Bacterial Staining of Water Use Fixtures

Description: Black/grey and/or red/pink deposits are sometimes noticed on moist surfaces of water use fixtures. This discoloration tends to follow the direction of the water flow in/on the surface of the fixture or in/on standing water. This discoloration easily wipes from the fixture surface and typically leaves no indication of the previous staining once cleaned. This condition is typically caused by airborne bacteria that thrives in moist and otherwise favorable locations. These bacteria are generally of the “serratia marcescens” type of bacteria, although other airborne bacteria can exist under these moist conditions.

Health Concern: These bacteria are generally not hazardous to a healthy person.

Origin: The origin of these bacteria is airborne and NOT from the water in the water plumbing system. They may often occur in conditions where there is substantial dust or other debris in the air (example: during or after periods of construction). A coliform bacteria test taken from a clean faucet will typically show no presence of coliform bacteria. These bacteria survive because the frequent use of water or leaky fixtures provides a favorable place to grow.

If one wants to specifically identify the type of these organisms, it is recommended they contact an accredited water quality laboratory for instructions on sample collection and submission.

Corrective Action: The best approach to ridding an area of these bacteria is to keep the area clean and dry. If this is not possible, treatment with a chlorine solution (bleach) will kill the bacteria. Being airborne, this condition is likely to continually occur if the area is wet; repeated disinfection attempts is to be expected. If the disinfection location is within a faucet, apply a water chlorine solution to the inside of the faucet with a squirt type device or possible toy water gun. If the discoloration is in the toilet bowl, place a chlorine tablet in the water storage tank to give continuing coverage to the bowl, drain ring and standing water in the tank. If occurring in a shower head, immerse the shower head in a bucket of chlorine solution for a few minutes.

For More Information
Please contact the Drinking Water and Groundwater Bureau at (603) 271-2513 or dwgbinfo@des.nh.gov or visit our website at www.des.nh.gov.

Note: This fact sheet is accurate as of February 2020. Statutory or regulatory changes or the availability of additional information after this date may render this information inaccurate or incomplete.