What should people with home dialysis machines do to remove chloramines?

Check with your physician. Often, home dialysis service companies can make the needed modifications.

Is it safe for kidney dialysis patients to drink water containing chloramines?

Yes. Since the digestive process metabolizes chloramines before they reach the bloodstream, everyone can drink chloraminated water.

Kidney dialysis patients can drink, cook and bathe in chloraminated water. It is only when water interacts directly with the bloodstream, as in dialysis, that chloramines must be removed.

What about fish, reptiles, amphibians, crustaceans and pets?

Owners of fish tanks, reptiles, amphibians and crustaceans, including hobbyists, restaurants and fish markets, that now treat for chlorine in the water should have appropriate carbon filtration equipment, or use water treatment products that neutralize chloramines.

All other pets, including dogs and cats, can safely consume chloraminated water.

Are Koi fish affected by chloramines like other fish?

Yes, Koi are just as susceptible to being harmed by chloramines as other fish.

Are saltwater fish or crustaceans affected by chloramines?

Yes, if the tank systems use water from the City water distribution system.

Does letting water sit for a few days remove chloramines from tanks or pond water?

No. Unlike chlorine, which disappears when water sits for a few days, chloramines may take weeks to disappear.

Will chloramines affect the way I treat my swimming pool?

No. You will still need free chlorine residual to retard algae and bacteria growth.

Can children and pregnant women drink chloraminated water?

Yes, everyone can drink water containing chloramines.

Can I use chloraminated water to prepare my baby's formula?

Yes.

Can people on low-sodium diets or with diabetes use chloraminated water?

Yes, people with those medical concerns can use chloraminated water.

Telephone numbers for further questions:

Water Superintendent Davis Scribner
978-536-5069

Massachusetts Department of Environmental Protection
(DEP Info Line)
1-800-462-0444

U.S. EPA Safe Drinking Water Hotline
1-800-426-4791

Websites for further information:

City of Peabody
www.peabody-ma.gov

Commonwealth of Massachusetts
www.mass.gov

Environmental Protection Agency
www.epa.gov

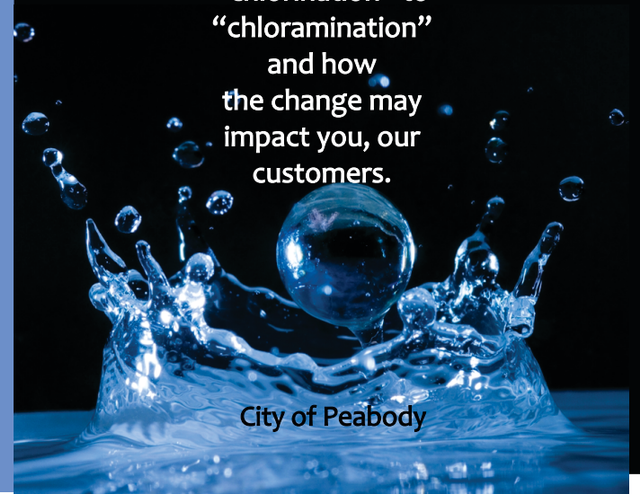
American Water Works Association
www.awwa.org

American Water Works Association Research Foundation
www.awwarf.org

Questions & Answers

About Disinfecting Water with Chloramines

Here are some questions and answers regarding the upcoming change in our method of disinfection from "chlorination" to "chloramination" and how the change may impact you, our customers.



City of Peabody

WHY are we switching to chloramines?

Currently we use chlorine as a means to disinfect the water we supply to our customers. The conversion to chloramines is intended to provide better quality water to reduce disinfection by-product formation to comply with increasingly stringent federal regulations. Application of chloramines will also help to maintain a more stable disinfection residual through our distribution system.

WHAT is the difference between chlorine and chloramines?

Chlorine is a disinfectant chemical that is added to the drinking water at the treatment plants. The chlorine then stays in the water at a low concentration throughout the distribution system to keep the water safe by protecting against biological growth.

Chloramines are a form of chlorine that is created by adding ammonium sulfate to the water after chlorine is added. We will be using ammonium sulfate as the ammonia source that safely combines with chlorine to form chloramines.

Like chlorine, chloramines also keep the water safe by protecting against biological growth throughout the distribution system, but it also produces fewer disinfection by-products and is a longer lasting disinfectant than chlorine.

WHEN will the change to chloramines take place?

The Peabody Department of Public Services will be installing new chemical feed equipment that will provide for the use of chloramines. However, the new equipment will not be activated until late in 2013, in order to provide plenty of time for customers to understand and prepare for this change in disinfection method.

Is chloramines disinfection safe? Is it a proven treatment method?

Yes to both questions. The U.S. Environmental Protection Agency (EPA) accepts chloramines as a disinfectant and recognizes its ability to control the formation of disinfection by-products.

Communities throughout the metropolitan Boston region are currently using chloraminated drinking water. The drinking water provided by the Massachusetts Water Resources Authority (MWRA) is currently chloraminated and has been since the 1930s. Locally Danvers began chloramination in December 2009.

Chloraminated water is safe for bathing, drinking, cooking and other everyday uses. The majority of consumers will not be affected by this change. However, there are two groups of people who need to take special care with chloraminated water: kidney dialysis patients and fish owners.

HOW will the change to chloramines disinfection affect me?

Your drinking water will have fewer disinfection byproducts, and less of a chlorine taste and odor. Most customers will not observe any difference, other than some reduction in the "swimming pool and bleach" smell they may have experienced when drinking a glass of water.

Some centers and hospitals providing kidney dialysis; and individuals, commercial establishments and laboratories maintaining fish tanks will have to ensure that the pretreatment steps they currently use to remove chlorine are adjusted, if necessary, to remove chloramines.

For example, carbon filtration or water treatment products that neutralize chloramines may be used. If you use a carbon filter it must contain high quality granular activated carbon and you must permit sufficient contact time. Filters must be changed according to manufacturer instructions.

Will reverse osmosis treatment units remove chloramines?

No, chloramines may pass through reverse osmosis membranes.

Will boiling water remove chloramines?

No. Boiling water or adding salt will not remove chloramines.

Do home water softeners remove chloramines?

Most softeners are not designed to remove chloramines.

How are kidney dialysis patients affected by chloramines?

Chloramines can diffuse through the reverse osmosis membrane filters used by some hemo-dialysis machines, and patients undergoing kidney dialysis could be adversely affected.

To prevent this, dialysis equipment must be adjusted to remove chloramines, and the treated water must be monitored to measure the final concentration.

Dialysis facilities will need to review their dialysis treatment equipment to determine its continued safe operation.

What is the City of Peabody doing to ensure that kidney dialysis centers are prepared?

The Peabody Health Department will be contacting the National Kidney Foundation and medical centers throughout the water distribution system area to notify them about the coming change to chloramines disinfection.

This informational brochure will be placed in City Hall and on the City's website to help make sure customers become aware of this change.