

Chapter 3: Legislation

3.1 Health and Safety at Work Legislation

3.1.1 Introduction

This chapter provides an overview of the relevant occupational health and safety legislation in relation to the control of legionellosis in Ireland. It does not purport to be a complete exposition of the health and safety legislation. Further information with regard to this legislation is available from the Irish Health and Safety Authority (HSA) website at www.hsa.ie.

In Ireland, the principal legislative provisions of relevance to the prevention of legionellosis in the workplace include:

- The Safety, Health and Welfare at Work Act 2005 (S.I. No. 10 of 2005)
- The Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007)
- The Safety, Health and Welfare at Work (Biological Agents) Regulations, 1994 as amended in 1998 (S.I. No. 146 of 1994 and S.I. No. 248 of 1998)
- The Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001 (S.I. No. 619 of 2001).

Official copies of the legislation can be purchased from the Government Publications Sales Office, Sun Alliance House, Molesworth Street, Dublin 2, Tel: 01 - 647 6000 or copies can be downloaded from www.irishstatutebook.ie/.

3.1.2 Outline and description of legislation

a) Safety, Health and Welfare at Work Act 2005 (S.I. No. 10 of 2005)

The Safety, Health and Welfare at Work Act 2005 applies to employers, employees in all employments and to the self-employed. It also has implications for persons who control places of work and for those who design, manufacture, import or supply articles or substances for use at work.

It replaced the Safety, Health and Welfare at Work Act 1989 (S.I. No. 7 of 1989). It does not specifically refer to *Legionella* (or, indeed individual biological hazards) but sets out the general principles to be adopted at all workplaces to manage risk. Brief descriptions are given of those provisions of most relevance to *Legionella* control in Appendix C. Section 8 of the 2005 Act sets out the general duties of employers (Appendix C).

It must be borne in mind that, notwithstanding section 12 of the 2005 Act, the intent and purpose of this legislation is protection of the health of employees from hazards arising from work-related activities or workplace conditions. Nevertheless, in any given building, it is clear that *Legionella* exposure risks apply, not only to workers, but also to others present at the workplace who may be affected by virtue of the work activity. Therefore the measures required by law, to manage the risk of *Legionella* exposure for workers, will benefit all building users.

Section 19

The employer and where applicable, any person who has control to any extent of the place of work, are required, by section 19 of the 2005 Act to:

- Carry out a written risk assessment of the place of work, including, assessing the risk to non-employees using the workplace
- Prepare a safety statement (section 20 of the 2005 Act) setting out the way in which risk is managed.

Section 16

Section 16 of the Act places an onus on designers, manufacturers, importers or suppliers of articles for use at work to ensure that:

- The article (which includes appliances, plant and machinery in the definition given in section 2 of the Act) is designed and constructed so as to be without risk to health when properly used at a place of work
- Information is provided about the safe use of the article to any person to whom he or she supplies that article
- This information must relate to the use for which the article has been designed, manufactured or tested and must also include information on safe installation, use, maintenance, cleaning, dismantling or disposal without risk to safety or health.

b) Safety, Health and Welfare at Work (Biological Agents) Regulations, 1994 as amended in 1998 (S.I. No. 146 of 1994 and S.I. No. 248 of 1998)

Despite the revocation of the Safety, Health and Welfare at Work Act 1989, the Safety, Health and Welfare at Work (Biological Agents) Regulations, 1994 as amended in 1998 (S.I. No. 146 of 1994 and S.I. No. 248 of 1998) remain in force. *Legionella* spp. and *L. pneumophila* are listed among biological agents set out in the Fourth Schedule of the regulations and are categorised as a 'group 2 biological agent', that is "one which can cause human disease and might be a hazard to employees, although it is unlikely to spread to the community and in respect of which there is usually effective prophylaxis or treatment available".

Regulation 3

Regulation 3 (Appendix D) sets out the duties of employers to prevent exposure to a biological agent or, if complete prevention is not possible, to minimise exposure. Of particular relevance to *Legionella* control is Regulation 3 (f), which refers to situations where the work activity does not involve a deliberate intention to work with or use a biological agent but may nevertheless result in employees being exposed to a biological agent (e.g. cleaning and maintenance work). This would be the situation pertaining to *Legionella* in most situations.

Regulation 4

Regulation 4 (Appendix D) obliges the employer to:

- Carry out a written risk assessment of exposure of an employee to a biological agent (including *Legionella*)
- Identify appropriate control measures to be taken
- Forward information on the risk assessment to the HSA, should the Authority so request.

Regulation 7

Regulation 7 requires the employer to:

- Provide employees and/or their safety representatives with information and training regarding the risk posed by a biological agent (Appendix D).

Second schedule

The second schedule of the regulations as seen below outlines measures to be taken where exposure to a biological agent cannot be prevented (Regulation 3 (d)):

- The keeping as low as possible of the number of employees exposed or likely to be exposed to a biological agent
- The design of work processes and engineering control measures so as to avoid or minimise the release of a biological agent into the place of work
- The use of both collective protection measures and individual protection measures where exposure cannot be avoided by other means
- The use of hygiene measures compatible with the aim of preventing or reducing the accidental transfer or release of a biological agent from the workplace
- The use of the biohazard sign depicted in the Third Schedule, and other relevant warning signs
- The drawing up of plans to deal with accidents involving a biological agent
- The testing, where it is necessary and technically possible, for the presence, outside the primary physical confinement, of a biological agent used at work
- The use of means for the safe collection, storage and disposal of waste by employees, including the use of secure and identifiable containers, after suitable treatment where appropriate
- The making of arrangements for the safe handling and transport of a biological agent within the workplace.

In summary, therefore where there is the potential for *Legionella* bacteria to be present at the workplace an employer must take the following actions:

- Assess the risk of exposure
- Limit exposure
- Introduce collective and adequate control measures to protect workers from exposure occurring
- Comply with the biological agents regulations as appropriate to the work activities and specific workplace details so as to protect those at risk from exposure.

c) Safety, Health and Welfare at Work (General Application) Regulations 2007 (S.I. No. 299 of 2007)

These regulations are a composite set of regulations. Of relevance to the control of *Legionella* in the workplace is Part 2, Chapter 2 of these regulations which covers the use of work equipment. Work equipment is defined under these regulations as any machinery, appliance, apparatus, tool or installation for use at work.

Regulation 29

Regulation 29 (Appendix E) requires the employer to ensure that:

- Employees have adequate information and where appropriate written instructions on work equipment
- The content of any information or instruction should address as necessary, normal conditions of use of the work equipment and actions to identify and control foreseeable abnormal situations.

Regulation 30

Regulation 30 (Appendix E) requires the employer to ensure that:

- Where the safety of work equipment depends on the installation conditions that an initial inspection is carried out after installation is completed and before it is first put into service
- Where work equipment is exposed to conditions causing deterioration liable to result in a danger to safety or health that the employer must ensure that periodic inspections and where appropriate, testing is carried out
- Special inspections are carried out when exceptional circumstances arise which are liable to make work equipment unsafe e.g. modification work and prolonged inactivity
- Deterioration is detected and remedied in good time
- Inspections must be carried out by a competent person
- Results of the inspections must be recorded and kept for five years
- Records must be available for inspection by a HSA inspector.

Regulations 62-67

Regulations 62-67 of the Act set out the responsibilities of employers in relation to personal protective equipment (PPE) (see also Chapter 7, Section 7.4). These regulations require employers to:

- Provide PPE for their employees' use where risks to the health and safety of employees at the work place cannot be avoided or limited by other means
- Make an assessment of whether the equipment satisfies the regulation requirements
- Determine the conditions of use and compatibility of the equipment
- Ensure use is normally confined to one employee and where it is necessary that equipment is made available to more than one employee, that such use does not create health or hygiene problems for any user
- Ensure that the PPE provided is maintained properly and replaced where necessary
- Provide information, training and instruction on the use of the equipment and the risks against which the wearing of the equipment protects the employee.

d) Safety, Health and Welfare at Work (Chemical Agents) Regulations, 2001 (S.I. No. 619 of 2001)

While not directly related to *Legionella*, employers are obliged to consider the requirements of these regulations to ensure that their workers are not at risk from exposure to chemicals while at work and/or performing a work activity in which chemical agents are being used. In this regard therefore, chemical agents in the form of biocides and disinfectants, etc. are used as a means of controlling aspects relating to the presence of *Legionella* and for cleaning purposes.

A hazardous substance is something which has the potential to cause harm. A chemical agent can be considered hazardous not only because of what it contains e.g. constituent or chemical ingredient but also because of the form or way in which it is used at the workplace i.e. the concentration, how and where it is stored, if used with other chemicals in a mixture, the temperature and environment for use, disposal and storage, etc.

These regulations place duties on employers, employees and other users of workplaces. The regulations require that employers:

- Determine which chemical agents are present and being used at the workplace
- Prevent and control exposure to these chemical agents
- Introduce specific protection and prevention measures to protect workers
- Make arrangements to deal with accidents, incidents and emergencies
- Inform, train, consult and supervise workers in the safe use of chemical agents.

Regulation 4

Regulation 4 outlines the requirements necessary for employers to perform an adequate risk assessment regarding any hazardous chemical agent present and used at the workplace (Appendix F). When assessing the risk from exposure to chemicals it is important to know the chemical in question, to adopt a step-by-step approach to identifying all the possible means of exposure, and to understand the effects that factors such as duration and frequency of exposure can have on the risk of harm being caused. Consideration should be given to the availability of a universal chemical antidote (e.g. the hypertonic, polyvalent, amphoteric compound Diphoterine) that can neutralise many hazardous chemicals.

3.2 Infectious Diseases Regulations 1981 (S.I. No. 390 of 1981)

The principal current regulations relating to legionellosis are contained in the Infectious Diseases Regulations (S.I. No. 390 of 1981) as amended by the Infectious Diseases (Amendment) Regulations 1985 (S.I. No. 268 of 1985), Infectious Diseases (Amendment) Regulations 1988 (S.I. No. 288 of 1988) and Infectious Diseases (Amendment) Regulations 1996 (S.I. No. 384 of 1996) and Infectious Diseases (Amendment) Regulations (S.I. No. 707 of 2003). These regulations can be viewed on the Irish Government website at www.irishstatutebook.ie/.

Article 11 of the 1981 regulations states:

“On becoming aware, whether from a notification or intimation under these regulations or otherwise, of a case or a suspected case of infectious disease or a probable source of infection with such disease, a medical officer of health, or a health officer on the advice of a medical officer of health shall make such enquiries and take such steps as are necessary or desirable for investigating the nature and source of such infection, for preventing the spread of such infection, and for removing conditions favourable to such infection”.

Legionellosis is a statutorily notifiable disease in Ireland as defined by the Infectious Disease Regulations 1981 (S.I. No. 390 of 1981). Under the Infectious Diseases (Amendment) (No. 3) Regulations 2003 (S.I. No. 707 of 2003), which came into effect on 1 January 2004, laboratory and clinical notification of legionellosis is mandatory. Cases should be notified to the MOH in the relevant department of public health.

Under the Infectious Diseases (Amendment) (No. 3) Regulations 2003 (S.I. No. 707 of 2003), it is also mandatory for a medical practitioner and a clinical director of a diagnostic laboratory to notify to the MOH any unusual clusters or changing patterns of any illness, and individual cases thereof, that may be of public health concern. The MOH in turn must notify HPSC.

3.2.1 Recommendation re *Legionella*-specific legislation

There is an urgent need for the DoHC and the Department of the Environment, Heritage and Local Government to consider:

- Legislative controls on standards of maintenance and disinfection of any equipment that poses a risk of producing aerosols contaminated with *Legionella* during both normal and abnormal (e.g. during maintenance) operating conditions
- A system of statutory notification by the owner/occupier of high-risk sites e.g. cooling towers

- The provision of legislative backing to an appropriate statutory authority for the monitoring and control of high-risk sites, including those instances where there is a recognised public health risk e.g. guest accommodation and trade shows with open air fountains/spa pools, etc.
- That provision should be made for adequate resources and training to ensure effective enforcement of existing legislation.