



The unfortunate circumstances in Flint, Michigan and other communities across the country have created concern regarding tap water safety. The potential presence of lead in drinking water is a very serious health concern. Moline residents can rest assured our water supply staff is committed to keeping lead out of the drinking water in our community. Moline's public water supply has a very proactive corrosion control and lead/copper monitoring program. This article will provide an overview of this program and provide additional actions you can take to provide enhanced protection against any potential lead exposure via tap water.

## About Lead

Lead is a bluish-gray, silvery metal, which is a harmful neurotoxin if ingested or inhaled. Interestingly, mankind has used lead for a variety of purposes including cosmetics, jewelry, ammunition, paint, plumbing, plastics production and as a gasoline additive. Fortunately, the significant health hazards associated with lead have been recognized and its use progressively banned in the US since the 1970s. These efforts have resulted in a dramatic decrease in lead exposure pathways over the last thirty years, which is a drastic improvement from the world baby-boomers grew up in.

## How Does Lead Get In Tap Water?

In regard to tap water, it is important to understand that lead does not come from the source water nor is it removed in the water treatment process. Lead can enter tap water, if the tap water is corrosive and comes in contact with older piping and/or plumbing fixtures that contain lead. Lead water service pipes are considered to be primary potential sources of lead in tap water. Water service pipes are the buried pipes that connect a building's plumbing system to the City water mains. Other potential sources of lead in tap water include lead-based "50/50" solder used to join copper pipes and brass/bronze plumbing fixtures manufactured before 2014.

## Keeping The Lead Out of Moline Tap Water

As previously mentioned, Moline's public water supply has a very proactive corrosion control and lead/copper monitoring program. The following bullet points summarize key elements of our ongoing actions and commitment to preclude any lead (and copper) contamination problems:

- Moline continuously regulates the hardness, alkalinity and pH of our finished water to inhibit corrosion in metallic piping systems. The target pH of our finished water is 9.0.
- Moline uses both Larson and Langelier Indices to monitor finished water quality, allowing for refined water treatment adjustments in regard to corrosion control.
- Moline has been on reduced compliance monitoring since 2007 for lead and copper due to the proven success of our corrosion control program.
- However, Moline continues to conduct lead and copper monitoring above and beyond that required by Safe Drinking Water Act regulations to ensure the safety of the water we supply to Moline residents.
- Our lead and copper monitoring program involves testing of samples taken from homes known to have lead service lines and/or copper pipe joined with "50/50" lead solder.
- Moline also uses metallic coupon studies to further assess the quality of our finished water and the effectiveness of our corrosion control program.

Like nearly all older public water supply systems in our country, there are still some lead water service pipes in Moline's water distribution system. Of the 17,000+ water service pipes in our system, several thousand are known or thought to be lead pipe. Although monitoring has demonstrated our corrosion control program is effective, Moline is systematically replacing the remaining lead service pipes in conjunction with our water main replacement program and other system maintenance activities. The City currently spends more than \$1 million per year on the water main replacement program. Also noteworthy is the fact that all of the water meters that were installed in Moline's 2010 water meter replacement project have lead-free brass bodies.



### How to Further Reduce Tap Water Lead Exposure in Your Home

There are several simple but proven methods you can use to further reduce potential exposure to lead in drinking water:

- 1) Flush the faucet for a couple minutes before consuming the water, if the faucet has not been used for six hours or longer. The longer water sits stagnant in a piping system, the more likely metal ions can leach into the water. Flushing helps ensure you are drinking fresh, rather than stagnant water.
- 2) Do not consume water from the hot water faucet. Hot water promotes lead leaching. Water from your water heater may contain lead and other impurities that have accrued in the tank.
- 3) Remove and clean faucet aerators on a periodic basis, as undesirable particles and sediment may collect in these over time.
- 4) When repairing and replacing plumbing, do not use "50/50" lead solder for plumbing repairs and ensure any new plumbing fixtures are lead-free.

### Our Commitment To You

The City is committed to providing its residents with a continuous supply of safe, high quality water, and we take this job seriously. You may already know Moline water was recently recognized as the best tasting water in Illinois, which further reflects our commitment to excellence. We trust you found this article to be informative and beneficial. Please feel free to contact us if you require any additional information.

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