

# **What You Need to Know About Lead and Copper in Your Drinking Water**

## **Sources of Lead in Drinking Water**

Lead and copper are not found in the sources of Andover's drinking water. Any lead and copper found in drinking water is most often the result of these metals slowly dissolving into the water from materials used in plumbing systems used to supply water, such as a lead service line (connecting your home to the main in the street), lead solder used in plumbing, some brass fixtures or household faucets. Water coming into contact with these materials can cause small amounts of metals to leach (dissolve) into the water, especially if water sits for a long time in the pipes before use.

At Andover's Water Treatment Plant, the drinking water is treated by raising the water pH to 8.5 before the water enters our distribution system. At this pH, water is much less corrosive toward the plumbing materials.

## **How to Reduce Your Exposure to Lead**

To reduce your potential exposure, always use fresh, cold running water for drinking and cooking. Do not use hot water for cooking and preparing baby formula. Lead dissolves more easily into hot water. Always purchase and install plumbing materials (i.e., pipes, pipe fittings, and plumbing fittings) and fixtures that are designated "lead-free." By law, this means they materials cannot contain more than 0.25 percent lead. Read the labels of any new plumbing fixtures closely.

## **How to Determine if You Have a Lead Service Line**

The service line is the pipe that connects your home to the water main in the street. Some service lines that run from older homes to the utility water main may be made from lead-lined steel and materials other than copper. Over time, many of these older service lines may have been replaced. If you have concerns, a plumber should inspect the service line to make that determination. In Andover, the homeowner is responsible for the section of service line from the home to the curb shut-off.

## **Testing for Lead and Copper in Your Drinking Water**

The Lead and Copper Rule under the federal Safe Drinking Water Act requires all public water suppliers to test for lead and copper at designated locations and at a specified frequency. The rule has established "Action Levels" of 15 parts per billion (ppb) for lead and 1300 parts per billion (ppb) for copper, and requires public water systems to maintain the lead and copper levels in at least 90% of the water samples below these action levels. Lead and copper sampling is conducted by collecting samples in residential homes which were constructed just prior to the 1986 ban on lead used in solder of drinking water piping. Samples are collected after the water has not been used for 6 to 8 hours. These homes are thought to have the highest potential for lead to leach into the water, and by collecting water after it has sat for an extended period of time, the lead and copper levels in the samples would be the highest of anytime during the day.

Based on a series of test programs dictated by the Lead and Copper Rule, the sampling requirements for Andover were reduced from 60 residential samples every year to 30 samples every three years. The most recent sampling of residential homes took place in July and August of 2013, and the test results are reported in the annual Water Quality Report, published by the Water Department.

Since the start of the lead and copper program, no exceedances of the action levels for lead and copper have occurred. Sampling is scheduled to take place again in July and August 2016. The Lead and Copper Rule also requires that two samples be collected at two of Andover's Public Schools every three years, during the same time period that the residential homes are being sampled. Water samples will be collected at both the Sanborn and the West Elementary Schools.

Additionally, once school has reopened for the academic year, Andover will be collecting and analyzing water samples at various locations at each of the Public Schools.

### **Additional Resources**

Below is a listing of additional resources to help you with questions and concerns about lead and copper in your drinking water.

1. The US Environmental Protection Agency (US EPA) [www.epa.gov](http://www.epa.gov)
2. MA Department of Environmental Protection (MassDEP) <http://www.mass.gov/eea/agencies/massdep/water/drinking/overview-of-lead-in-massachusetts-drinking-water.html>
3. MA Department of Public Health (MassDPH) [www.mass.gov/dph/lead-sources](http://www.mass.gov/dph/lead-sources)
4. Center for Disease Control (CDC) <http://www.cdc.gov/nceh/lead/default.htm>