

Legionella Control International

Recommissioning Water Systems – Post COVID-19 Lockdown

This guidance sets-out those practical steps Duty Holders, Responsible Persons and others responsible for workplace safety should consider as they recommission their buildings and water systems post COVID-19 lockdown.

It is important to remember that the Health and Safety at Work Act still applies during this period of uncertainty and Dutyholders must still be taking reasonably practicable steps to control risk from Legionella. Dutyholders implicated in an outbreak of Legionnaires' disease resulting from actions taken for COVID-19 precautions are not likely to have any exemption from prosecution.

This document should be read in conjunction with our previous COVID-19 guidance, ACOP L8, HSG274 and HTM 04-01 (SHTM in Scotland).

Recommissioning water systems

It is essential that when buildings reopen following the lifting of COVID-19 restrictions, that any water system is not simply put straight back into use as this could increase the potential for an outbreak of Legionnaires' disease.

During the period of shutdown it would be sensible to formulate a recommissioning plan for each water system to allow safe start-up and assurance to users that it is safe.

Any plan for recommissioning buildings must take into account the safety of the operatives carrying out the work. It is foreseeable that the hazard present within water systems in this situation would be greater than normally expected. Reasonably practicable measures such as limiting aerosol, minimising exposure and use of RPE should be considered.

Evaporative cooling systems

Evaporative cooling systems should already have robust start-up and shut-down procedures in place and the expectation is that these will be followed.

Hot and cold water systems

The minimum expectation for small, simple hot and cold water systems would be flushing through with fresh mains water.

Larger buildings, those with storage tanks, showers, calorifiers and more complex pipework the expectation is likely to be for more extensive flushing followed by cleaning and disinfection.

Flushing

During flushing all valves should be operated in the fully open position so that any particulate matter can be flushed through. Of particular importance are float-operated or other restrictive valves which need to be manually opened to ensure clearing of particulates

and prevent fouling of the valves. Where a clearing velocity cannot be achieved, consideration should be given to removal of valves to enable an effective flush.

Cleaning and disinfection

Where cleaning and disinfection is carried out, it is very important to monitor the decrease in disinfectant level over the course of the contact time. Loss of more than 40% disinfectant concentration could indicate influence of biofilm. See BSI PD855468 for more guidance.

Empty buildings

Where buildings have been empty for some time and during warm weather, it is likely that some increase in bacteria levels and biofilm will occur. These water systems may require more than a simple disinfection at 50ppm of chlorine for an hour to be successful.

Be prepared for the need to repeat some disinfections to achieve success.

Record keeping and validation testing

In all cases where water systems are being recommissioned it is sensible to have evidence to prove/reassure that the recommissioning process has been effective.

Water sampling for Legionella bacteria to BS7592 should be considered for recommissioning plans to validate the effectiveness of the process.

As per HSG274 part 2, water samples should be taken 2-7 days following recommissioning and not on the day of disinfection. Follow up samples may need to be considered as part of the recommissioning plan.

Elevated risk

Our water safety experts believe there is the potential for multiple outbreaks of Legionnaires' disease following the COVID-19 precautions if actions taken now are not carefully considered.

The Health and Safety at Work Act still applies and Dutyholders must continue to take reasonably practicable precautions to control the risks from Legionella throughout this time.

Further advice and support

If you require further advice or support on any of the issues raised here please contact us:

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