WATER QUALITY FACT SHEET

JUNE 2012

Serratia Marcescens Bacteria

Introduction: Have you ever seen and wondered what that occasional pink stuff is that is in the toilet, shower, pet's dish or even your teenage son's bathroom sink? It is most likely a bacteria called *Serratia marcescens*.

Serratia Marcescens Bacteria: This bacteria grows as a slimy pink substance that sometimes forms in moist areas around homes. It is most frequently observed in toilet bowls, on surfaces in shower stalls and bathtub enclosures, on tile, in sinks, and in pet water dishes. This red or pink pigmented bacterium known as *Serratia marcescens* is the most common cause of the pink "stuff."

Serratia bacteria are common inhabitants of the environment and can be found in many places, including human and animal feces, dust, soil, and in surface waters. The bacteria will grow in any moist location where phosphorous containing materials or fatty substances accumulate. Sources of these substances include soap residues in bathing areas, feces in toilets, and soap and food residues in pet water dishes. Many times, the pinkish film appears during and after new construction or remodeling activities. Others have indicated the pink "stuff" occurs during a time of year when their windows are open for the majority of the day.

These airborne bacteria can come from any number of naturally occurring sources, and the condition can be further aggravated if customers remove the chlorine from their water by way of an activated carbon filter. In recent years, the popularity of home water filtration systems has grown tremendously, and the presence of *Serratia* has appeared more and more frequently in homes which remove the chlorine disinfection from the water supply.

Serratia can also grow in tap water in locations such as toilets in guest bathrooms where the water is left standing long enough for the chlorine residual to dissipate. Serratia will not survive in chlorinated drinking water. The public water supply in the City of Brentwood contains enough chlorine to provide safe, disinfected drinking water at your tap. However, when left standing in an open container for as little as 30 minutes, tap water begins to lose its chlorine disinfectant into the atmosphere.

Once the organism is established, it usually cannot be eliminated entirely. However, periodic and thorough cleaning of the surfaces where the pink slime occurs, followed by disinfection with chlorine bleach is the best way to control it.

Health Concerns: Serratia marsescens is not known to cause any waterborne diseases. Members of the Serratia genus were once known as harmless organisms that produced a characteristic red pigment. More recently, Serratia marcescens has been found to be pathogenic to a very small percentage of people, having been identified as a cause of urinary tract infections, wound infections, and pneumonia in hospital environments.

References:

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