



# Department of Human Services

Incorporating: Health, Community Services, Mental Health, Senior Victorians and Housing

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OUR REF: RIEMS #4068

YOUR REF:

23 May 2008

Dear Car wash owner/operator,

## Re: Risk of Legionnaires' disease

As you are no doubt aware from Wednesday's media reports, there has been an unprecedented outbreak of Legionnaires' disease in Hoppers Crossing.

The department has formed the view that the source of infection was a car wash. This view has been supported by detailed epidemiology and testing of water at the car wash. It is believed that the warming of water to 40°C for part of the car wash process has created an ideal environment for growth of *Legionella* bacteria.

*Legionella* bacteria occur naturally in the environment. Artificial water systems, including showers, spa pools, and fountains and cooling towers, may provide environments that allow *Legionella* bacteria to multiply in large numbers especially when there are nutrients (eg dirt and slime). *Legionella* can then be spread by aerosols.

A meeting to discuss the risks of Legionnaires' disease from car wash sites was held between the department, Plumbing Industry Commission and representatives of the car wash industry.

It appears that the majority of car wash premises have at least some part of their process that involves the heating and storage of warm water.

A warm water system is defined by the *Health (Legionella) Regulations 2001* to be:

*a piped water system, including any thermostatic mixing valve, which is designed to supply water at a temperature of between 30°C and 60°C.*

The regulations require that the person who owns, manages or controls the warm water system must:

1. Ensure that the warm water system is disinfected by one or more of the following methods—
  - a. at least once each month by heat or chlorination; or
  - b. continuously by means of automatic low level chlorination; or
  - c. continuously by means of ultra-violet light treatment. Please note that if the method of disinfection of a warm water system is by ultra-violet light treatment, regular *Legionella* testing is required.

2. If you have outlets in the system that are not used for a period of 7 days or more they must be flushed at full flow.
3. In the event that *Legionella* is detected, you must:
  - a. Disinfect the entire warm water system by heat or chlorination. Our strong recommendation is that in such cases, chlorine be used. In practice this should be carried out by a trained water treatment professional and you should also consult with your service technicians about the possible impacts on your system if chlorine is used;
  - b. Review the warm water system operation, maintenance program and any water treatment;
  - c. Correct any faults necessary to prevent a re-occurrence of those faults.
4. Keep an up to date maintenance log book of—
  - i. all maintenance and corrective activities undertaken in relation to the system; and
  - ii. all microbiological test results of samples taken from the system; and
  - iii. any approvals issued under regulation 24 in respect of the system.

These regulations can be viewed at [www.legislation.vic.gov.au](http://www.legislation.vic.gov.au) Go to the Victorian law today section and search for Health (Legionella) Regulations 2001.

### **What action should you take?**

If you currently store warm water in your system you need to:

1. Cease the practice immediately until longer term options can be taken

OR

Consult a water treatment specialist to discuss methods of disinfecting the warm water to comply with the regulations

2. Review your car wash system to look for opportunities to reduce the risk of growing *Legionella* and therefore reduce the risk that your car wash might be the cause of a case of Legionnaires' disease. These measures would be in addition to your compliance with the Health (Legionella) Regulations.

For example:

- If you currently heat the water, review the temperature that it is heated to and consider raising it to above 60°C. *Legionella* bacteria cannot survive at this temperature. Depending on your system you may need to take precautions to prevent scalding of end users of the water.
- Consider replacing any rubber hoses particularly in those parts of the system used to move heated water. Rubber actually supports *Legionella* growth and its use should be avoided or at least minimised.

The department has produced a detailed draft guide 'Controlling Legionella in warm water systems' which is available at [www.health.vic.gov.au/environment/legionella/review](http://www.health.vic.gov.au/environment/legionella/review) Whilst the guide is tailored to large facilities such as hospitals and aged care facilities, it does contain detailed information about *Legionella* and Legionnaires' disease in general and about how the risks can be managed.

The department will continue to work with industry to produce a guidance document tailored for your industry.

If you wish to discuss the matter further please do not hesitate to contact our Legionella Hotline on 1800 248 898 or email us at [lrm@dhhs.vic.gov.au](mailto:lrm@dhhs.vic.gov.au) or on the web at [www.health.vic.gov.au/environment/legionella](http://www.health.vic.gov.au/environment/legionella)

Implementation of the above requirements will help you meet your obligations under occupational health and safety laws. In addition, you need to make your workers aware of the *Legionella* risk and any steps you are taking in line with this information to protect their health and safety.

If you have any questions regarding occupational health and safety, please contact the WorkSafe Victoria Advisory Service on 1800 136 089.

Thank you for your cooperation in this important public health initiative.

Jan Bowman  
Assistant Director,  
Environmental Health