

Outlet flushing where Legionella is present or suspected:

1. Background:

Legionella can colonize any water system and if the water stagnates, Legionella can proliferate to harmful levels, and biofilms can also form which can harbour Legionella bacteria.

Flushing is used as a method of preventing Legionella bacteria from getting to harmful levels by purging any Legionella bacteria to drain so levels remain low and also helping to remove biofilm from the system. (this is helped by flushing at higher rates from the outlets)

2. Risks

If Legionella is or could be present in the system then the risk comes from creating and breathing in aerosols. To control the risk we need to control aerosol generation.

This can be controlled by reducing the force of impact of water on hard surfaces and also by removing spray outlets.

If none of the below methods can be used to control aerosol or spray production then the operative should be issued with a suitable face mask with P3 protection and should be face fit trained, and flushing should also be undertaken when other building users are not in the area.

3. Methods for flushing safely

The following methods can be used to control the risk when flushing outlets on a water system.

- If the system is tank fed ensure the water in the tank is not stagnant. This can be checked both visually and by checking that the stored temperature is within 3°C of the incoming mains.
- Remove spray outlets such as shower heads and kitchen plate washes where possible. This reduces aerosol production and also increases the flow of water through the supply pipework which can help remove any biofilm.
- If spray heads / inserts cannot be removed then control aerosols by one of the following methods:
 - Run the outlet into a bag with a corner cut out of the bottom so the water runs to drain without release or aerosols. The bag can be tied around shower heads if necessary.
 - Fit a hose large enough to go over the outlet and run the hose to the sink or drain so no aerosol is produced. (Circular flexible ductwork can be used for emergency showers)
 - Hold a cloth or towel over the outlet whilst flushing, this will prevent aerosol production.
- Flush all toilets with the seat down.

- If an outlet is being flushed for the first time, but the rest of the system is okay then run this slowly for the first 5 minutes (or until the supply leg is thoroughly flushed) and then increase the rate of flushing.

- If flushing little used outlets on a well controlled system where there is no legionella detection or it is not suspected then flushing is to mimic normal use so although the above methods may be used, the risks are considered very low so flushing of taps can be undertaken normally.