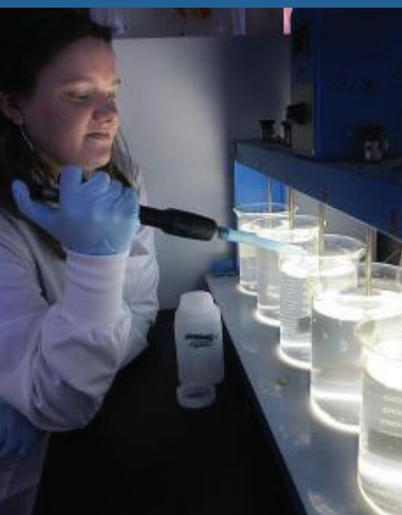




# PROVIDING QUALITY IN EVERY DROP

## FOR MORE INFORMATION

For more information related to drinking water standards, customers can also call the EPA Hotline: 1-800-426-4791



## QUESTIONS?

We can be reached at our Customer Service Center: 1-866-430-0820

Hours: 7 a.m.–7 p.m.

For emergencies, we're available 24/7.

## CHLORINE

A necessary ingredient in the treatment of drinking water from lakes, streams and rivers

### CHLORINE PLAYS A CRITICAL ROLE IN THE DISINFECTION PROCESS

The use of chlorine as a disinfectant in drinking water supplies has played a critical role in the prevention of waterborne diseases for nearly a century. According to the World Health Organization, the adoption of drinking water chlorination has been one of the most significant advances in public health protection, stating that “disinfection by chlorine is still the best guarantee of microbiologically safe water.”

### WHY IS CHLORINE ADDED TO YOUR DRINKING WATER?

Chlorine is added to water for the customers' protection. It is used as a disinfectant to ensure that harmful organisms, such as bacteria and viruses, are destroyed in the treatment process.

The Missouri Department of Environmental Protection (DEP) and the U.S. Environmental Protection Agency (EPA) require Missouri American Water to maintain low levels of this disinfectant in water even at the furthest point of the distribution system. Consequently, customers who live or work closest to our water treatment plants might experience higher levels of chlorine.

We frequently monitor chlorine levels and use the results to make adjustments as needed, ensuring levels are not excessive but adequate for public health protection. Missouri American Water continues to meet the drinking water standards for chlorine use in your drinking water as set by the EPA and DEP.

### WILL MY HOME TREATMENT DEVICE REMOVE CHLORINE?

Some home treatment devices can remove chlorine. Once the chlorine is removed, water should be refrigerated and used as quickly as possible\*. If you decide to use a home treatment device, it is important to adhere to the manufacturer's instructions for maintaining the device. Homeowners who choose not to follow the recommended instructions properly could reduce the effectiveness of these devices, resulting in lower quality water.

## TIPS TO REMOVE THE TASTE AND SMELL OF CHLORINE IN YOUR WATER

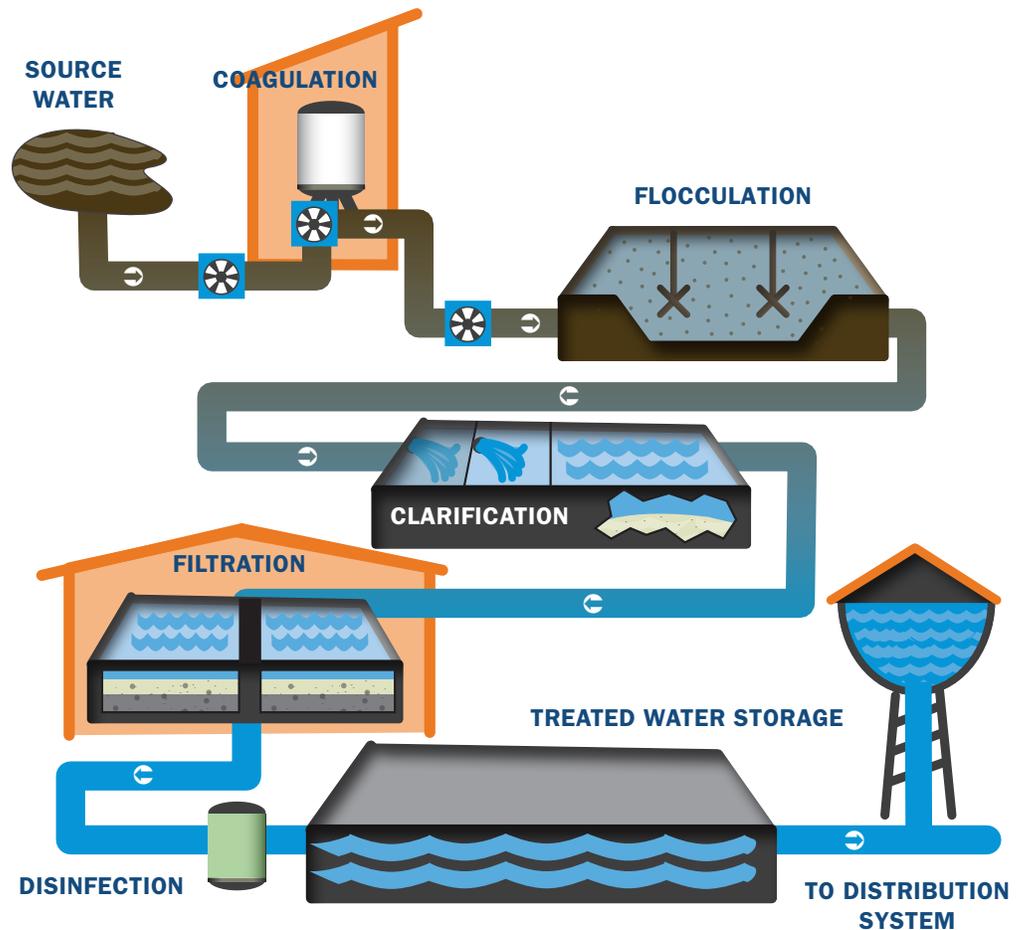
- If your water is treated with chlorine, fill a glass container with water and refrigerate it overnight uncovered. Another option is to boil tap water for five minutes and allow it to cool.
- If your water is treated with chloramine, boil tap water for 20 minutes and allow it to cool.
- Add a lemon slice or a few drops of lemon juice to a glass of drinking water.

\*Please Note: Once you remove the chlorine, be sure to refrigerate the water to limit bacterial regrowth. Missouri American Water does not recommend removing all traces of a disinfectant in the water supply.

## LEARN MORE ABOUT HOW YOUR COMMUNITY WATER IS TREATED

A member of our staff can come speak to your civic or community group, or visit your child's classroom. Whether you are looking for information on the water treatment process, water quality, backflow prevention, wise water use, watershed protection, or careers in the water industry, we can tailor the presentation to meet your needs.

## WATER TREATMENT PROCESS



**SOURCE WATER:** Lake, stream or river.

**COAGULATION:** Dirt and other particles suspended in water are removed. Chemicals, such as aluminum and iron salts, are added to water to form tiny sticky particles called “floc.”

**FLOCCULATION:** The floc acts as a magnet and attracts other dirt particles. The combined weight of the dirt and floc becomes heavy enough to sink to the bottom during clarification/sedimentation.

**CLARIFICATION/SEDIMENTATION:** Heavy particles (floc) are removed and the clear water moves to filtration.

**FILTRATION:** Water passes through filters, some made of layers of sand, gravel and activated carbon, which help remove even smaller particles.

**DISINFECTION:** A small amount of chlorine is added during the treatment process to kill any bacteria or microorganisms that might be present in the water. After the chlorine is added, the water is transferred to a temporary vessel to provide ample contact time for proper disinfection to occur.

**STORAGE:** The water then flows through pipes to homes and businesses in the community. Distribution tanks throughout the system provide water storage to increase the reliability of your water service and provide fire protection.

