

Today's Topic/Issue

Although Legionella is a naturally occurring bacteria widespread in nature, certain conditions can encourage significant growth which can cause bacterial pneumonia. As a result, legionella is considered as a biological hazard, is listed under the COSHH Regulations and is reportable to the Health and Safety Executive under RIDDOR.

Causes and Transmission



The following conditions encourage the growth of legionella:

- A water temperature of between 20C and 45C, with 37C being the preferred temperature - anything higher than 70C will “kill off” the bacteria)
- The presence of rust, sludge, scale, organic matter or biofilms
- Slow moving or stagnant water.

The water needs to be in an aerosol form for the bacteria to be transmitted to humans.

Legionella bacteria can be transmitted by:

- Water systems incorporating a cooling tower or evaporative condenser
- Infrequently used hot and cold-water systems
- Humidifiers and air washer
- Fire suppression systems (deluge and sprinkler systems)
- Pressure washers
- Lawn sprinklers and hose pipes
- Lathe and machine tool cooling systems
- Showers
- Air conditioning systems which have not been maintained correctly



QUICK QUIZ

What areas on site do you think might encourage Legionella?

Symptoms to look out for

Legionnaires' disease is a serious form of pneumonia caused by breathing in tiny water droplets containing Legionella bacteria.

The early symptoms can be similar to flu and may include:

- High temperature, fever or chills
- Cough
- Headache
- Muscle aches and pains
- Tiredness

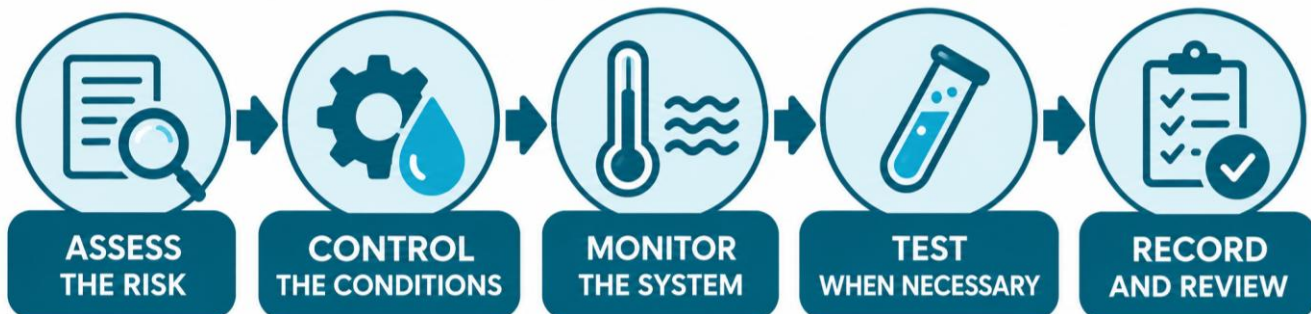
More serious illness can develop, including:

- Shortness of breath
- Chest pain
- Pneumonia
- Diarrhoea
- Confusion

Susceptibility to legionella bacteria increases with age, over 45 males being more likely to be infected than females. Smoking and respiratory medical conditions are a significant risk factor as well as diseases that can reduce immunity such as organ transplants, cancer, diseases affecting the blood and diabetes

If you develop symptoms and think you may have been exposed to Legionella at work, seek medical advice and tell your employer.





If a site has areas that might harbour legionella, it will need to complete a risk assessment. If there is no foreseeable risk of exposure than no further control measures are required although risk assessments must be updated if circumstances change.

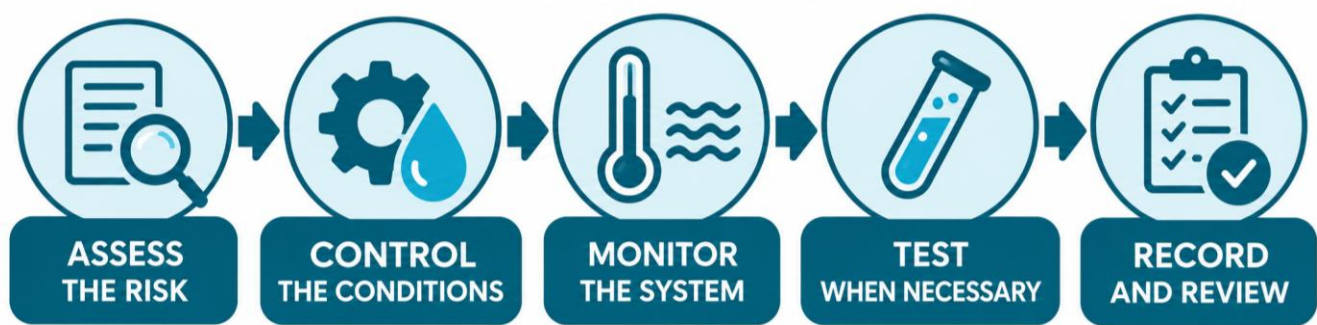
A duty holder must be appointed to assume responsibility for legionella on site where the risk assessment shows potential for exposure. It may be determined that testing and treatment is required and this should be conducted by a competent person.

QUICK QUIZ

Do you know who is responsible for legionella on site?



There isn't a blanket requirement for every small business to take Legionella water samples every year. The HSE states that microbiological testing of ordinary mains-supplied hot and cold-water systems is not usually required unless the risk assessment or monitoring indicates a problem. The monitoring regime should be based on the system and its risks.



Managing Legionella

Every employer or person in control of workplace premises must consider the risk from Legionella. However, the level of management required will depend on the water systems present and the findings of the risk assessment. A small business with a simple mains-fed hot and cold-water system may have relatively straightforward arrangements.

A suitable management system should include:

- 1) Risk assessment** - Identify the water systems on site and consider whether conditions could allow Legionella to grow, including temperature, water storage, stagnation, scale, sludge and biofilms.



QUICK QUIZ

What areas on site do you think might encourage Legionella?

Possible answers could include:

- Hot water systems – boilers, hot-water cylinders and storage tanks
- Cold-water storage tanks – particularly where water can remain unused
- Showers – especially infrequently used showers
- Taps and outlets – particularly those that aren't used regularly
- Air-conditioning or cooling systems – where they use or produce water
- Outdoor water systems – hoses, tanks or other equipment where water may stand for long periods
- Recently vacant areas – for example, toilets, showers or kitchens that haven't been used for weeks
- Buildings or areas that have been shut down – particularly after holidays, refurbishment or periods of low occupancy

2) Responsible person - Appoint someone who is competent to manage the identified risks. This could be someone within the business or a competent external person.

QUICK QUIZ

Do you know who is responsible for legionella on site?

A Legionella Responsible Person is the competent person appointed to take day-to-day responsibility for managing and controlling the risk from Legionella on a site. Importantly, they don't necessarily have to be a Legionella specialist or an external consultant. HSE says the responsible person could be the business owner, a worker within the business, or someone from outside the business, provided they have sufficient authority, competence, knowledge and experience for the role.



Toolbox Talk – SUPERVISORS NOTES

Legionella Awareness

2026/27

3) Temperature control - Where temperature is being used as a control measure, hot water should generally be stored at 60°C or above and distributed at 50°C or above, while cold water should be maintained below 20°C.

4) Prevent stagnation - Infrequently used outlets should be identified and flushed regularly. Unnecessary dead legs, long pipe runs and unused sections of pipework should be avoided.

5) Keep systems clean - Water tanks, pipework, taps, showers and other components should be kept clean and maintained. Showerheads and hoses may require regular cleaning and descaling.

6) Monitor and record - Temperature checks, flushing, cleaning, maintenance and any other monitoring identified by the risk assessment should be recorded.

7) Testing and sampling - Routine Legionella sampling is not normally required for ordinary mains-fed hot and cold-water systems unless the risk assessment or monitoring indicates that it is necessary. Where sampling is required, it should be carried out appropriately and samples should be analysed by a suitable UKAS-accredited laboratory.

8) Review - Review the risk assessment and control measures when the water system changes, problems are identified, or there is reason to believe the existing arrangements are no longer effective.



Toolbox Talk - Attendance Sheet

Site/Department Name:

Trainer Name:

Signature:

Toolbox Talk Topic:

Date:

Name	Signature

Any further feedback or questions from attendees regarding this toolbox talk topic?