

OHS INFORMATION SHEET 16B: RISK MANAGEMENT OF COOLING TOWERS

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What is a Cooling Tower?

Cooling towers are used in air conditioning systems or for refrigeration. They use surrounding air to cool water which in turn will cool the target area. A cooling tower system includes any machinery, tanks, pipes or valves connected to the system, and will contain one or more cooling towers depending on how extensive the system is.

How does a cooling tower system spread legionella?

When air is drawn or forced through a cooling tower it collects air borne particles and as it leaves the tower these particles are carried into the environment. Sometimes these particles may be contaminated with *Legionella* bacteria. If the *Legionella* bacteria is inhaled by susceptible* people, these people may develop Legionnaires' disease.

Registration of Cooling Tower Systems

The Building (Legionella) Act 2000 requires all Cooling Tower Systems to be registered with the Building Commission. For Cooling Tower Systems in operation before 1st March 2001, an application to register must be lodged before 1st September 2001.

For Cooling Tower Systems that are commissioned on or after 1st March 2001, an application to register must be lodged before the system is tested and commissioned. Registration is for a period of twelve months and the application for renewal must be lodged before the expiry of the previous registration.

Risk Management Plans

Monash University has initiated a comprehensive risk management strategy for all of its cooling tower systems. This strategy will involve carrying out risk assessments of all cooling tower systems and formalising existing risk management activities in accordance with the *Department of Human Services Standard Operational Program*. Risk Management Plans are required to be completed within 12 months of the registration of the Cooling Tower System. The program specifies activities that are to be carried out at predetermined intervals. These activities include:

- Regular inspections;
- Regular servicing;

* Susceptible people include; People over 50 years of age (predominantly males); heavy smokers; heavy drinkers; diabetics; people with chronic lung disease; and people with impaired immune systems.

- Monthly HCC testing to identify bacterial levels in system; and
- *Legionella* testing.

Profomas for the Risk Management Plans can be found on the Monash Legionella Web-page.

Enquiries

Should you have any enquiries regarding risk management of cooling tower systems please contact Richard Connolly on ext. 51034 or e-mail Richard.Connolly@adm.monash.edu.au