

## WATER SYSTEM HAZARDS ASSOCIATED WITH ACCOMODATION FACILITY SHUTDOWN OR PARTIAL SHUTDOWN

With little or no water use over a prolonged time, water is left lying in pipes. Issues arising from this include: Stagnant water and dead ends, depletion of disinfection substances (chlorine) and possible fluctuation of water temperatures. All these are favourable conditions for:

- the growth of harmful bacteria;
- leaching out of chemicals from piping (lead and copper);
- growth of biofilms;
- of particular concern, but not the only one, is the growth of *Legionella* bacteria.

## WATER SYSTEMS AT RISK FROM WITHIN HOTELS/GUESTHOUSES/HOTELS/CAMPSITES

Wherever water droplets (aerosols) can be created, there is a risk of infection.

- Showers/wash hand basins/sinks/flushing toilets;
- swimming pools/hot tubs/whirlpool baths/saunas/steam rooms (see Advice Note 3);
- water fountains in swimming pools (see Advice Note 3);
- ornamental fountains;
- cooling towers and evaporative condensers for air-conditioning;
- water systems for garden hoses/power washing equipment.

## RISK ASSESSMENT

It is imperative that hotels and other accommodation sites carry out a **Risk Assessment of all their water systems during its partial or full shutdown** (see HPSC Hotel Checklist reference below) as soon as possible. This assessment should reflect the current water system usage and other systems or equipment which have reduced use or are shut down. A risk assessment should review the potential for microbial growth during the shutdown period and the control measures that need to be taken to minimize the risk of infections as a result of biofilm formation with in all water systems components, particularly those at the furthest point in the system. It is also recommended to maintain signed and management reviewed written records of all monitoring data and corrective/remedial actions carried out during this period.

To manage the risks from shutdown of the water systems in your business during the COVID 19 pandemic, there are below, a number of useful **reference documents** that you can use. You can find these on-line by clicking on the following links:

1. [ESGLI Guidance for managing Legionella in building water systems during the COVID-19 pandemic](#)
2. [HPSC Legionnaires Disease Checklist for Hotels and Other accommodation Sites](#)
3. [National Guidelines on Legionnaires Disease 2009 HPSC](#)
4. [World Health Organisation Water Safety in Buildings 2011](#)
5. [HSA Control of Legionella Bacteria during and After COVID 19 Pandemic](#)
6. [Gov.ie Return to Work Safely Protocol](#)
7. Of further interest maybe the following 2 videos:
  - 1) [Why does water quality change inside buildings,](#)
  - 2) [Why flush building water systems.](#)

1. While the **ESGLI guidance** is aimed at hotels, campsites and cruise ships etc, it is relevant to all public, residential and office buildings with similar water systems including swimming pools, leisure centres, gyms, spas, beauty salons. It is very important for the future health of guests, visitors and staff that all water systems are safely

managed while closed or during partial shutdowns. The procedures that are followed now will have an impact on how safely these facilities can reopen without impacting on public health.

2. The **HPSC Guidelines on ‘Legionnaires’ disease** and **Checklist for Hotels and Other Accommodation sites** provides guidance to premises operators on steps they can take to reduce the risk from Legionnaires’ disease. In section 8.2.1 of these guidelines it is stated that: *‘any organisation or premises (work-related or leisure-related) that does not have an active programme to control the growth of Legionella bacteria are negligent in ensuring the safety of its workers, visitors, guests and others.’*

#### **POINTS TO REMEMBER**

- Reviewing the Risk Assessment of your water systems is very important prior to re-opening after shutdown.
- Biofilms cannot be totally removed by flushing and can re-colonise quickly (repeat periodic flushing needed).
- Temperature/Biocide control is not the only tool for management of bacterial growth.
- Recommended to seek competent outside expert advice before re-commissioning large water systems.

Remember to follow HSE COVID-19 guidance and keep up to date with advice at [www.hse.ie](http://www.hse.ie)