



Fact Sheet

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Color, taste, and odor problems in drinking water

At times, water can have an unpleasant odor, taste, or appearance. These aesthetic characteristics usually do not pose a public health threat. State rules require public water systems to treat aesthetic water quality problems for new sources or if customers request treatment and are willing to pay for it. Most people want their water to look, taste, and smell good.

The first step in solving an aesthetic water quality problem is to identify whether it originates from your household plumbing or from the water your utility or well supplies. One way to tell is to ask others in your neighborhood if they have a similar problem. Another is to contact your water utility or local health agency.

Below are typical concerns and the most common causes. If you are on a public water supply and you have any of these problems, or you can't correct the problem yourself, contact your water utility. If you have a private well, your local health agency may be able to give you advice.

Colored water

If your water suddenly changes color—no matter what color it becomes—it could indicate a public health concern. Do not use the water. Contact your water utility or, if you have your own well, your local health agency. It's likely that something disturbed the water flow in the water main, such as a line break or fire fighting, or a plumbing problem allowed unsafe water to enter the line.

- **Green or blue water:** Usually caused by corrosion of copper plumbing. If corrosion is occurring, dripping water will leave a bluish-green stain on porcelain fixtures. Certain metals that can get into drinking water from corrosion, such as copper or lead, may pose a health concern. Overly corrosive water may cause a problem with the home's piping. If you suspect corrosion, contact your water utility or a licensed plumber.
- **Black or dark brown water:** Often caused by manganese in the water or pipe sediment. Manganese does not pose a threat to human health. If it doesn't clear after a few minutes of flushing all your cold-water faucets and toilets, wait about an hour and try again. If it still isn't clear, contact your water utility. If you have your own well, you may need a licensed plumber to evaluate and correct the problem. Check with your local health agency for advice.
- **Brown, red, orange or yellow water:** Usually caused by iron rust. Galvanized iron, steel, or cast iron pipes in a home or business, or the water main can cause rusty water. While unpleasant and potentially damaging to clothes and fixtures, iron in drinking water is not a human health concern.
- **Milky white or cloudy water:** Usually caused by tiny air bubbles. If your water is white, fill a clear glass with water and set it on the counter. If the water starts to clear at the bottom of the glass first, the cloudy or white appearance is trapped air. It is not a health threat and should clear in a few minutes. If you have your own well, the pumping system may be causing this issue. You may need a qualified contractor to determine how it might be corrected.



HELPING TO ENSURE SAFE AND RELIABLE DRINKING WATER

Taste and odor problems

If a taste or odor occurs at every water faucet on the property, the cause is probably the main water supply. If it occurs only in certain faucets, the problem is the fixtures or pipes supplying those specific faucets. If the problem goes away after running the water for a few minutes, the problem is somewhere in your household plumbing system. The best way to reduce taste and odor caused by your plumbing is to run the faucet for several minutes, put some water in a container, and then store it in the refrigerator. You may also consider installing a certified water filter.

- **Petroleum, gasoline, turpentine, fuel, or solvent odors:** These odors are rare, but potentially serious. **Do not use the water.** A leaking underground storage tank may be contaminating your water supply. Immediately contact your water utility or local health agency.
- **Metallic taste:** Minerals, such as iron or copper, may leach into the water from the pipes. Less common metals, such as zinc and manganese, could also be a problem. If you are concerned, have your water analyzed by a certified lab, or contact your water utility. Ask your local health agency for a list of qualified labs.
- **Chlorine, chemical, or medicinal taste or odors:** Adding chlorine to the water or the interaction of chlorine with a build-up of organic matter in your plumbing system may cause the taste or odor to be strong. This is not usually an immediate health threat. If the taste or odor seems strong to you, contact your local health agency or water utility for advice.
- **Sulfur or rotten egg odor:** Bacteria growing in your sink drain or hot water heater may cause odor. Naturally occurring hydrogen sulfide in your water supply may also cause this odor. To evaluate the cause, put a small amount of water in a narrow glass, step away from the sink, swirl the water around inside the glass, and smell it. If the water has no odor, the likely problem is bacteria in the sink drain. If the water does have an odor, it could be from your hot water heater. There is an element in your hot water heater designed to protect it from corrosion. Sometimes the element causes sulfide smell as it deteriorates over time. A licensed plumber may be able to evaluate this problem. If you rule out the drain and the water heater, and the odor is definitely coming from the tap water, do not use it. Contact your water utility or local health agency.
- **Moldy, musty, earthy, grassy, or fishy odor:** Bacteria growing in a sink drain or from organic matter such as plants, animals, or bacteria that are naturally present in lakes and reservoirs during certain times of the year may cause odor. You can evaluate the source of this problem by putting a small amount of water in a narrow glass, stepping away from the sink, swirling the water around inside the glass, and smelling it. If the water has no odor, the likely source is the sink drain. If it does have an odor, the source could be organic matter in your drinking water. Although harmless, this material can affect the taste and smell of your drinking water even at very low concentrations.
- **Salty taste:** High levels of naturally occurring sodium, magnesium, or potassium may cause a salty taste. If you live in a coastal area, seawater may be seeping into the fresh water supply. This could be a health threat. Contact your water system or local health agency.

Resources

If you decide to use a filtration or treatment device in your home, call (800) NSF-MARK or visit the [National Sanitation Foundation](http://www.nsf.org/) website for a list of approved devices at <http://www.nsf.org/>

Our publications are online at <https://fortress.wa.gov/doh/eh/dw/publications/publications.cfm>

Call the Office of Drinking Water's regional office nearest you:

Eastern Region, Spokane Valley (509) 329-2100

Northwest Region, Kent (253) 395-6750

Southwest Region, Tumwater (360) 236-3030



How to Get Rid of Pink Stains in Your Toilet Bowl and Bathtub

[ewswater.com /blog/pink-stains-in-your-toilet-bowl-and-bathtub-heres-how-to-get-rid-of-it/](http://ewswater.com/blog/pink-stains-in-your-toilet-bowl-and-bathtub-heres-how-to-get-rid-of-it/)

Pink Stains – What Is It?

Pink residue is generally not a problem with water quality. A pink discoloration may be a result of iron found in some well water or old pipes in the delivery system but would not be isolated to only one toilet, one fixture or one room. In most cases a pink residue is likely a result of airborne bacteria which produce a pinkish or dark gray film on moist surfaces. This film is usually found as a ring that accumulates at the water line in the toilet bowl or around showerheads, shower doors or curtains, sink drains, bathtubs, tiles and grout.



Some people have also noted that the pink residue appears in their pet's water bowl, which causes no apparent harm to the pet and is easily cleaned off.

Many experts agree that the bacteria that causes these pink stains is most likely *Serratia Marcescens*, a bacteria which is found naturally in soil, food, and in animals. *Serratia*, which produce a characteristic red pigment, thrive on moisture, dust, and phosphates and need almost nothing to survive. *Serratia* is easily carried airborne and will seek a moist location in which to grow. Some people have reported that the pink residue only appears during certain times of the year, when their windows or doors are left open for part of the day. Ironically good ventilation will not help. These bacteria are present in a number of environments and wind can carry the airborne bacteria or dust in which the bacteria are present. *Serratia marcescens* thrives in conditions that are wet and seek a constant introduction of fat or phosphorous-laden materials, such as feces, urine, soap, gels and shampoo products and/or food products.

Pink Stains – How To Get Rid Of It

Customers have asked us why there is a pink ring in their toilet bowl or evidence of the pink discoloration elsewhere and what can they do to get rid of it. Often they are concerned that something must be in the water which is not the case and nothing to fear. However, the pink ring that develops at the water line in the toilet, around drains, in the tub/shower area, in bathroom drinking cups, and even dog bowls is actually caused by airborne bacteria known as *Serratia marcescens*. The airborne bacteria thrive in moist environments, which is why it is commonly found in bathrooms.

Serratia marcescens survives when any water sits for a period of time in the open air. This is why this issue is very common.

There are several things you can do to prevent the pink stains from developing. Drying wet surfaces after use will prevent the bacteria from growing.

For toilets, we have found over the years from manufacturers, our own personal experience and feedback from many customers that there is a way that takes less than a minute to make this "job" easy. Simply get a good toilet bowl cleaner and squirt around the bowl from the rim of the toilet and leave it. Upon your return, using a soft brush, apply light pressure against the bowl surface, swish the water around the bowl and flush. Do this before the reappearance of the discoloration and stay ahead of any reappearance. *Serratia Marcescens* cannot be completely killed and removed, but routine maintenance can keep the bacteria from reappearing, increasing or becoming a more stubborn

issue. Remember to flush any guest or infrequently used toilets on a daily basis to avoid setting a stain.

For harder to remove stains you can use regular household bleach and a soft bristle cleaning brush to gently scrub the affected area. An old toothbrush or nail brush works great.

Avoid being too aggressive with cleaning solutions or abrasive methods – please exercise caution. Others who recommend the use of stainless steel or wool pads or even pumice stones have given you information contrary to manufacturer warranties. These items will scratch and remove the protective coating, sealant or finish on the toilet which ironically makes them more susceptible to staining, mold or mildew, bacteria growth and mineral deposit rings. Chlorine tablets or any toilet tank cleaners are not recommended. Check with the toilet bowl manufacturer for more information and warranty.

Shower curtains and liners – wash them in hot water with a little bleach. For patterned shower curtains, use color-safe bleach.

Bathtubs, sinks, drains, faucets, showerheads and other surfaces – if you can keep them wiped down and dry, the formation of pink residue may be avoided. Use similar cleaning methods as you would to clean the toilet. Do not be aggressive and if you have any special finishes consult with the manufacturer.

Natural surfaces (granite, marble, travertine, etc.), tile and grout can be porous and require a proper sealant and yet aggressive or incorrect cleaning will remove sealant over time. A good and properly applied sealant on marble, travertine, granite and other surfaces, tile and grout will prevent or inhibit any issues. Water should bead up or wipe up easy and not soak in. Resealing should be done as needed or on a schedule based on the material or surface to be sealed depending on manufacturer recommendations and your local conditions and usage.

Again, as with other items, if you can keep surfaces wiped down and dry, the formation of pink residue may be avoided. Use similar cleaning methods as you would to clean the toilet. Do not be aggressive and if you have any special finishes consult with the manufacturer.

If you have staining, mold, mildew, or other buildup, [click here to download our Information & Care Guide](#). For further help, please [contact customer service](#) and we will be happy to help you!