

# Public Education for Lead

## IMPORTANT INFORMATION ABOUT LEAD IN YOUR DRINKING WATER

The City of Kamiah found elevated levels of lead in drinking water in some homes/buildings. Lead can cause serious health problems, especially for pregnant women and children 6 years and younger. Please read this notice closely to see what you can do to reduce lead in your drinking water.

The lead level that requires public education and additional requirements is 15 parts per billion or 0.015 mg/L. The 90<sup>th</sup> percentile level of lead for our public water system is 0.024 mg/l or 24 parts per *billion*- that is 24 parts out of 1,000,000,000. To illustrate, this is like *one inch* of the way to Rapid City, SD. Still, lead in drinking water is serious business. *Note that most homes tested have much lower levels.*

### 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. Drinking water is one possible source of lead exposure. The main sources of lead exposure are lead-based paint, lead-contaminated dust or soil, and some plumbing materials. Brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Lead can also be found in certain types of pottery, pewter, brass fixtures, food, and cosmetics. Other sources include exposure in the work place and exposure from certain hobbies (lead can be carried on clothing or shoes). Lead is found in some toys, some playground equipment, and some children's metal jewelry.

When water is in contact for several hours with pipes (or service lines) or plumbing that contains lead, the lead may enter drinking water. Homes built before 1988 are more likely to have plumbing containing lead.

EPA estimates that 10 -20% of a person's potential exposure to lead may come from drinking water. Infants who consume mostly formula mixed with lead-containing water can receive 40 -60% of their exposure to lead from drinking water.

### Steps You Can Take to Reduce Your Exposure to Lead in Your Water

- 1. *Run your water to flush out lead.*** If the tap hasn't been used for several hours, run water for 15-30 seconds to flush lead from interior plumbing or until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
- 2. *Use cold water for cooking and preparing baby formula.*** Lead dissolves more easily into hot water. Do not use water from the hot water tap to cook, drink, or make baby formula.
- 3. *Do not boil water to remove lead.*** Boiling water will not reduce lead.
- 4. *Look for alternative sources or treatment of water.*** You may want to consider purchasing bottled water or a water filter. Read the package to be sure the filter is approved to reduce lead. Be sure to maintain and replace a filter device in accordance with the manufacturer's instructions to protect water quality.
- 5. *Test your water for lead.*** Call us at the number listed below to find out how to get your water tested for lead. A list of Idaho certified laboratories is available at <http://healthandwelfare.idaho.gov/Health/Labs/CertificationDrinkingWaterLabs/tabid/1833/Default.aspx>
- 6. *Get your child's blood tested.*** Contact your local health department or healthcare provider to find out how you can get your child tested for lead, if you are concerned about exposure.
- 7. *Identify and replace plumbing fixtures containing lead.*** Brass faucets, fittings, and valves, including those advertised as "lead-free," may contribute lead to drinking water. Prior to January 2014, the law allowed fixtures, such as faucets, with up to 8% lead to be labeled as "lead free." "Lead free" is now defined as a weighted average of

less than or equal to 0.25%. Visit the National Sanitation Foundation website at [www.nsf.org](http://www.nsf.org) to learn more about lead-containing plumbing fixtures.

### **What Happened? What is Being Done?**

This exceedance was discovered in October of 2020. A representative sample plan with ten homes to be tested was approved by Idaho Dept. of Environmental Quality a few years ago, having selected older homes most likely to have an issue with this. *Most homes tested show no lead at all or just a slight trace.* This lead tends to come from solder joints in copper pipes which were installed prior to 1988. In 2020 we had two homes test above the action level, which takes us outside the 90<sup>th</sup> percentile requirement.

The City of Kamiah constantly monitors our water pH coming from the water plant to ensure that it is not corrosive. pH level of 7 is considered neutral, with numbers below 7 considered potentially corrosive, or acidic. We maintain a safe & gentle pH target of 7.3 as it leaves the water plant.

A century or more ago municipal service lines (lines between our mains and your residence) were commonly made of lead pipe. To the best of our knowledge, Kamiah has no lead service lines at any residences or businesses. Galvanized steel lines are still common and may also contain a small amount of lead. But the main issue seems to be lead solder in copper lines or perhaps plumbing fixtures. As noted in the previous page, a moment of flushing can do a lot to reduce the risk because lead levels rise when water sits in one place for extended time. Our testing reflects the worst case scenario of a tap which has not been used for many hours. Lines which have been flushed or water frequently used do tend to have much lower levels.

Kamiah has had a few sporadic violations in years past, although until now none were recent. The issue was closely enough maintaining correct pH, which our old water plant was not well enough equipped to do. When the new water plant was finally commissioned, continuous pH monitoring was implemented so the operator could see minute by minute the levels we are discharging. The Clearwater River does have pretty neutral pH typically and can briefly turn very slightly acidic due to exposure to natural rock formations upriver during higher water flows. The difference is very subtle and is far less acidic than many foods or beverages commonly enjoyed. We have the ability to add a naturally occurring mineral to increase the pH to a non-corrosive level. We are, however, having to do a balancing act to prevent water discoloration from a different naturally occurring mineral present upriver, manganese. The City of Kamiah is now exploring options to most effectively and economically strike a more reliable balance between these two issues. We expect to soon be undergoing an in-depth study to determine the best method with the least impact on operations and costs. We are pursuing grant dollars to cover these costs.

### **For More Information**

Call us at 208-935-0319, email at [water@cityofkamiah.org](mailto:water@cityofkamiah.org), or visit our website at <https://cityofkamiah.org/public-works-dept>. For more information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at [www.epa.gov/lead](http://www.epa.gov/lead) or contact your health care provider.

Date Distributed 11-23-2020

Water System ID - ID2310003

Este informe contiene información muy importante sobre su agua potable.  
Tradúzcalo o hable con alguien que lo entienda bien.