

Information Sheet 20b

LEGIONNAIRE'S DISEASE

The disease is a pneumonia-like illness caused by the Legionella bacteria. Everyone is susceptible to infection. The bacterium is a common one which survives and multiplies in water. It is widespread in natural and fresh water such as rivers, lakes, streams and ponds. It may also be found in wet soil.

Water temperatures in the range of 20 – 45degC favour growth. It is uncommon to find bacteria proliferation below 20degC and it does not survive above 60degC. The route of infection is through inhalation into the lungs of small droplets of water carrying the bacteria. Aerosols containing such droplets may be generated by running taps, showers and other operations. The bacteria have great powers of survival and can grow inside layers of slime in pipes, and on plants and rocks. In their normal environment legionella bacteria tend not to cause infections.

However, man-made water systems sometimes provide environments that let the bacteria increase to large numbers, which can result in an outbreak. Legionnaires disease is not passed from person to person, or from drinking water contaminated by legionella bacteria.

Symptoms

The symptoms of legionnaires disease are similar to the symptoms of the flu: high temperature, feverishness and chills; coughs; muscle pains; headache; pneumonia; and (occasionally) diarrhoea and signs of mental confusion.

Under general health and safety law, as an employer or person in control of a premises, you have health and safety duties and need to take suitable precautions to prevent or control the risk of exposure to legionella.

Risk Assessment Report

The report needs to show where the site is, who the duty holder is, who the responsible person is, who is their substitute and their means of contact; and will need to list the water systems present and the points of entry. It should list all of the water assets and have an individual asset risk assessment for each asset. Depending on the risk assessment the reports should show a management plan for each asset and a management plan for the site.

Problem areas:

Any water system, with the right environmental conditions, could be a source for Legionella bacteria growth. There is a reasonable foreseeable Legionella risk if your water system;

- a) has a water temperature between 20-45 deg C
- b) creates and/or spreads breathable droplets, eg. aerosol created by cooling towers or water droplets or even taps
- c) stores and/or re-circulates water
- d) is likely to contain a source of food for the organism, eg. presence of sludge, scale or fouling

A full risk assessment should be carried out at least every two years or when the system has been changed i.e. a new sink is fitted etc.

Further information and guidance can be obtained from the HSE website with their 'frequently asked questions':
<http://www.hse.gov.uk/Legionnaires/faqs.htm>

and also including their brief guide for Dutyholders (available as a free download)
<http://www.hse.gov.uk/pubns/indg458.pdf>