Current evidence suggests swimming pools and spa pools should be safe against microbial growth as long as these facilities are chlorinated properly and operated according to recognised standards, however reviewing the Risk Assessment is particularly important for operators before water systems are re-opened after shutdown. It is advisable that operators seek guidance from competent persons where required.

WATER SYSTEMS AT RISK FROM MICROBIAL GROWTH WITHIN RECREATIONAL WATER FACILITIES

Wherever water droplets/aerosols can be created there is a risk of infection e.g. *Legionnaires' disease, Pseudomonas aeruginosa*

- Showers and taps;
- spa baths, whirlpool baths and hot tubs;
- waterfountains in swimming pools;
- turkish baths and saunas;
- steam rooms;
- ornamental fountains;
- cooling towers and evaporative condensers for air-conditioning, even if situated on the roof or in the grounds of the facility.

WATER SYSTEM HAZARDS ASSOCIATED WITH A POOL SHUTDOWN (FULL OF WATER)

- Stagnant water and subsequent microbial growth throughout pool systems;
- risk of infection as a result of biofilm formation within the pool, system pipework and equipment;
- pumps, heaters and other pool equipment can corrode, seize and block;
- increased risks to operators during system restart due to the requirements to handle algae filled water;
- when pools are closed managers / owners should not forget the need to manage the risks from *Legionella* growth within hot and cold water distribution systems feeding showers, changing rooms, kitchens and spas etc.

RISK ASSESSMENT

You should review your risk assessment and update it to 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 growth for harmful bacteria during the shutdown period. It should identify the measures you need to take to minimise the risk of infections as a result of biofilm formation within the pool, system pipework and components. It is also recommended that you maintain records of monitoring data and remedial actions carried out during this period. You may need to seek the help of a competent person when carrying out a review of your Risk Assessment. The person carrying out the procedure will need to follow necessary safety precautions including the wearing of appropriate personal protective equipment.

USEFUL REFERENCES

When considering risk to recreational water facilities such as swimming pools and spa pools and the management of these facilities during the COVID 19 pandemic, there are some useful <u>reference documents</u> available. 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. <u>UK Pool Water Treatment Advisory Group: Guidance on Temporary Pool Closure</u>
- 3. Ireland Active Advice for Pool Operations Temporary Closure
- 4. HSPC Legionnaires Disease Checklist for Leisure Centres
- 5. National Guidelines on Legionnaires Disease 2009 HPSC
- 6. HSA Control of Legionella Bacteria during and After COVID 19 Pandemic
- 7. Gov.ie Return to Work Safely Protocol

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, 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, spray parks and splash pads. It is very important for the future health of guests, visitors and staff that 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. UK PWTAG Guidance on Temporary Closure: An immediate and complete shutdown of any swimming pool facility is not recommended. PWTAG advises against emptying the pool to preserve its structural integrity, unless it is designed to be emptied on a regular basis and there are established procedures in place to achieve this safely. According to the PWTAG there are two options for temporary closure of the pool water treatment reducing circulation or stopping circulation. See PWTAG Guidance on temporary pool closure for technical guidance. Ireland Active also provides industry guidance for the temporary closure of swimming pools and references both the PWTAG Guidance and Health and Safety Authority Guidance on the Control of Legionella during the COVID 19 pandemic.
- 3. The HPSC Guidance on Legionnaires' disease and Checklist for Leisure Centres 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 your Risk Assessment is particularly important before water systems are re-opened after shutdown;
- biofilms cannot be totally removed by flushing and can recolonise quickly (repeat periodic flushing needed);
- temperature/Biocide control are not the only tools for management of bacteria growth;
- It's recommended to seek competent outside expert advice before re-opening where required.

Remember to follow HSE COVID-19 guidance and keep up to date with advice at www.hse.ie