

Legionella Control in Hot and Cold Water Systems During The Summer Break

With the closure of schools due to the COVID-19 pandemic and the forthcoming summer holiday break there has been a relatively short period with the hot and cold water systems being used at their normal levels. This is a reminder to all those who have accountability and responsibility in managing legionella at their school on what actions should be taken over the summer break. It supplements previous guidance given by NYCC Property Services and the Health & Safety Departments as part of the COVID-19 response

Legionella Risk Factors

During this pandemic and subsequent lockdown, there are two risk factors that could have increased creating ideal conditions for Legionella bacteria to grow in water systems. These are:

- temperature and
- time for stagnation to occur.

Legionella bacteria thrive at temperatures between 20°C and 50°C so one of the key control measures for minimising the risk is to ensure that your cold water is cold (i.e. below 20°C) and the hot water is hot (above 50°C). When water is below 20°C or above 50°C Legionella bacteria will not grow. However, water between these temperatures presents a greater degree of risk, particularly where it is left to stagnate. Generally, where water is left within a system without movement for more than a week then the risk of growth will increase

Risk from this hazard is foreseeable in nearly all hot and cold water systems and a scheme of control should be in place to address that risk which will typically include checking water temperatures, programmed maintenance/checks and flushing parts of the system that may contain stagnant water due to low use

Key Control Measures

The main objectives should be to prevent stagnation and keep water temperatures outside of 20-50°C.

To satisfy this;

- Continue to do the hot and cold water measurements as detailed in your Water Log Book. Make sure this is completed and available for inspection if required. If others do this activity on your behalf, ensure they will be doing it and understand the requirements
- When taking you tests run the water for longer and to ensure stagnation of the water does not occur
- Flush all toilets to ensure the turnover of water in the cold water system, aim to ensure the turnover of any water stored in tanks every 24 hours and movement of water through pipework and outlets at least once a week to prevent it from becoming stagnant.
- Turn on showers and move away and run very slowly for 1 minute and then increase the flow for a further 4 minutes and then turn off.

For further detailed information, see Appendix 3 in the Property Services Technical Memorandum – Hard FM Guidance on Building Closure or Reduced Site Operations for further information. This was issued at the start of the COVID-19 pandemic.

Summary

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

- Flushing of the water systems has been undertaken weekly and has taken into account the level of occupancy (less people the longer the flushing of all outlets include WCs and showers)
- Water temperatures at outlets have been checked and are consistently in line with the recommendations.