

# Managing legionella during Covid-19 lockdown

## Background

The Covid-19 pandemic has seen the closure of non-essential businesses in an effort to slow the spread of infection. However, it is important to remember that the Health and Safety at Work (NI) Order 1978 continues to apply during this time. Having in place a suitable and sufficient risk assessment will help dutyholders identify and assess the risk of exposure to legionella bacteria from work activities and water systems, as well as any precautionary measures that may be needed. The control and management of legionella is dealt with more specifically in *Legionnaires' disease. The control of legionella bacteria in water systems, Approved Code of Practice and guidance (L8)*.

The advice in this leaflet is issued to remind dutyholders of the need to manage the risk from legionella bacteria that may be present in wet cooling plant, in the hot and cold water systems of buildings, or any other source of process water used as part of business activities, as a result of changes in operation due to Covid-19 restrictions.

## Controlling legionella

Dutyholders must review how they manage legionella risk during the Covid-19 outbreak. Water systems should be assessed individually as not all scenarios will be the same. The following general advice applies:

- wet cooling systems must be maintained or safely shut down;
- hot and cold water systems supplying critical services, for example hospitals, must be maintained to ensure continued operation;
- hot and cold water systems in buildings that are empty or have a reduced occupancy must address the issue of stagnation, routine checks and maintenance that may not have taken place during this time.

## Wet cooling systems

Wet cooling systems that are able to remain operational during this period will require continued management to remain safe. This will include tasks such as replenishing chemicals, adjusting dosing levels, calibrating sensors, taking dip-slides and legionella water samples as well as periodic clean and disinfection. Some of these tasks may be carried out in-house and some may be completed by a water treatment company. Where a business has closed, any wet cooling plant should have been run down safely.

Where wet cooling plant has been closed down for a prolonged period it should be recommissioned following the measures detailed in the written scheme of control and *HSG274 Legionnaires' disease: Technical guidance, Part1: The control of legionella bacteria in evaporative cooling Systems*. Paragraphs 1.23-1.29 refer to commissioning and recommissioning and provide clear guidance on this topic.



## Further sources of advice

Management of legionella may require assistance from a competent person. Such individuals, or water treatment companies, are normally members of a professional body such as the Water Management Society or Legionella Control Association respectively.

Where you have not previously carried out a legionella risk assessment you should be aware that there may be a high demand for these services when Covid-19 restrictions are lifted.

Further information can be found within HSE guidance *INDG458 Legionnaires' disease, A brief guide for dutyholders*.

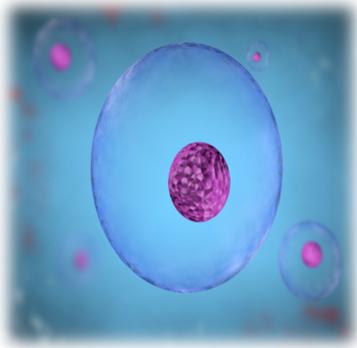
### Caution

*Dutyholders should plan what needs to be done before the water system is brought back into use and where necessary seek competent advice from a water management company.*

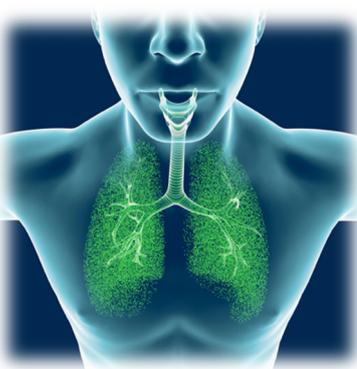


Legionella is a type of bacteria that grows in water. There are several species of the bacteria that cause disease.

When conditions are favourable, the bacteria will grow and multiply.



Legionella can survive and grow as a parasite within free-living protozoa (a microorganism) and biofilm (a collection of microorganisms) which develop in water systems.



People contract legionellosis by inhaling the bacteria contained within small droplets of water suspended in the air.

## Domestic hot and cold water systems

### *Buildings with reduced occupancy*

Buildings that are operating with a reduced occupancy must introduce additional measures to keep the remaining occupants safe. The following advice should be considered:

- if possible, drop water tank levels to maintain less than 24 hours' worth of normal storage to avoid water stagnation;
- flush outlets frequently to reduce stagnation and the potential for microbial growth in dead legs;
- monitor water temperature (cold water can become warmer when it does not circulate);
- if fitted, consider increasing water treatment dosing, but consider other impacts, such as corrosion;
- consider short-term installation of point-of-use filters at designated outlets;
- routine tasks such as temperature checks and cleaning and disinfection programmes should be carefully reviewed. Many of these tasks may have not taken place during periods of reduced or non-occupancy and will need to be reintroduced.

### *Buildings that have been 'mothballed'*

It is unlikely that hot and cold water systems within buildings will have been taken out of use (sometimes referred to as mothballing). Where this is the case, dutyholders should follow the guidance in HSG274 Legionnaires' disease Part 2: The control of legionella bacteria in hot and cold water systems (see paragraphs 2.50-2.52).

Mothballed water systems will normally be left filled with water and not drained down as moisture will remain within the system. This can enable biofilm to develop where there are pockets of water or high humidity. The water in the system helps to avoid other problems associated with systems drying out, including failure of tank joints and corrosion in metal pipework. Systems that have been mothballed should be thoroughly flushed, cleaned and disinfected before returning to normal use.

## Other risk systems

The risk from legionella in all other water based process also needs to be properly managed. Dutyholders should ensure they are following all relevant guidance and advice specific to the process they have responsibility for. Guidance in relation to other risk systems is available within *HSG274 Legionnaires' disease: Technical guidance Part 3: The control of legionella bacteria in other risk systems*.

Specific guidance in relation to the operation of spa pools is available within *HSG282 Control of legionella and other infectious agents in spa-pool systems*.

### Caution

*If you believe that recommissioning your system will result in an uncontrolled release or other significant risk, you must notify:*

*HSENI or your Local Authority Environmental Health Officer.*

*You should record all communications.*