

Cooling water systems and Legionnaires disease

A cooling water system is a cooling tower, its associated equipment and pipe work. Cooling towers are most commonly used in air conditioning systems and refrigerators.

In 2018, NSW Health strengthened the *Public Health Regulation 2012* to reduce the community's risk to Legionnaires' disease. The new Regulations require building owners to conduct risk assessments and monthly tests on cooling towers and report high levels of Legionella and other bacteria to their local council.



Picture: Cooling Towers

Legionnaires Disease

Legionnaires' disease is an infection of the lungs (pneumonia) caused by the legionella bacteria, which are commonly found in cooling tower basins. It cannot be spread from person to person.

The incubation period between exposure and the development of symptoms is between two and ten days. Symptoms may include fever, chills, a

cough and shortness of breath and may lead to severe chest infections such as pneumonia.

It is a serious infection that may be life-threatening, particularly in the case of elderly people, those who are immunocompromised or heavy smokers. People who develop this disease are diagnosed by chest X-ray and a urine test and usually require treatment in hospital.

There are often more cases of Legionnaires' disease across the Sydney metropolitan area in autumn, and cooling towers are a known source of the bacteria that causes the disease, Legionella pneumophila.



Picture: Inside a cooling tower

Cooling Water System Regulation

NSW Public Health Units follow up every case of Legionnaires' disease and work closely with local councils in the management of cooling towers. Building owners carry out routine inspections and testing of cooling towers to help identify contamination early and allow for prompt cleaning and corrective actions.

Legionella growth can be controlled by proper water treatment (process of disinfection) procedures and regular cleaning. Building occupiers are responsible to ensure all water and evaporative cooling, air handling, dehumidifying, and hot and warm-water systems are properly maintained.



Registration

The *Public Health Act 2010* requires that all cooling water systems are registered with Council due to the potential risks associated with Legionnaires disease.

Registration of a cooling water system is required if you intend to either:

- occupy a premises that has a water cooling system.
- install a water cooling system in a premises that you occupy.

Restarting after closure

Businesses starting up again following any closures, including annual shut downs and COVID_19 closures, are reminded that building owners and occupiers have a legal obligation to ensure air-conditioning cooling towers are properly maintained.

For further information

Further information regarding cooling water systems, please contact Council's Environmental Health Officer or Customer Service on:

Phone: 02 9330 6400

E-mail: mail@georgesriver.nsw.gov.au