

# FACTSHEET

## LEGIONELLA

### **Prevention and Control**

A suitable and sufficient risk assessment is required to identify and assess the risk of exposure to legionella bacteria from work activities and water systems on the premises and identify any necessary precautionary measures.

If the assessment shows that there is a reasonably foreseeable risk and it is reasonably practicable to prevent exposure or control the risk from exposure, the owner/manager should put in place appropriate controls and monitor these controls for effectiveness. Persons carrying out these assessments should be suitably able, experienced, instructed, trained and informed. In particular they should know:

- a) potential sources and the risks they present;
- b) measures to be adopted, including precautions to be taken for the protection of people concerned, and their significance; and
- c) measures to be taken to ensure that controls remain effective, and their significance.

Where the above expertise can not be found in house it may be necessary to enlist the help of an outside organisation. A written scheme should be produced and include:

- a) an up to date plan showing layout of the plant or system, including parts temporarily out of use (a schematic plan would suffice);
- b) a description of the correct and safe operation of the system;
- c) the precautions to be taken;
- d) checks to be carried out to ensure efficacy of scheme and the frequency of such checks; and
- e) remedial action to be taken in the event that the scheme is shown not to be effective.

In general, proliferation of legionella bacteria may be prevented by:

- avoiding water temperatures between 20°C and 45°C – water temperature is a particularly important factor in controlling the risks;
- avoiding water stagnation, which may encourage the growth of biofilm;
- avoiding the use of materials in the system that can harbour or provide nutrients for bacteria and other organisms;
- keeping the system clean to avoid the build up of sediments which may harbour bacteria (and also provide a nutrient source for them);
- the use of a suitable water treatment programme where it is appropriate and safe to do so; and
- ensuring that the system operates safely and correctly and is well maintained.

## Monitoring and Cleaning

### Hot Water

- Water in the boiler should be kept at a minimum of 60°C and at each outlet point above 50°C within a minute of running the water. It is recommended that these checks are carried out monthly, at the first and last tap on the run, and at a representation of taps annually. NB Please refer to guidance enclosed on scalding.
- Shower heads and hoses should be dismantled, cleaned and descaled at least quarterly.
- Any units, which are not regularly used must be flushed through and purged to drain without release of aerosols, at least weekly or immediately before use.
- Ensure that there are no areas of stagnation of water, which are not under control.

### Cold Water

- Check that the cold water is stored below 20°C, and maintains a temperature below 20°C at the first and last taps on the run after running the water for up to 2 minutes, recommended at the same frequencies as hot water checks.
- Visually inspect the cold water tank annually. Ensure the tank is insulated and that there is a closed lid. Check for debris and if necessary, clean and disinfect.

**Record all checks made and retain records for a minimum of 5 years.**

**For further information, obtain the following:**

**The Control of Legionella Bacteria in Water Systems – Approved code of practice and Guidance - HSE Books.**

Monitoring	Frequency	Date of check	Signature
Calorifier outlet 60°C	Monthly		
Calorifier return 50°C	Monthly		
Hot water sentinel taps 50°C after 1min (first and last tap on run)	Monthly		
Cold water sentinel taps ≤20°C after 2mins (first and last tap on run)	Monthly		
Hot water feed pipes on Thermostatic mixing valves 50°C after 1min	Monthly		
Temperatures at representative taps in addition to sentinel taps 50°C after 1min	Annually		
Cold water tanks are in good order	Annually		
Volume of cold water being used	Annually		
Schematics are up to date	Annually		
Draining, cleaning and inspecting the calorifiers	Annually		
Shower heads to be dismantled, cleaned and descaled	Quarterly		
Units that are infrequently used, flush and purge	Weekly		