rhythms and night work
- Violence from members of the public
- Factors such as traumatic incidents, the organisation of work and relations with work colleagues that contribute to stress
- Accidents, such as cuts, needle punctures and electric shocks.

Based on the 2011 findings by HSA inspectors, most workplaces in the sector have safety statements and consultation arrangements in place. However, less than half have a safety representative.

TABLE 39.1: Fatalities, injuries and illnesses in healthcare – statistical overview

	2013	2014	2015
<i>Number employed</i>	246,325	247,200	250,676
<i>Fatalities</i>	0	1	1
<i>Number of reported accidents</i>	1,435	1,475	1,453

TABLE 39.1: Fatalities, injuries and illnesses in healthcare – statistical overview
continued

	2013	2014	2015
<i>Causes/triggers*</i>			
Manual handling	20.8%	29.4%	30.8%
Aggression/shock/violence	15.4%	17.0%	20.1%
Falls on same level	18.4%	18.4%	17.2%
Injuries: CSO reported – rate per 1,000	31	18	n/a
Illnesses: CSO reported – rate per 1,000	49	36	n/a

**Ranked by reference to 2015 figures*

TABLE 39.2: Analysis of HSA healthcare inspection findings

	2013	2014	2015
<i>Inspections/investigations</i>	428	324	246
<i>Enforcement</i>			
Prohibition Notices	0	1	2
Improvement Notices	17	1	9
Written advice	231	159	146
<i>Safety management</i>			
Safety statement prepared/present	n/a	90%	88%
Consultation arrangements	n/a	94%	92%
Safety Representative appointed	n/a	33%	41%

THE ROLE OF THE SAFETY REPRESENTATIVE

The safety representative's function is to represent the employees who have selected him/her by making their concerns about health and safety issues known to the employer and by ensuring that the employer takes action to address the concerns expressed by eliminating the risks to employees' health, safety and welfare. The overall aim of the safety representative has

been described as being: "To help achieve and influence safe and healthy workplaces to protect workers' health and safety".

The role and the legal rights of the safety representative are discussed in detail in Section 4, Chapters 10 to 14. In the healthcare sector the safety representative needs to be aware of the issues that most affect employees and other workers in healthcare workplaces.

Among the issues identified by unions with members working in the sector are understaffing (which the unions see as a major contributing factor to workplace stress), violence towards lone workers, blood borne viruses and overcrowding in accident and emergency departments.

RESOURCES

HSA guidance

The HSA has published a number of guidance documents.

Health & Safety Authority Guidance Document for the Healthcare Sector http://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Guidance_Healthcare_Sector.pdf

Auditing a Safety and Health Management system: a safety and health audit tool for the healthcare sector http://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Auditing_Healthcare.pdf

Health and Safety Management in Healthcare: Information Sheet http://www.hsa.ie/eng/Publications_and_Forms/Publications/Healthcare_Sector/Health_and_Safety_Management_in_Healthcare.pdf

Guidance on Lone Working in the Healthcare Sector http://www.hsa.ie/eng/Publications_and_Forms/Publications/Healthcare_Sector/Guidance_on_Lone_Working_in_the_Healthcare_Sector.pdf

Managing the Risk of Work-related Violence and Aggression in Healthcare http://www.hsa.ie/eng/Publications_and_Forms/Publications/Information_Sheets/Violence_in_Healthcare_Information_Sheet.pdf

**CHAPTER 40:
WHOLESALE/RETAIL**

THE SECTOR

More people are employed in the wholesale/retail sector than in any other sector of the economy. Figures from the Central Statistics Office for 2016 put employment in the sector at over 283,000. While the industry is the largest employer in Ireland, the numbers employed have fallen during the recession. At the height of the Celtic Tiger boom over 311,000 were employed in the sector.

According to Retail Ireland, the Ibec member group representing employers, there are 44,000 retail and whole businesses in Ireland. The sector includes business from the local corner shop to large supermarkets and outlet stores. It includes warehouses and garages, including those where cars and cycles are repaired. Retail Ireland state that in 2010 the sector contributed €5.1bn in taxes to the Exchequer and paid €8.2bn in wages.

In 2010, a report by the Expert Group on *Future Skills Needs, Future Skills Needs of the Wholesale and Retail Sector*, stated the sector

accounted for 11% of the added value in the economy. The report detailed the skills and training needs for the industry but made no mention of health and safety training.

It is against this background that the health and safety challenges and issues facing the industry must be considered.

HEALTH AND SAFETY ISSUES

Unfortunately fatal accidents are an issue in the wholesale and retail sector. Over the three year period 2011-2013 eight people were killed in accidents in the sector. The causes of the accidents were loss of control of transport, fall/collapse of material and fall from height.

The HSA guidance for the retail trade identifies manual handling, slips/trips/falls, workplace violence, fire and lone working as safety issues. The Authority's analysis of the reported accident figures for the wholesale retail sector shows that year after year manual handling, followed by slips/trips/falls on the same level, with falls from heights a long way behind, as the three top causes of reported accidents. Two other causes of accidents identified by the Authority in webpages guidance are cuts and falling objects.

TABLE 40.1: Fatalities, injuries and illness in wholesale/retail – statistic overview

	2013	2014	2015
<i>Number employed</i>	272,325	272,400	273,850
Fatalities	3	4	2
Fatality rate per 100,000 workers	0.4	1.5	0.7
Accidents reported to HSA	817	1,024	1,084
Injuries: CSO reported - rate per 1,000	22	22	n/a
Illnesses: CSO reported – rate per 1,000	25	20	n/a

TABLE 40.2: Analysis of HSA wholesale/retail inspection findings

	2013	2014	2015
<i>Inspections/investigations</i>	1,430	1,093	800
<i>Enforcement</i>			
Prohibition Notices	39	25	14
Improvement Notices	102	55	28
Written advice	752	508	395
<i>Safety Management</i>			
Safety statement prepared/present	n/a	86%	77%
Consultation arrangements	n/a	88%	89%
Safety Representative appointed	n/a	19%	16%

The HSA's analysis of its inspections suggests that there is scope for improvement in health and safety management. At only six in every ten workplaces inspected was a safety statement prepared and present at the workplace. And in about 60% of the workplaces inspected some form of enforcement action had to be taken.

While it appears consultation arrangements are in place, the level of safety representatives appointed is abysmally low.

THE ROLE OF THE SAFETY REPRESENTATIVE

The safety representative's function is to represent the employees who have selected him/her by making their concerns about health and safety issues known to the employer and by ensuring that the employer takes action to address the concerns expressed by eliminating the risks to employees' health, safety and welfare. The overall aim of the safety representative has been described as being: "To help achieve and influence safe and healthy workplaces to protect workers' health and safety".

The role and the legal rights of the safety representative are discussed in detail in Section 4, Chapters 10 to 14. In the healthcare sector the safety representative needs to be aware of

the issues that most affect employees and other workers in the healthcare workplaces.

As mentioned above, the number of safety representatives in the sector is very low.

RESOURCES

HSA guidance

Simple Safety Toolkit for Retailers
http://www.hsa.ie/eng/Topics/Simple_Safety/Retail/

Workplace transport webpages
http://www.hsa.ie/eng/Vehicles_at_Work/Workplace_Transport_Safety/Workplace_Transport.html

Petrol Station Safety webpages
http://www.hsa.ie/eng/Your_Industry/Petrol_Stations/

HSE-GB guidance

Warehousing and storage: A guide to health and safety <http://www.hse.gov.uk/pubns/priced/hsg76.pdf>

HSE-GB webpages for retail

<http://www.hse.gov.uk/retail/>

**CHAPTER 41:
INDUSTRY: MANUFACTURING,
MINES AND QUARRIES, UTILITIES**

THE SECTOR

The Central Statistics Office includes manufacturing along with mining and quarry, water/waste and electricity/gas under the heading 'industry' in the figures for employment. The figures for Quarter 4 2016 show that over 259,000 people are employed in the combined industrial sector. If we strip out the number employed in mining and quarry (about 5,000), water and waste (about 5,000) and electricity and gas (about 20,000), it is reasonable to say that over 200,000 work in manufacturing industry.

HEALTH AND SAFETY ISSUES

The number of fatalities in the industrial sectors, while significant when the figures for the sub-

sectors are added together, are low for each individual subsector. Of the four sub-sectors in the industrial sector, only manufacturing reports a significant number of accidents. Coupled with the diversity of the sub-sectors, this makes identification of issues less than clear cut.

Across the four sub-sectors, trapped/crush injuries are the main cause/trigger of fatalities, with seven of the 16 fatalities attributable to being trapped and crush injuries. Also, vehicles were involved in a number of the fatal accidents. Other causes/triggers include drowning and contact with electricity.

An examination of the reported non-fatal accidents identifies manual handling as the main cause/trigger of accidents resulting in injury. Falls on the same level (slips/trips/falls), falls from heights and loss of control of means of transport or handling equipment are the next most common causes of accidents.

TABLE 41.1: Fatalities, injuries and illness in industry – statistical overview

	2013	2014	2015
<i>Numbers employed</i>	240,500	239,500	248,200
<i>Fatalities</i>			
Manufacturing	1	3	3
Mining/Quarrying	2	0	2
Electricity/Gas	1	1	0
Water Supply/Waste	1	0	3
Total	5	4	8
Fatality rate per 100,000 workers	2.1	1.7	2.2

TABLE 41.2: Analysis of HSA industry inspection findings

	2013	2014	2015
<i>Injuries reported to HSA</i>			
Manufacturing	1,054	1,266	1,358
Mining/Quarrying	43	30	41
Electricity/Gas	16	20	30
Water Supply/Waste	161	190	184
<i>Inspections/investigations</i>			
Manufacturing	1,323	1,050	1,108
Mines/Quarrying	252	175	233
Electricity/Gas	56	55	31
Water Supply/Waste	250	188	140
<i>Enforcement – manufacturing</i>			
Prohibition Notices	23	18	10
Improvement Notices/directions	87	68	64
Written advice	696	516	521
<i>Enforcement – mines/quarrying</i>			
Prohibition Notices	8	2	31
Improvement Notices	15	10	17
Written advice	115	72	109
<i>Enforcement – electricity/gas</i>			
Prohibition Notices	1	1	0
Improvement Notices	3	0	2
Written advice	17	13	9
<i>Enforcement – water supply/waste</i>			
Prohibition Notices	9	7	6
Improvement Notices/Directions	15	17	14
Written advice	137	80	53
<i>Safety Management – manufacturing</i>			
Safety Statement prepared/present	87%	82%	87%
Consultation arrangements	84%	91%	95%
Safety Representative appointed	38%	38%	32%

THE ROLE OF THE SAFETY REPRESENTATIVE

The safety representative's function is to represent the employees who have selected him/her by making their concerns about health and safety issues known to the employer and by ensuring that the employer takes action to address the concerns expressed, by eliminating the risks to employees' health, safety and welfare. The overall aim of the safety representative has been described as being: "To help achieve and influence safe and healthy workplaces to protect workers' health and safety".

The role and the legal rights of the safety representative are discussed in detail in Section 4, Chapters 10 to 14. In the industrial sectors the safety representative needs to be aware of the issues that most affect employees and other workers in the healthcare workplaces.

RESOURCES

HSA Guidance

The HSA has published webpages with guidance for the quarrying and mining industrial sub-sectors. To access the quarrying webpages, visit: http://www.hsa.ie/eng/Your_Industry/Quarrying/. To access the mining webpages, visit: http://www.hsa.ie/eng/Your_Industry/Mining/.

http://www.hsa.ie/eng/Publications_and_Forms/Publications/Docks_and_Ports/Code_of_Practice_for_Health_and_Safety_in_Dock_Work.pdf

HSE-GB

The HSE-GB has a webpage for manufacturing industry, which provides guidance on a number of different types of manufacturing industries. To access, click on the following link <http://www.hse.gov.uk/manufacturing/>

CHAPTER 42: AGRICULTURE

THE SECTOR

There are about 140,000 farms in Ireland, with over 100,000 people working in agriculture. The sector contributes about €24bn to the economy and accounts for almost 10% of exports. Primary agriculture accounts for around 2.5% of GDP.

The land area of Ireland is about 6.9m hectares, of which about 4.5m is utilised for agriculture. About 80% of the land utilised by agriculture is devoted to grass (silage, hay, pasture), 11% to rough grazing and the remainder, about 9%, to crop production. The average size of farms is about 32 hectares.

Agriculture is a significant part of the Irish economy and is important in social terms. Unfortunately agriculture is a dangerous industry. Over the five year period 2010-2014 a total of 108 were killed in farm accidents. Last year (2014) more people (30) were killed in accidents on farms than in all the other sectors combined. That despite the fact that only about 6% of the total workforce are employed in agriculture. Many of those killed were elderly and very unfortunately quite a number were children.

It is against this background that we must consider the health and safety facing the industry.

HEALTH AND SAFETY ISSUES

The HSA has identified three key areas of concern:

- Farmers working with unguarded PTO assemblies, which includes defects at the U-guard, O-guard and shaft guard.
- Farmers working on machinery carrying children under the age of seven inside cabs (a practice prohibited under the Child Farm Safety Code of Practice).
- Farmers having open or unprotected lagoons or agitation points (slurry pits) with a risk of persons falling in.

The Authority says the three areas are ones where there is a very high risk of injury or death, which could be reduced almost to zero at very low cost.

An analysis of the farm fatality figures over the ten year period 2005-2014 highlights the hazards of farming. Over the period 198 people died in farm accidents. The causes were:

- Tractors/farm vehicles 30%.
- Machinery 19%.
- Livestock 13%.
- Drowning or gas (slurry pits mostly) 11%.
- Falls from heights 9%.
- Falling objects 7%.
- Timber related 7%.
- Electrocutation 2%.
- Other causes 2%.

Of the 198 who died 70 were older people (age 65 or over) and 22 were children.

The Authority has published online and in hardcopy a veritable library of information to help farmers work safely.

Farming like every other sector is governed by the SHWW Act 2005. Farmers are required to identify hazards and carry out risk assessments and have a safety statement. Farming is one of the sectors where the HSA has availed of the provision in the SHWW Act 2005, which allows employers in a sector to abide by a code of practice, rather than draft a safety statement. Section 20(8) provides that, for an employer with three or fewer employees, it shall be sufficient compliance with the requirement to have a safety statement to observe the terms of a code of practice.

The *Code of Practice for Preventing Injury and Occupational Ill Health in Agriculture* offers farmers, the vast majority of whom are self-employed, a readymade method of identifying the hazards of their workplace, guidance on risk assessment and the control measures to be put in place to minimise or eliminate the risks.

The Code of Practice can be accessed online at:
http://www.hsa.ie/eng/Your_Industry/Agriculture_Forestry/Overview/Agriculture_Code_of_Practice/

The Code of Practice is backed up by an extensive array of information on the risks posed by:

- Livestock.
- Vehicles.
- Machinery.
- Slurry pits.
- Timber work.
- Fire.
- Electricity.
- Falls and collapses.

This information can be accessed on the Authority's agricultural and forestry webpage at:
http://www.hsa.ie/eng/Your_Industry/Agriculture_Forestry/

THE ROLE OF THE SAFETY REPRESENTATIVE

Given that most farmers are self-employed there are relatively few safety representatives in the industry. Where there are safety representatives the issues for them, broadly speaking, the same as for safety representative in other sectors. *For further information see Section 4: The Role of the Safety Representative.*

CHAPTER 43: **HOSPITALITY**

THE SECTOR

The hospitality industry is the fifth largest employer in the country. Figures from the CSO for quarter 4, 2016 record that 148,000 people are employed in the sector. The industry covers people working in hotels, restaurants, cafes, pubs, fast food outlets, contract catering and in clubs where bar and food staff are employed.

Delve a little more deeply into the nature of the sector and the important role the industry plays in attracting tourists becomes evident. A Department of Transport, Tourism and Sport briefing and other economic commentaries, covering the hotel and catering sectors in the broadest terms, highlight the tourist link.

The figures published do not give a total picture of economic activity for the sector, but if one takes the figures from tourism as the base, it is clear that the sector contributes significantly to the country's economy. According to the Department, tourist revenues from overseas tourists (excluding air and ferry fares) earned the country €3.3bn in overseas revenue. Combined with the domestic tourist market, it is estimated that the total tourism revenue to the economy in 2013 was around €5.7bn.

It is against this background that the health and safety issues facing the industry have to be considered.

HEALTH AND SAFETY ISSUES

The sector has, fortunately, in recent years been fatality free. The number of injuries reported each year averages under 200. Over the three year period 2013, 2014, 2015 the number of injuries reported totalled 574.

The HSA's analysis of the reported accident figures over the years shows that the most common causes or triggers of accidents are:

- Manual handling.
- Slips, trips, falls.
- Fall, collapse, breakage of material.
- Movement by the person.
- Loss of control handtools.

The injuries most commonly suffered by workers in the sector are back, finger, hand, leg and head injuries. The HSE-GB identifies the main risks in the sector as slips and trips, contact dermatitis and manual handling.

A report by the Injuries Board, based on an analysis of claims found that the majority of accidents that resulted in claims were caused by boiling water overflowing, splashes from hot liquids, hazardous chemicals and acid burns.

Issues identified by trade unions with members working in the sector include chemical handling and lone working. A lot of workers in the sector do their own cleaning, be it washing dishes in a kitchen or mopping out kitchen or scullery floors. Many catering staff work on their own, either in the early morning or late at night, when opening or closing premises. Violence towards staff, particularly in bars is another hazard identified by unions.

Two cases illustrate the type of issues that arise in workplaces.

In one case a waitress who suffered serious burns to her leg, after her clothing caught fire while she was working in a hotel restaurant, was awarded damages of €65,300 by the High Court. The court heard that the waitress suffered the injuries when a flammable fuel, an ethanol gel in burners used to keep food warm, spilled onto the ground and splashed on the waitress's polyester trousers, which then went on fire. The court heard that the waitress suffered serious injuries to her left leg. She suffered horrendous blisters on the burn area, which became infected and required antibiotics. Her wounds had to be dressed regularly.

Noting that her injuries had left a permanent scar and discoloration and that she would not be able

to expose her skin to sunlight, Mr Justice Vivian Lavan awarded the waitress €65,300 damages. (*Kalliokoski v Adare Hotel Ltd, t/a Adare Manor: High Court, Dublin, March 2009*)

In the other case, a Circuit Court judge held that the system of work was dangerous. He awarded £12,000 damages to a kitchen porter who suffered second degree burns when he fell and soup spilled over him. The accident occurred when the kitchen porter was carrying a basin full of hot soup from the kitchen to the carvery. There were no handles on the basin. To reach the carvery he had to ascend a step, and because it was coming up to lunch time he was in a rush. There was gravy on the step and he fell. As a result of the fall the hot soup splashed over his wrist and scalded him. Evidence was given about the cleaning procedures. The catering manager said that whoever caused a spillage was supposed to clean it up. However other witnesses, including the injured kitchen porter, stated that it was usual to leave tidying up until after lunch. Awarding the kitchen porter damages, the Judge said that having to carry a basin of hot soup without handles was intrinsically dangerous. It was not possible, the Judge said, for the kitchen porter to carry the basin and look down at his feet. While the system of cleaning was perfectly reasonable if followed, it did not appear to have been followed.

THE ROLE OF THE SAFETY REPRESENTATIVE

The principal issues for safety representatives are those identified by the HSA's analysis of the reported accident statistics, by the Injuries Board's report and by the trade unions with members in the sector. Beyond that the issues are broadly speaking, the same as for safety representative in other sectors. For further information see Section 4: The Role of the Safety Representative.

RESOURCES

HSA guidance

The HSA has published a number of guidance documents. *Safe Hospitality: Safety, Health & Welfare in Hotels, Restaurants, Catering & Bars* is a comprehensive guide which can be used by managers and staff in hotels, restaurants pubs, cafes, wine bars and nightclubs. To download the guide visit: http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Safe_Hospitality.html

Another useful guide published online by the Authority is *Simple Safety in Food and Drink*. To download visit: http://www.hsa.ie/eng/Topics/Simple_Safety/Simple_Safety_in_Food_and_Drink/

Two other resources with useful information are:

- *The Workplace Health and Safety Toolkit for Small Businesses* http://www.hsa.ie/eng/Publications_and_Forms/Publications/Safety_and_Health_Management/Workplace_Health_Toolkit_for_Small_Businesses.html
- *BeSMART*, the Authority's electronic safety management and risk assessment tool for small business. BeSMART offers template risk assessments and drafts safety statements for such businesses as bed and breakfast, hostels, hotels and pubs.

HSE-GB guidance

The HSE-GB webpages offer a range of guidance on the issues facing the hospitality sector. <http://www.hse.gov.uk/catering/>

CHAPTER 44: **OFFICES**

THE SECTOR

The NACE codes by which the HSA categorises sectors does not include an office category. Therefore offices are rather different to the workplaces in other sectors covered in this section. Offices are cross-sectoral.

Banks, insurance companies, the ICT businesses all occupy large offices. In smaller business or workplaces, such as shops and pubs, the office may be a little room at the back of the workplace. For some, particularly the independent small self-employed business person, be he/she a farmer, plumber or courier, the office may be the kitchen table or the van.

There are no numbers from the CSO for the number of people working in offices, but it is reasonable to assume that many of the people working in the HSA category Finance/Insurance/Real Estate work in offices. Around about 100,000 people work in the sector.

HEALTH AND SAFETY ISSUES

Before the change in the NACE classifications, what is now classified as Finance/Insurance/Real Estate was classified as Business: financial-office.

Looking at the HSA's statistical analysis for that sector the most common causes of workplace accidents WERE:

- Manual handling.
- Slips/trips/falls.
- Shock/fright/violence of others.
- Movement by injured person.
- Fall from height.

The most common injuries suffered were foot, hand, leg, back and ankle.

Issues identified by trade unions with workers in offices include violence and aggression from members of the public and bullying and harassment.

Other issues that come up are:

- Office temperatures: HSA guidance advises that the minimum comfortable working temperature for sedentary indoor workers is 17.5 degrees centigrade. There is no guidance on the maximum temperature. However the Authority advises that in extremely hot weather the provision of fans, cold water dispensers and regular water breaks, as well as the relaxation of formal dress codes can assist in maintaining comfortable working conditions.
- Air conditioning: There is no legal requirement for employers to provide air conditioning or mechanical ventilation. However the HSA in its guidance points out that steps should be taken to ensure that there is sufficient fresh air in enclosed places of work. In most places this could, the guidance states, include windows and doors.
- In offices the minimum space per person is 4.65 square metres. This space, the HSA guidance states excludes filing cabinets and other office furniture, but not desks and chairs.

The details relating to the provision of sanitary facilities are set out in Chapter 2.

THE ROLE OF THE SAFETY REPRESENTATIVE

The principal issues for safety representatives are those identified by the HSA's analysis of the reported accident statistics and by the trade unions with members in the sector. Beyond that the issues are broadly speaking, the same as for safety representative in other sectors. For further information see Section 4: The Role of the Safety Representative.

RESOURCES

HSA guidance

In relation to office safety the HSA's guidance on Display Screen Equipment and Manual Handling are particularly relevant.

Guide to the Safety, Health and Welfare at Work (General Application) Regulations 2007 Chapter 5 of Part 2: Display Screen Equipment
http://www.hsa.ie/eng/Publications_and_Forms/Publications/General_Application_Regulations/Display_Screen.pdf

Guidance on the Prevention and Management of Musculoskeletal Disorders (MSDs) in the Workplace
http://www.hsa.ie/eng/Publications_and_Forms/Publications/Manual_Handling_and_Musculoskeletal_Disorders/Guide_on_Prevention_and_Management_of_Musculoskeletal_Disorders_MSDs_.pdf

Ergonomics in the Workplace
http://www.hsa.ie/eng/Publications_and_Forms/Publications/Occupational_Health/Ergonomics.pdf

Safety Toolkit and Short Guide to General Application Regulations 2007 Display Screen Equipment
http://www.hsa.ie/eng/Publications_and_Forms/Publications/Retail/Gen_Apps_Toolkit_Small_Business_Edition.pdf

Another useful online guidance document published by the HSA is *Workplace Conditions*. To download visit http://www.hsa.ie/eng/Archived_Material/FAQs/Workplace_Conditions/

For more information see *Chapter 24, Ergonomics to include manual handling and DSEs/VDUs*

HSE-GB guidance

The HSE-GB webpages on office safety can be accessed at: <http://www.hse.gov.uk/office/>

IBOA guide

The IBOA has published a short guide: *A Guide to Health and Safety in the Workplace for OBOA Members and Representatives*. To access the guide click on the following link <http://www.iboa.ie/services/safety.html>

SAFETY REPRESENTATIVES RESOURCE BOOK

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Our vision

A country where worker safety, health and welfare and the safe management of chemicals are central to successful enterprise.



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