

WHAT'S THIS PINK STUFF IN MY BATHROOM?

This question seems to peek its head on a fairly regular basis. Utilities from all over the United States have experienced similar problems. The bottom line? Pink residue is less likely a problem associated with water quality than with naturally occurring airborne bacteria, and is also affected by the homeowners cleaning habits. The bacteria produces a pinkish film, and sometimes a dark gray film, on surfaces that are regularly moist, including toilet bowls, shower heads, sink drains, and tiles. The problem also more commonly occurs in more humid regions of the country.

To determine the exact species of bacteria would require lengthy and costly laboratory testing, and for those reasons most homeowners are reluctant to have the tests performed. Although the exact species of bacteria is not known, most experts have concluded that this pink staining is most likely from the bacteria *Serratia marcescens*. These bacteria thrive on moisture, dust, and phosphates and are widely distributed, having been found in soil, food and also in animals. The conditions for the survival of *Serratia marcescens* are minimal, and the bacteria may feed upon itself in the absence of other nutrients.

Members of the *Serratia* genus were once known as harmless organisms that produced a characteristic red pigment. Because of this, scientists and teachers frequently used it in experiments to track other microbes. More recently, *Serratia marcescens* has been found to be pathogenic to some people, having been identified as a case of urinary tract infections, wound infections, and pneumonia, and it is no longer recommended for use in school experiments.

Many times, the pinkish film appears during and after new construction or remodeling activities. The dirt and dust stirred up from the work probably contains *Serratia* bacteria. Once airborne, the bacteria seek moist environments to proliferate. Some people have even noted the pink residue in their pets water bowl, which causes no apparent harm and can easily be cleaned off. Others have indicated that their experience with this nuisance occurs during a time of year that 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.

What To Do?

Short of buying pink fixtures, the best solution to keep these surfaces free from the bacterial film is continual cleaning. A chlorinous compound is best, but use care with abrasives to avoid scratching the fixtures, which will make them even more susceptible to bacteria.

Chlorine bleach can periodically be stirred into the toilet tank and flushed into the bowl itself. As the tank refills, more bleach can be added. Three to five tablespoons of fresh bleach should be all that is necessary. A toilet cake that contains a disinfectant can keep a residual in the water at all times. The porous walls of a toilet tank can harbor many opportunistic organisms.

Cleaning and flushing with chlorine will not necessarily eliminate the problem, but will help to control these bacteria. Keep bathtubs and sinks wiped down and dry to avoid this problem. Using a cleaning solution that contains chlorine will help curtail the onset of the bacteria.

While all water utilities are concerned about the quality of the product they are supplying to their customers, they cannot guarantee water quality once it leaves the pressurized distribution system and enters the customer's plumbing. Homeowners' individual components and the cleanliness of their environment are not part of the utility's responsibility to provide a safe and aesthetically pleasing product.

Reprinted with permission.
Nelson Yarlott, Small Systems Specialist
American Water Works Association
Opflow Forum, November 2000 Issue

* **SPECIAL NOTE:** We have reprinted this article due to the large number of calls about this subject.