

## Reopening after the coronavirus pandemic lockdown Legionella risks

Legionnaires' disease is a type of pneumonia which can cause serious respiratory illness. It can occur when tiny droplets of water (aerosol) containing Legionella bacteria are breathed into the lungs of susceptible people. Preventing Legionnaires' disease is typically achieved by limiting the growth of Legionella in building water systems

You can find out what Legionnaires' disease is, where it comes from, how people get it and symptoms and treatment by reading the HSE's guidance 'What is Legionnaire's disease?' [www.hse.gov.uk/legionnaires/what-is.htm](http://www.hse.gov.uk/legionnaires/what-is.htm)

Employers, the self-employed and people in control of premises, such as landlords, have a duty to protect people by identifying and controlling risks associated with legionella.

If your building was closed or has had reduced occupancy during the coronavirus (COVID-19) pandemic, water system stagnation can occur due to lack of use, increasing the risks of Legionnaires' disease.

You should review your legionella risk assessment and manage the legionella risks when you:

- reinstate a water system or start using it again
- restart some types of air conditioning units

If the water system is still used regularly, maintain the appropriate measures to prevent legionella growth.

### Advice for reopening

If you have already reviewed your risk assessment and implemented additional control measures, then it is unlikely you will need to take any further steps prior to reopening.

A building is more likely to be safe to reopen without additional measures if:

- Flushing of the water systems has been undertaken weekly
- Water temperatures at outlets have been checked and are consistently in line with the recommendations in HSG274 Part 2 – The Control of Legionella Bacteria in Hot and Cold Water Systems.
- Any microbiological sampling undertaken over the course of the lockdown indicates no significant change in the total viable count (TVC) and Legionella bacteria samples have returned as not detected or satisfactory

Additional steps to take prior to reopening could include:

- Flushing through simple hot/cold water systems with fresh mains water for several minutes
- Increasing the temperature of hot water systems to above 60°C if possible and drawing it through to all hot water outlets (a temperature over 60°C will kill Legionella bacteria over time)
- Flushing through larger hot/cold water systems (including those with tanks, showers, calorifiers etc.) for a significant period of time
- Ensuring that the system is capable of delivering water at safe temperatures by checking temperatures ahead of reopening
- Undertaking a chemical or thermal disinfection of the water system
- Undertaking microbiological sampling for Legionella bacteria

Where no additional action has been taken, or you are concerned about the effectiveness of controls implemented, you must take reasonable steps to ensure the safety of the water system prior to reopening. It is foreseeable that some increase in bacterial levels will have occurred. Such water systems should not simply be put straight back into use and a plan should be formulated to allow safe start-up prior to reopening the building.

Any plan should consider the competency and health and safety of individuals carrying out the work. The hazards from Legionella bacteria will likely be greater than expected under normal conditions so measures such as limiting the production of water droplets (aerosol), minimising exposure to those droplets and even use of respiratory protective equipment should be considered.

Where you have concerns, for example if you have previously experienced problems with Legionella in your water system, external advice should be sought from a competent person who may be able to assist remotely or through attendance on site.

### **Hot and cold water systems**

If hot and cold water outlets are used infrequently, flush them weekly to prevent water stagnation. If you cannot do this, work with your competent person to ensure systems are cleaned (if required) and disinfected before the building is occupied.

### **Air conditioning units**

If your workplace has been closed for an extended period and has air conditioning units that have a source of water that can generate aerosol, you will need to assess the risks of legionella being present within them before restarting.

Small wall or ceiling-mounted units with closed cooling systems should not present a risk.

Larger units may present a risk if they have improperly drained condensate trays, or humidifier or evaporative cooling sections where water can stagnate, becoming a reservoir for bacteria to grow.

When you review your risk assessment, decide what the risks are for your units and if you need to clean them safely, before they are turned on.

### **Commercial spa pools and hot tubs**

If commercial spa pools and hot tubs are:

- being used, you must maintain the existing control regimes
- not being used, you should drain, clean and disinfect them. You should also clean and disinfect them before reinstatement

### **Additional sources of information**

The following professional associations provide guidance that may help you comply with the law.

The HSE has published guidance for managing Legionella during the coronavirus pandemic: [www.hse.gov.uk/legionnaires/index.htm](http://www.hse.gov.uk/legionnaires/index.htm)

The Legionella Control Association has published guidance on managing water systems during the coronavirus pandemic: [www.legionellacontrol.org.uk](http://www.legionellacontrol.org.uk)

The European Society of Clinical Microbiology and Infectious Diseases (ESCMID) has also published guidance for managing Legionella during the coronavirus pandemic:

[https://www.escmid.org/research\\_projects/study\\_groups/study\\_groups\\_group\\_n/legionella\\_infections/](https://www.escmid.org/research_projects/study_groups/study_groups_group_n/legionella_infections/)

The Chartered Institute of Environmental Health has published guidance on legionella risks during the lockdown and reopening safely:

<https://www.cieh.org/media/4208/legionella-guidance-covid-19.pdf>