

LEGIONELLA RISKS IN COUNCIL PREMISES – A Quick Guide Guidance for Site Owners and Premises Managers

What is Legionnaire's disease?

Legionnaires' disease is a pneumonia that principally affects those who are susceptible due to age (over 45), illness, immuno-suppression, smoking, lack of fitness etc. and may be fatal. Legionellae can also cause less serious illnesses which can affect all people.

Infection is caused by inhaling legionella bacteria, in water droplets or aerosol which are small enough to penetrate deeply into the lung. Symptoms include myalgia and headache followed by fever and chills. Infection with legionella bacteria can be fatal in approximately 12% of reported cases. On average there are approximately 200-250 reported cases of Legionnaires' disease each year in the UK.

Where are legionella bacteria found?

Legionella bacteria are common in natural water courses such as rivers and ponds. Since legionella are widespread in the environment, they may contaminate and grow in other water systems such as hot and cold-water services.

They survive low temperatures and thrive at temperatures between 20-45°C if the conditions are right, e.g. if a supply of nutrients is present such as bio-film, rust, sludge, scale, algae and other bacteria. They are killed by high temperatures above; they will not survive above 60°C.

What is the Council Policy?

Shropshire Council has undertaken to:

- ✓ Identify and assess the risk of legionella infection to its employees, contractors and visitors arising from the manner in which the water systems, over which the Council has day to day control, are operated, managed or designed.
- ✓ At all times comply with the Health and Safety Executive's Approved Code of Practice L8 (Fourth edition), Legionnaires' disease: The control of legionella bacteria in water systems (ACOP).

What does the risk assessment process involve?

The Strategic Asset Management Team have arranged for Risk Assessments to be carried out, by external consultants, on water systems and plant, for each property. The Risk Assessments will be reviewed every 2 years and when the original assessment is no longer valid following major refurbishment works.

The Strategic Asset Management Team have arranged for specialist contractors to undertake water temperature monitoring, cleaning, disinfection and certification routines on water systems and plant, for each property as below;

Cold water tank inspection and certification annually
Cold water tank disinfection as required
Shower disinfection and de scale quarterly

Temperature checks:

hot taps monthly to be >50 °C after 1 minute cold taps monthly to be <20°C after 2 minutes

calorifiers monthly store >60°C, return > 50 °C

CW tanks annually store < 20°C

Log book completion monthly

What do I have to do about Legionella?

Locate and familiarise yourself with the on-site logbook, which contains the Risk Assessment and details of completed remedial work.

Where appropriate the control measures below should be adopted on site:-

- A temperature regime where hot water is stored at temperatures above 60°C and distributed at a temperature above 50°C. Cold water is stored at temperatures below 20°C.
- Avoidance of water stagnation by:-
 - Flushing through any outlets that are not used at least once per week, for several minutes on a weekly basis, e.g. showers, outside taps, outlets in disabled facilities and outlets in outbuildings. These weekly checks should be documented.
 - Draining down any systems that are not in regular use.
- Following plant shutdowns and holiday periods of over one week's duration, thermal disinfection should be undertaken by raising the temperature of the centralised hot water system to 60°C for more than one hour and running each outlet for five minutes, working back from the most remote outlet to the water heater. Cold outlets shall be run with the respective hot outlet.
- Flushing of all WCs, with lids closed, following system shutdowns and holiday periods of over one week's duration.

At properties having **hydrotherapy and spa pools** the following sampling and monitoring procedures shall be adopted, organised and carried out by the in-house staff:-

<u>Chemical testing</u> of the chlorine, alkalinity and pH on a regular basis in line with the industry recommendations. Further guidance is available from the Health & Safety Team.

Biological monitoring:

<u>Swimming Pools</u> – checking for aerobic colony count, total coliforms, e-coli and pseudomonas on a monthly basis.

<u>Hydrotherapy Pools</u> – as above on a twice weekly basis or in line with the manufacturer's recommendation whichever is the more frequent. Testing specifically for legionella and other organisms may be required when adverse effects have been associated with the use of the pool but are not required routinely.

<u>Spa Pools</u> – monthly biological test as above. In addition, quarterly testing for legionella.

Analysis of the water samples shall be undertaken by a UKAS accredited laboratory.

Where can I get more information and help?

Strategic Asset Management Team 01743 281036
Health & Safety Team 01743 252819

Policies & Procedures for the Control of Legionella Risks.

- HSE free publication: <u>Essential Information for providers of Residential</u> Accommodation
- HSE Approved Code of Practice L8 (Fourth Edition), Legionnaires' disease:
 The Control of Legionella Bacteria in Water Systems.