

WE KEEP LIFE FLOWING*

FACTS ABOUT CHLORAMINES

The U.S. Environmental Protection Agency (EPA) has imposed stringent regulations to address known health risks associated with disinfection byproducts in chlorinated water. To comply with these regulations, many water systems across the country have transitioned from chlorine to another safe, proven disinfectant known as chloramines.

WHAT IS CHLORAMINATION?

Chloramination is a common disinfection process used by the water industry in which a small amount of ammonia in water is added to chlorine in water at the end of our treatment process. The EPA widely accepts chloramines as an effective treatment to prevent the waterborne transmission of parasites that are capable of causing sickness. With its 100-year track record as a safe, effective disinfectant, chloramines are widely used by municipally run and privately owned water systems across the United States and Canada. Missouri American Water uses this treatment at the surface water treatment plants in Jefferson City, Joplin, St. Joseph and St. Louis.

FREQUENTLY ASKED QUESTIONS

Why does Missouri American Water use chloramines for the disinfection process? This change is being made to comply with federal regulations regarding disinfection byproducts, specifically to reduce the level. These byproducts are potentially harmful contaminants that form when chlorine reacts with organic compounds naturally present in the surface water sources of supply during the normal water purification process.

The water system in Garden City repeatedly exceeded the level of DBPs prior to Missouri American Water acquiring the system.

How do chloramines affect our drinking water?

People use chloraminated water in all the same ways for drinking, bathing, cooking, cleaning, and watering lawns and gardens. The only change that customers might notice is a reduced taste and odor of chlorine. If you prefer, products are available that reduce or remove chloramines, such as home treatment systems and water filters, which often contain certifications describing their effectiveness. We recommend that you visit the National Sanitation Foundation's website for information on in-home filters that remove chloramines and chlorine.



LEARN MORE

For more information, visit us online at missouriamwater.com > Water Quality.

PRECAUTIONS FOR KIDNEY DIALYSIS PATIENTS AND FISH OWNERS

Although the use of chloramines is proven to be safe, kidney dialysis patients and fish owners must take special care not to use water directly from the tap. As with chlorine, chloramines must be removed from water that is used in the kidney dialysis process and from water that is used in fish tanks or ponds. Please follow these precautions:

KIDNEY DIALYSIS PATIENTS

In the dialysis process, water comes in direct contact with the bloodstream. Just like chlorine, the presence of chloramines in dialysis water would be toxic and must be removed.

Dialysis systems already pre-treat their source water to remove chlorine. However, some modifications might be necessary to remove chloramines. Consult your dialysis provider or health care practitioner for more information on your particular treatment need.

Medical facilities that perform dialysis are responsible for purifying the water, which enters the dialysis machines. Consult your physician if you have any questions.

If you use a home dialysis machine, check with your physician. They will most likely recommend the appropriate type of treatment. Many home dialysis service companies are able to make the necessary modifications.

Kidney dialysis patients can drink, cook and bathe in the water, because the digestive process neutralizes chloramines before they reach the bloodstream. Chloraminated water can be used without treatment for these general uses.

FISH OWNERS

Both chlorine and chloramines are toxic in very low levels and must be removed from the water used for aquatic life. Most pet stores sell disinfectant-removal products that can be added to the tap water prior to introduction to the fish tank or pond.

Consult your local pet supply store for specific assistance on recommended products.

Chloramines are a very stable disinfectant and will remain in water for weeks. You are advised to remove chloramines from any water used for fish or aquatic life. This approach will provide maximum protection for your pets.



How can we be sure that chloramination is safe?

For nearly 100 years, water systems across the United States and Canada have used chloramines without any ill effects. Every day, one in five Americans receive drinking water treated with chloramines, including residents in Washington, D.C., San Francisco, Boston, Dallas, Indianapolis, Denver and Miami. Over 75% of Missouri American Water customers drink water treated with chloramines. We have years of experience providing chloraminated water for community water systems, including Jefferson City, Joplin, St. Joseph and St. Louis.

When a main break occurs with chloraminated water, what is the likelihood of a significant fish kill?

Both chlorine and chloramines are toxic to fish. Therefore, regardless of whether water is treated with chlorine or chloramines, water companies must react quickly when main breaks occur and employ best management practices to minimize the environmental impact on streams and rivers.

Will chloramines adversely affect my swimming pool?

You should continue to treat your pool according to the manufacturer's recommendations. Test kits available at your local pool supply store can be used to measure the disinfectant concentration in the pool water. Contact your local pool supply store for additional details.

When it comes to gardening, will chloraminated water harm ornamental plants, vegetables, trees or shrubs?

No. The low levels of disinfectant in the water should not have any effect on plant life. The bacteria that contribute to plant growth live within the soil and are generally protected from chloramines concentrations by the soil layer. Soil will reduce or remove the disinfectant, thereby reducing its levels in the water that reach the plants.