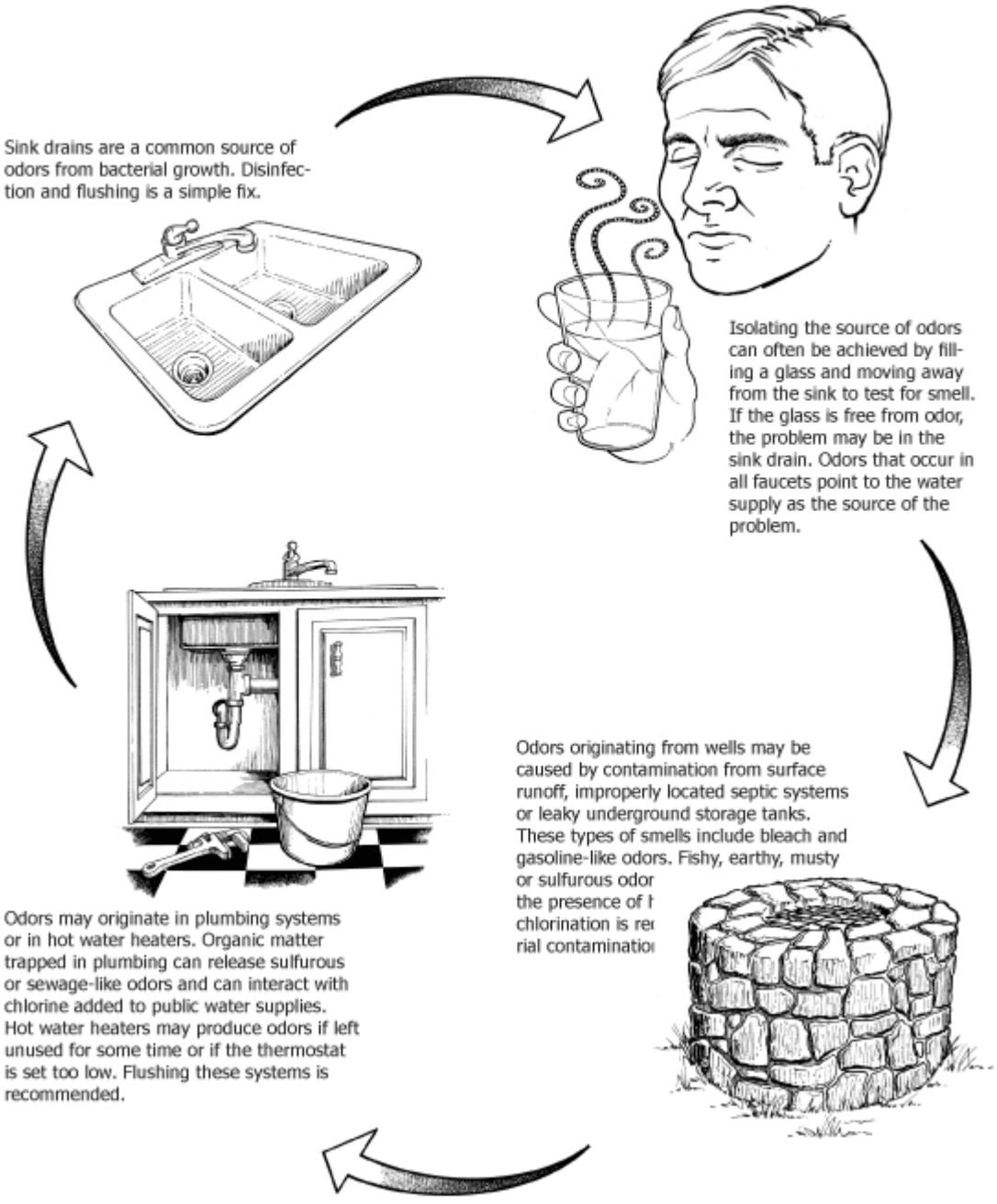
Your Tap Water - Locating the Source of the Odor

Information and graphics provided by the City of Ithaca
https://www.cityofithaca.org/626/Your-Tap-Water

Homeowners sometimes experience unpleasant odors in their household water. In many cases, the exact cause of the odor is difficult to determine by water testing; however, this publication provides a few general recommendations for treating some common causes of household water odors.

Odors in Your Household Water



If odor occurs in all water faucets, the problem is probably in the main water supply. If it occurs only in certain faucets, the problem is likely in 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 the household plumbing system. If the odor is persistent, the problem could be the water source or a combination of both the water source and the plumbing system. Figure 1 outlines the possible sources of odors in water.

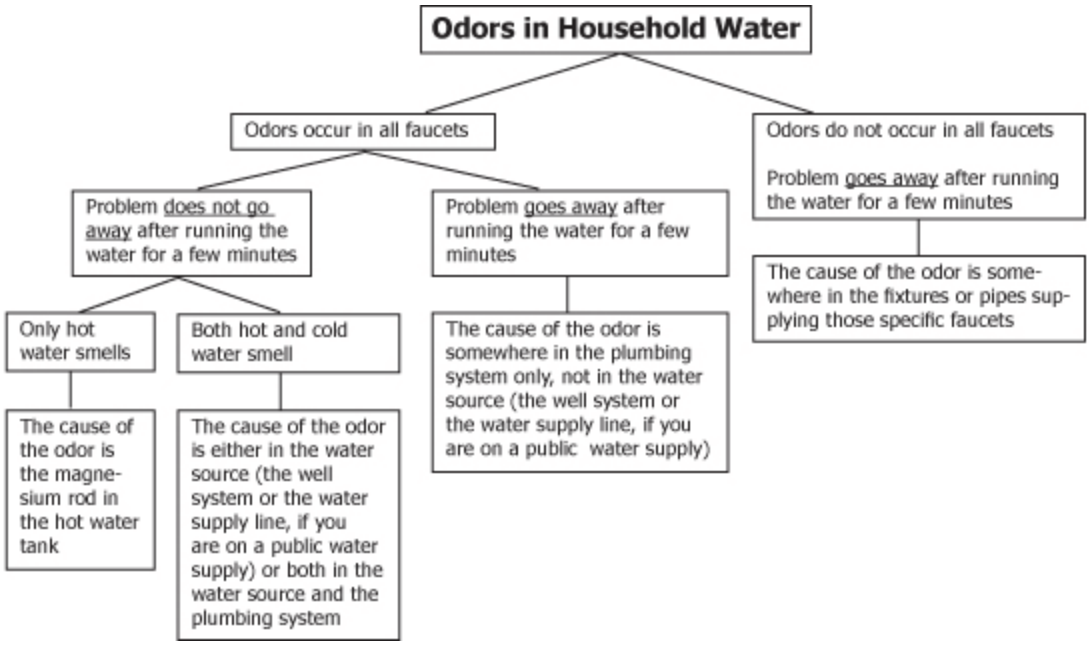


Figure 1. A decision tree to help locate household water odor sources.

For odors coming from the plumbing system or the well system, corrective measures are suggested. If you obtain water from a public water supply (PWS) and the odor is suspected to originate from the water source line, contact your water provider. This is especially true if your neighbors also experience the same type of odor problem.

Fruity odors

Fruity odors can be related to high calcium or iron in the source water. We track calcium and iron in the source water daily and weekly, respectively. Iron levels are low but calcium levels are higher, indicative of the underlying geology of the watershed. The sensation of these odors can also be a result of what was eaten immediately prior to drinking water.

Musty, Grassy, Sewer, Rancid or Rotten Egg Odor

Usually the smell is in the drain not the tap water. The smell is likely sewer gasses caused by bacteria that live on food, soap, hair and other organic matter in the drain. You may also notice particles in the water that are not supposed to be there. The most common problem is build-up in your house plumbing and not the water heater.

There are some easy steps you can take to eliminate the smell and particles.

Gasses are heavier than air and remain in the drain until the water is turned on, especially if it's a faucet you don't use often. When water runs down the drain, the gases are expelled into the air. That's why the water smells funny when you turn it on the faucet.

Three ways to eliminate taste, odor and color issues from your household pipes.

Flush Pipes

1. Remove the screens (aerators) from the end of the faucets and run all of them wide-open simultaneously for three to five minutes. Removing aerators before flushing the plumbing prevents dislodged organic matter from accumulating on the aerators.

2. Flush each toilet two or three times while the faucets are running. Running all water faucets and toilets simultaneously generates a large flow of water through the pipes. This should help remove any water that may have been sitting in the pipes for a long time.

3. Let the water run for three to five minutes then turn off the water faucet. Clean the aerators and reinstall them on the faucets.

Flush the Water Heater

Water heaters should be flushed at least every 1 to 3 years, depending on make and models, to help control the build-up of mineral deposits. Flushing will help the water heater operate more efficiently and usually extend its life. It's a good idea to flush the water heater if 1) the water becomes a yellow or brownish color from an accumulation of rust; 2) you notice sand-like mineral sediments; or 3) calcium build-up causes white flaky particles in the fixtures.

1. Turn off the electricity or gas to the water heater.

2. Shut off the cold water inlet to the tank.

3. Attach a garden hose to the tank drain valve located near the bottom of the tank. The drain valve usually looks like a regular garden faucet or a round dial with a threaded hole in the middle.

4. Extend the garden hose to a place where the water can safely exit the heater**.**

5. Open the pressure relief valve or turn on a faucet in the house to allow air in the tank.

6. Open the drain valve to allow the water to exit the tank. **Caution**: water leaving the heater will be hot and under normal household water pressure.

7. After five minutes of flushing, fill a bucket with the still flushing water.

8. Allow the water in the bucket to stand for a minute. See if the water is clear or if any sand-like material settles to the bottom. If the water is clear, go to step 9. If the water is discolored or you see sand-like material at the bottom of the bucket, repeat steps 6 and 7 until the flushed water is completely clear and free of sediment.

9. Close the drain valve and remove garden hose. Turn off inside the faucet and close pressure relief valve. Turn on the cold water inlet.

10. Don't forget to turn on the gas and electric power to the tank.

If you are not comfortable flushing the hot water heater, another option is to hire a licensed plumber.

Disinfect Drains

These steps will eliminate bacteria and disinfect drains and garbage disposals:

1. Run cold water about 15 seconds into the drain. Then turn the water off.

2. Pour one to two cups of chlorine bleach down the drain. Pour bleach slowly around the edges of the drain so that it runs down the sides of the drain. **Caution: Bleach may cause eye damage, skin irritation and damage to clothing.**

3. If the odor is coming from a sink with a garbage disposal, turn the disposal on for a few seconds while the bleach is being poured. This will disperse the bleach around the inside of the disposal. **Caution: Avoid splashing when the disposal is turned on.**

4. Leave bleach in the drain for about ten minutes. **Caution: Prolonged contact with metals may cause pitting or discoloration.**

5. Flush with hot water for about 2 minutes. If you have a garbage disposal, turn it on while flushing to ensure it is completely flushed.