

Chloramine Common Questions/Answers and Facts

- **What is the difference between chloramines and chlorine?**
 - Chlorine and chloramines are both common disinfectants used in water treatment (Disinfection is required by the EPA to kill/inactivate any potential pathogens in the water). Chloramines are formed with a small addition of ammonia to water that has already been treated with free chlorine. The chloramine residual is less reactive and longer lasting than the free chlorine residual.
- **What are some general facts about chloramine disinfection?**
 - Chloramine disinfection has been used by water utilities for almost 90 years.
 - More than 1 in 5 Americans use drinking water treated with chloramines (including Louisville Water, KY American Water in Lexington, Hardin Co. Water District No.1, Hardin County Water District No.2 and Philadelphia Water).
- **What are some benefits of chloramine disinfection?**
 - Chloramines provide a longer lasting disinfectant in the water than chlorine (Fort Knox uses presently).
 - Chloramines produce fewer Disinfectant By-Products (DBPs) than chlorine.
 - HCWD No.1 has seen a reduction of over 30% in their County Water system on their DBPs since switching to chloramines.
 - There are fewer taste and odor issues with chloramines.
- **What is the issue with kidney dialysis machines?**
 - Water used in kidney dialysis machines must be disinfectant-free because the water comes in direct contact with the patient's blood.
 - Dialysis patients should consult their physician or dialysis machine manufacturer regarding the change from chlorinated to chloraminated water. Most dialysis machines are equipped to remove both chlorine and chloramines in water, but these professionals can provide further detail regarding any changes in normal procedures that the patient or care-giver needs to know.
- **What is the issue with fish tanks?**
 - Fish tanks need to be treated with a product that customers can readily purchase at pet stores or aquarium supply stores that will eliminate the ammonia in the chloraminated water.

- **Why did HCWD No.1 switch to chloramines and why is Fort Knox switching?**
 - **HCWD No.1 performed extensive studies and in order to continually meet stringent water quality guidelines and to ensure compatibility with neighboring water utilities it was determined that utilizing chloramine disinfection was the best way forward. HCWD No.1 made the switch in their County Water System to chloramines in October 2018.**
 - **Hardin County Water District No.1, Hardin County Water District No.2, and Louisville Water Company all utilize chloramines as their disinfectant. Fort Knox is completely renovating their water treatment plant beginning in the fall of 2020. It was determined that during this renovation was the best time to switch the water plant to chloramines. Switching Fort Knox to chloramines will reduce DBPs in the distribution system and allow for supplemental water to be provided to Fort Knox from neighboring utilities if necessary.**