Health effects of lead
Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

Sources of Lead
Lead is a common metal found in the environment. Common sources of lead exposure are lead-based paint, household dust, soil, and some plumbing materials including faucets purchased before January 2014. Lead can also be found in other household items such as pottery, make-up, toys, and even food. Lead paint was outlawed in 1978, but dust from homes that still have lead paint is the most common source of exposure to lead. Therefore, make sure to wash your children's hands and toys often as they can come into contact with dirt and dust containing lead.

The water provided by MWRA is lead-free when it leaves the reservoirs. Local distribution pipes that carry the water to your community are made mostly of iron and steel and therefore do not add lead to water. However, lead can get into tap water through a lead service line (if your home has one), lead solder used in plumbing, and older brass fixtures. Even though the use of lead solder was banned in the U.S. in 1986, it still might be present in older homes. The corrosion or wearing away of these lead-based materials can add lead to tap water, particularly if water sits for a long time in the pipes before use. Therefore, water that has been sitting in household pipes for several hours, such as in the morning, or after returning from work or school, is more likely to contain lead. If high levels of lead are found in drinking water, water may contribute 20 percent or more of a person's exposure to lead. Infants who consume mostly formula mixed with lead-containing water can receive up to 60 percent of their exposure from water.

Why am I receiving this brochure?
During the fall 2021 sampling period Malden found elevated levels of lead in drinking water in some homes. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

Steps You Can Take To Reduce Exposure To Lead In Drinking Water

**Fresh water is better than stale:** If your water has been sitting for several hours, run the water until after it is consistently cold - usually about 30 seconds to two minutes - before drinking or cooking with it. This flushes water which may contain lead from the pipes.

**Test your child for lead:** Contact your local health department or your health care provider to find out how you can get your child tested. A blood lead level test is the only way to know if your child is being exposed to lead. For more information, contact the state Department of Public Health at 1-800-532-9571 or search for MDPH lead.

**Identify if your plumbing or fixtures contain lead:** If your home has a lead service line (the pipe connecting your house to the water main in the street), consider replacing it to reduce the possibility of elevated lead levels. Contact the water department or check www.mwra.com for more information. Faucets purchased before 2014 may also contribute lead to drinking water.

**Use cold, fresh water for cooking and preparing baby formula:** Do not cook with, drink, or make baby formula with water from the hot water tap. Lead dissolves more easily into hot water.

**Consider using a filter:** If your water contains lead, you may want to consider using a filter. Make sure the filter you are considering removes lead - not all filters do. Be sure to replace filters in accordance with manufacturer's instructions to protect water quality. Contact NSF International at 1-800-NSF-8010 or www.nsf.org for more information on water filters. Also, if you are considering using bottled water, note that it may cost up to 1,000 times more than tap water. Simply flushing your tap, as described above, is usually a cheaper, equally effective alternative.
What is being done to control lead in the drinking water?

MWRA and Malden Engineering & Malden Water Department are concerned about lead in your drinking water. We have an extensive testing program and treat the water to make it less corrosive. Starting in 1996, MWRA increased the pH and buffering capacity of the water, and has steadily fine-tuned these levels to further reduce the leaching of lead into drinking water. Due to this treatment change, lead levels found in sample tests of tap water have dropped around 90 percent since 1992.

Although most homes have very low levels of lead in their drinking water, some homes may still have lead levels above the EPA Action Level of 15 parts per billion (ppb).

Up until January 2014, Federal law allowed brass fixtures such as faucets to contain up to 8% lead. Faucets sold after then are essentially lead free and will not contribute lead to drinking water. Replacing an older faucet is one way to reduce the potential for elevated lead levels in your drinking water. You can also run the water to flush out any water in contact with the older brass faucet.

To monitor lead levels, Malden Engineering tests tap water in homes that are most likely to have lead. These homes are usually older homes that may have lead service lines or lead solder, and they must be tested after water has been sitting overnight. The EPA rule requires that 90% of these worst case samples must have lead levels below the Action Level of 15 ppb.

Additional information

You can call MWRA at (617) 242-5323 or visit www.mwra.com for more information about lead. Contact the Malden Engineering Department, at 781-397-7040 to see if you have a lead service line and how to get it replaced, or to find out what else we are doing about lead at www.cityofmalden.org/engineering.

For more information on reducing lead exposure around your home and the health effects of lead, visit EPA’s website at www.epa.gov/lead, search for MassDEP lead or MDPH lead, call 1-800-532-9571, or contact your health care provider.

This report contains very important information about your drinking water. Please translate it or speak with someone who understands it.

Because lead levels in home plumbing can vary, individual homes and communities may occasionally have higher test results. In the fall of 2021, Malden’s results were 20.6 ppb, above the Action Level.