

## Slime & Staining

Bacteria and fungi present naturally in air, water and household dust can attach to damp surfaces and multiply to form a visible black slime or stain in various colours (black, red, pink). These growths are known as biofilms or 'microbial slime' and are most often visible in areas of the house that have a moist environment e.g. bathrooms and kitchens. If biofilms are not removed as soon as they form, they can grow into certain materials, such as tile grout and shower curtains, permanently marking them with black, pink or red stains.

### Where do biofilms occur?

Biofilms can form on any surface that comes into contact with water such as:

- On the inside of cold water taps – sometimes they form grey/black jelly-like or slimy deposit that dangles from the spout of the tap
- In toilet cisterns and toilet bowls
- Around the base of tap fittings
- In refrigerator drip trays
- In shower heads and on shower curtains
- In dehumidifiers
- On tiles in the bathroom / shower area
- In washing machines particularly around the powder drawer and rubber door seal
- In drains and plugholes
- Ice-making machines
- On kitchen sink draining surfaces
- Drinks vending machines

### Are biofilms harmful?

Although these biofilms can appear very unpleasant they are generally harmless and do not pose a risk to health.

### What can I do to prevent growth?

Unfortunately, there is nothing we can do to the drinking water supply to prevent the growth of biofilms within customers' properties and the only way to keep on top of them is the rigorous routine cleaning of all surfaces which can be affected.

Bacteria and fungi require both water and nutrients to enable them to multiply and form a biofilm. The best way to prevent biofilm growth is to improve ventilation to allow damp areas in kitchens and bathrooms to dry rapidly. It is also important to reduce food sources for bacteria and fungi to prevent growth. Food sources can include shampoo, soap, propellant from hair spray and deodorant, washing powder, household dust and general kitchen food. Keeping areas clean and free from potential food sources will restrict growth.

In-line filters and softeners can also be affected by biofilm growth so it is important that they are serviced according to the manufacturers' instructions.

### What can I do to remove growth?

Black slime associated with tap fittings can be removed by cleaning the inside of the tap or around the base of the tap with a small brush (old toothbrush) dipped in a mild solution of bleach or a sterilizing fluid such as Milton. The tap should be thoroughly flushed immediately afterwards.

If a tap has a plastic insert in it or any other detachable fitting attached to it, the fitting should be regularly removed, cleaned and disinfected. When purchasing taps it is a good idea to look for designs that do not have plastic inserts as these are commonly associated with the growth of biofilms / bacteria and are difficult to keep clean. If your house has a hot water cylinder fed from a storage tank in the loft, it is also advisable to buy separate hot and cold taps or a bi-flow tap (where the hot and cold flows are kept separate) in order to prevent your cold drinking water being potentially contaminated by the hot water supply. Mixer taps where the hot and cold water blend together are only suitable for properties with combi boilers.

Kitchen surfaces can be wiped with a household cleaner or mild bleach solution that will kill the bacteria and fungal spores. The regular use of a proprietary mould and mildew cleaner in bathrooms (as directed by the manufacturer) is also particularly effective in killing bacteria and removing biofilms.

If growths are not removed on a regular basis they can grow into shower grouts / silicone sealants / shower curtains and rubber materials and permanently stain them.

### Where can I get further information?

Please call us first on our operational helpline on **0800 052 0130**.

One of our regulators, the Drinking Water Inspectorate, is responsible for ensuring the high quality of public water supplies. You can visit their website at: [www.dwi.gov.uk](http://www.dwi.gov.uk)