

Legionella

In order to understand the workplace health and safety requirements for legionella, and your obligations under the law you must consider and understand relevant legislation and codes of practice.

What law applies

How to meet your obligations under the Act.

Guide to legionella control in cooling water systems, including cooling towers

A guide for owners or persons in control of cooling water system components, water treatment service providers, chiller service providers, designers and installers of cooling water systems.

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General health and safety obligations

To understand your obligations and safety requirements you must be familiar with the:

Workplace Health and Safety Act 1995 which imposes obligations on people at workplaces to ensure workplace health and safety. The *Workplace Health and Safety Act 1995* also helps you to meet your workplace health and safety obligations through:

- The *Workplace Health and Safety Regulation 2008* which describes what must be done to prevent or control certain hazards which cause injury, illness or death
- codes of practice, which are designed to give practical advice about ways to manage exposure to common risks. In particular, the *Risk Management Code of Practice 2007* should be read in conjunction with information on PPE.

Every Queensland employer must have **workers' compensation** insurance. Most employers insure with WorkCover Queensland, while a small number of large organisations have their own insurance. This insurance coverage ensures that employees injured at work receive financial support.

What you must do

It is a requirement of the *Workplace Health and Safety Act 1995* that risks must be assessed and control measures then implemented and reviewed to prevent or minimise exposure to the risks.

If the *Workplace Health and Safety Regulation 2008* describes how to prevent or minimise a risk at your workplace you **must** do what the regulation says. If there is a code of practice that describes how to prevent or minimise a risk at your workplace you **must** do what the code says or adopt and follow another way that gives the same level of protection against the risk.

If there is no regulation or code of practice about a risk at your workplace you **must** choose an appropriate way to manage exposure to the risk. People must, where there is no regulation or code of practice about a risk, take reasonable precautions and exercise proper diligence against the risk.

See the *Risk Management Code of Practice 2007* for further information.

Specific legislation for Legionella

Section 35 of the *Workplace Health and Safety Act 1995* places certain obligations on the owners of specified high risk plant such as cooling towers.

Owners must maintain the plant in a condition that ensures that it operates without any risk to health and safety. This means regular testing and cleaning.

An owner of plant that incorporates a cooling tower cannot use the plant (or allow it to be used) at a workplace unless the plant is registered with Workplace Health and Safety Queensland.

There are also requirements under the *Public Health Act 2005* to report notifiable diseases, of which Legionella is one.

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View and/or print the Guide to legionella control in cooling water systems, including cool towers

About the guide

The guide is for owners or persons in control of cooling water system components, water treatment service providers, chiller service providers, designers and installers of cooling water systems to assist in complying with the associated obligations under the *Workplace Health and Safety Act 1995* (PDF, 766 KB), and in managing the risks from micro-organisms such as Legionella bacteria in the components of the cooling water system.

The guide addresses:

- Workplace health and safety legislation - obligations of designers, owners, and persons in control of cooling water systems
- Registration of cooling towers
- Controlling the risk of microbial growth
- Management of risk factors during the design, installation, and commissioning of cooling water systems
- Management of risk factors during operation and maintenance of cooling water systems
- Quality of makeup water to the cooling water system
- Maintenance and servicing of cooling water system by a competent person
- Water treatment program for the cooling water system
- Routine servicing and inspection of a cooling tower
- Routine servicing and inspection of a chiller system
- Routine cooling tower cleaning procedure
- Emergency disinfection and decontamination of the cooling water system
- Heterotrophic colony count testing and Legionella testing
- Heterotrophic colony count
- Legionella testing
- Inspection of cooling water system by an on-site person
- Access to and egress from an area containing a cooling tower
- Drift control
- Chemical safety
- Documentation and reporting
- Cooling water system service reports
- Cleaning, disinfection, and decontamination reports
- Availability of records and reports
- Responsibilities of water treatment service providers (WTSP)
- Evaluation of cooling water system maintenance program
- Occupational health and safety for water treatment service providers
- Risk management of bleed water reuse
- Examples of key performance indicators and targets for cooling tower water
- Sample procedure for cleaning cooling towers and related equipment
- Bacterial Sampling and Testing Methods

- Control strategies for presence of Legionella and other heterotrophic micro-organisms
- Emergency disinfection and decontamination procedures
- Legionella and Legionnaires' disease
- Further information on occupational health and safety for water treatment service providers
- Requirement to report legionellosis, and the role of Queensland Health and Workplace Health and Safety Queensland
- Risk management and water quality standard for the reuse of bleed/blowdown water from cooling towers