

Lead and Copper Rule FAQ

What is the Lead and Copper Rule?

- The Lead and Copper Rule is the federal regulation that determines how water systems should treat drinking water to reduce lead and copper exposure from household plumbing.

Is Portland in compliance with the Lead and Copper Rule?

- Yes. Since 1997, the Portland Water Bureau has been in compliance with the Lead and Copper Rule.

Is Portland's water safe?

- Yes. The Portland Water Bureau provides safe drinking water to almost 1 million customers in the greater Portland area.

Is there lead in Portland's water?

- Water-related lead exposure in Portland is linked to household plumbing, not to lead in our water or distribution system. Portland's drinking water comes from two high-quality sources – the clean, cold and protected water of the Bull Run Watershed and Columbia South Shore Well Field. Our source water meets or exceeds all federal and state drinking water standards.

Who is most at risk for lead in water?

- Children under six and pregnant women are most at risk for lead exposure, particularly if they live in homes with lead solder in their plumbing. These homes were typically built or plumbed between 1970 and 1985.

What are the sources of lead in drinking water in Portland?

- In Portland, the greatest source of lead in water is household plumbing. Portland has never used lead service lines and has removed all known lead service connectors or pigtails (short 2-3' pipes).

What homes are most at risk for lead?

- In Portland, the homes most at risk for lead in water are homes with copper pipes joined with lead solder. These were generally built or plumbed between 1970 and 1985. However, the homes with the greatest risk for exposure to lead are those with lead-based paint. Homes built before 1960 are most likely to have lead-based paint.

How many homes are at risk for lead in water?

- There are potentially up to 45,000 homes in the Portland Water Bureau's [service area](#) that were built between 1970 and 1985. These homes are more likely to have lead solder.

What is the federal standard for lead?

- The Lead and Copper Rule set the federal action level for lead at 15 parts per billion (ppb). This means that if ten percent of water samples from Tier 1 Homes (see below) return lead levels of over 15ppb, a water provider is

required take action. This includes informing the public of steps to take to prevent exposure to lead in water.

- Since 2006, Portland has recorded one lead exceedance. It occurred in 2013, and represented a total of 13 homes in the Water Bureau service area, including five homes in Portland.

How many at-risk homes potentially exceed the federal action level of 15 ppb?

- Based on the Water Bureau's testing, up to 10% of the at-risk homes may have elevated levels of lead that could exceed the federal action level of 15 ppb. These are homes PWB targets with its Lead Hazard Reduction Program. Customers in at-risk homes are encouraged to test their water for lead.

Does Portland treat drinking water to reduce lead?

- Yes. Since 1997 the Portland Water Bureau has been adding sodium hydroxide, also known as caustic soda, to increase the pH of its drinking water. This has reduced the lead in water levels in the most at-risk homes by more than 70%.

How does Portland monitor for lead in water?

- The Portland Water Bureau monitors for lead in water in the highest-risk homes in the bureau's service area. These homes, referred to as Tier 1 homes, were built or plumbed from 1983-1985 and are confirmed to have lead solder in their household plumbing. These homes are sampled every 6 months by testing the water after it has been sitting in the home plumbing for at least 6 hours, which is expected to represent the highest likely occurrence of lead.

What is a Tier 1 Home?

- “Tier 1 Home” is a regulatory term that is defined as a home with a lead service line or a home built or plumbed between 1983 and June 30, 1985, that has lead solder. There are potentially 1,200 Tier 1 homes in the Water Bureau’s service area.

Other cities have lead service lines. Does Portland?

- No. Portland has never used lead service lines. Prior to 1940, lead pigtails were used on some homes. Portland finished removing all known pigtails from the system in 1998.

What do Portland’s lead in water results mean?

- Monitoring for lead in water from Tier 1 Homes is intended to capture a snapshot of the highest lead levels in the highest-risk homes as a way of monitoring the effectiveness of the bureau’s corrosion control treatment (see below). These results do not indicate the level of lead in the vast majority of homes in our system.

What does Portland do to reduce exposure to lead in water?

- The Portland Water Bureau has a comprehensive corrosion control program to reduce lead in water, including:
 - Treating our drinking water with sodium hydroxide to reduce the potential for lead corrosion in home plumbing.
 - Conducting extensive education and outreach to customers in the most at-risk homes.

- Providing information to all customers about simple steps they can take to reduce their exposure to lead in water.

What is the pH and alkalinity of Portland's water?

- Portland adjusts the pH of its drinking water to 8.0 to reduce corrosion of lead. Portland's main source of water, the Bull Run, has an average alkalinity of 11 mg/L. Our secondary source, the Columbia South Shore Well Field, has an average alkalinity of 101 mg/L.

Has Portland conducted corrosion control studies? When?

- In 1994 Portland completed a corrosion control study that indicated raising the pH to 9.0 and adjusting alkalinity to 20 mg/L may provide additional reduction of lead in water. The Portland City Council directed the Water Bureau to look at alternative methods to reduce exposure to lead. The result is Portland's current compliance program.
- In 2014, in anticipation of changes to the water system, the Portland Water Bureau secured funding to begin a water quality corrosion study. That study will inform potential changes in the future. We expect preliminary results in the summer of 2016.

How can I tell if I have lead in my water?

- By testing your water. The Portland Water Bureau offers free test kits. Contact the LeadLine at www.leadline.org or calling 503-988-4000.

What can I do if I have lead in my water?

- There are three common-sense steps people can take:

- Run your tap for 30 seconds to 2 minutes before using the water for drinking or cooking after it has been standing for several hours.
- Filter your water. Tests have shown more than 90% reduction of lead in water from this simple step.
- Contact your local plumber to evaluate the possibility of replacing your plumbing.

What are other sources of exposure to lead?

- In Portland the greatest source of exposure to lead is lead-based paint. Homes older than 1960 are most likely to have high levels of lead-based paint. To learn more about ways to reduce your exposure to all sources of lead contact the LeadLine at www.leadline.org or 503-988-4000.

How can I test my child for lead exposure?

- Multnomah County, in partnership with the Portland Water Bureau, provides free tests. In the 174 “investigations” that Multnomah County has conducted since 2013, there has been no link between lead and water. You can have your child tested by your pediatrician through the LeadLine. Dates and times of free blood lead testing clinics can be found at www.leadline.org.