

## What Do I Need to Know about the Risks of Lead in Drinking Water?

### How does lead get into drinking water?

- Generally, finished drinking water contains no lead.
- Lead may be present in piping and plumbing fixtures found in customers' homes.
- Homes constructed before 1950 may be served by a lead water service line. Copper pipe installed before 1985 may have been installed using lead-containing solder.
- If drinking water is corrosive, it can corrode customers' lead service lines and plumbing fixtures, which can result in elevated lead levels in drinking water.

### What are the health effects of lead in drinking water?

- Customers who drink water with elevated lead levels can suffer long term health impacts including damage to the liver, kidneys, or even the brain.
- Mental development issues are a significant concern for children exposed to lead contamination.
- In 1991, the Environmental Protection Agency published a regulation to control lead and copper in drinking water. The rule is part of the Safe Water Drinking Act, and it requires water systems to monitor drinking water at customer taps. If lead concentrations exceed the Action Level of 0.015 mg/L (or 15 parts per billion) in more than 10 percent of taps, the system must complete additional actions to control the corrosion.

### What is Des Moines Water Works doing to control elevated lead levels?

- Des Moines Water Works treats the drinking water to ensure it is not corrosive.
- Corrosion control is an important part of Des Moines Water Works' treatment process. By carefully managing the chemistry of our drinking water, Des Moines Water Works ensures the water is not corrosive.
- A number of factors impact how corrosive treated drinking water will be. These factors include the total amount of dissolved minerals in the water (calcium and magnesium), alkalinity, temperature, and pH.
- Each day, samples are analyzed to ensure Des Moines Water Works' treatment for corrosion control remains effective.

### Could what happened in Flint, Michigan happen in Des Moines?

- Des Moines Water Works is paying close attention to what unfolded in Flint, Michigan. In North America, no one should have to question the safety of water at the tap. Flint underscores that Des Moines Water Works' first job is to protect the families we serve. Those of us involved in managing, cleaning and delivering water share an obligation to protect public health.

- We do not have first-hand knowledge about what occurred in Flint, but this much seems clear: When Flint switched its water supply source, the new water caused lead to leach from service lines and home plumbing – lead that ended up in water coming out of the taps.
- This kind of incident is unlikely here because Des Moines Water Works monitors water quality parameters on a daily or even hourly basis to ensure the drinking water we produce will not be corrosive. Des Moines Water Works also follows a written Lead and Copper Sampling Plan. This plan helps ensure we stay in compliance with the requirements of the Lead and Copper Rule.
- Des Moines Water Works tests for lead and copper contamination by asking customers with specific types of plumbing to collect samples in their homes.
- These results are published annually in Des Moines Water Works' [Consumer Confidence Report](#), which describes the regulatory requirements Des Moines Water Works must meet or exceed.
- Des Moines Water Works continues to be in compliance with Lead and Copper Rule requirements.
- Supplying approximately 500,000 central Iowans with safe, affordable and abundant drinking water is Des Moines Water Works' mission. Water plays a key role in your health and Des Moines Water Works plays a key role in providing **water you can trust for life**.

#### **What can you do to limit exposure to elevated levels of lead?**

- Use only water from the cold tap for drinking, cooking, or preparing baby formula.
- Flush the tap for two to four minutes before using water for drinking or cooking when no water has been used for several hours. Showering, washing dishes, or doing laundry can be effective ways to flush household plumbing before water is used for drinking or cooking.
- While in-home water treatment devices such as softeners or filtration systems are not necessary in Des Moines, if such in-home treatment devices are used, they must be properly operated and maintained in accordance with the manufacturers recommendations. Improperly operated in-home treatment devices can increase the potential for water to become corrosive.

#### **Where can I find more information?**

- If you are concerned about lead in your water, you may wish to have your water tested. Please contact Des Moines Water Works at 283-8700, to request a test of your water (fees apply).
- Visit EPA's lead information website: <http://www.epa.gov/lead/protect-your-family#homeleadsafe>