



# Lead Survey Q&A

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## 1. Why should I care about lead in drinking water?

Lead is especially dangerous for children because their growing bodies absorb more lead than adults do, and their brains and nervous systems are more sensitive to its damaging effects. Exposure can cause permanent damage to the brain and nervous system, leading to behavioral and learning problems, lower IQ, and hearing loss. Other effects include slowed growth and anemia. In rare cases, ingesting lead can cause seizures, a coma, or even death.

## 2. What is a safe level for lead?

There is no known safe level of lead. The Department of Health (DOH) is working to minimize any lead exposure to the extent practical.

## 3. How big a problem is lead in children in Washington State?

In 2016, clinicians in Washington State tested approximately 23,400 children younger than six years old. They found two percent of these children had elevated levels of lead. By comparison, nationally 3.3 percent of children tested had elevated levels of lead.

## 4. Is drinking water a significant source of lead exposure for children?

Nationally, lead paint and dust account for up to 70 percent of elevated blood lead levels in U.S. children. Drinking water, along with lead-contaminated soil, children's toys and jewelry, workplace and hobby hazards, imported candy, and traditional home remedies and cosmetics may also expose children and adults to lead.

## 5. Why did DOH send out a lead survey?

On May 2, 2016, Governor Inslee directed DOH to "work with each Group A public water system to identify all lead service lines and lead components (i.e., lead goosenecks) within two years" ([Directive 16-06](#)). The best way to fulfill this directive was to create a survey and ask each Group A public water system to provide their feedback.

## 6. How many people did the lead survey reach?

The detailed information received from water systems account for more than 90 percent of the service connections in Washington State. DOH created a [summary](#) of this information.

## 7. When is the deadline for identifying the possible location of these lead service lines and lead goosenecks?

The clock began when the governor issued his directive on May 2, 2016. DOH is working with water systems to complete this effort by May 2, 2018.

## 8. How does the occurrence of lead service lines in Washington State compare with other states?

In a recent national assessment, Washington State was reported as having one of the lowest numbers of lead service lines in the country, with an estimated four lead service lines per 1,000 people. The national assessment estimated the national average at 18 lead service lines per 1,000 people. DOH believes there are actually fewer lead service lines in Washington than the assessment suggests. Based on water system responses to the 2016 lead survey, we believe the occurrence of lead service lines is less than one lead service line per 1,000 people.

**9. Why is it so difficult to locate the lead service lines in Washington State?**

Some water systems initially installed lead service lines or other lead components many years ago. Some were not able to create and maintain accurate written records of where they were originally installed or what's been done with them since. Some water systems that did create and maintain accurate records do not have the resources needed to research these records and spot-check their accuracy.

The only sure way to locate a suspected lead service line is by excavation and visual confirmation, which is expensive and disruptive. Among the water systems that used lead service lines or other lead components, almost all of them switched in the 1940s to using non-lead alternatives for new connections. Fortunately, most of the growth in our water systems occurred after World War II and survey respondents indicate our state has a very low number of lead service lines and other lead components compared with other states.

**10. What is the state planning to do, now that the survey is complete?**

We are following up with water systems that identified a lack of service line inventory and/or inadequate staff resources. We are also helping connect water systems with resources to remove lead components. One option, the Drinking Water State Revolving Fund (DWSRF) Program, can provide funding for the removal and replacement of lead service lines and components.

**11. How does this survey connect with the drinking water regulations?**

Most Group A water systems are subject to the Lead and Copper Rule. Systems that exceed the action level for lead (0.015 milligrams per liter) or copper (1.3 milligrams per liter) in more than 10 percent of the samples collected must take steps to reduce the corrosiveness of the water they serve. If, after installing corrosion control treatment a water system exceeds the lead action level, the system must begin replacing of all lead service lines over a 15-year period.

**12. What is a lead component, and what's the difference between a lead component and lead service line?**

"Other lead component" means a component made of at least 90 percent lead. An example of a lead component is a short lead pipe installed between the water main in the street and the service line—typically a small diameter galvanized iron pipe—running to the home or business. A lead service line is a small diameter pipe connected to the water main and running all the way to the home or business.

**13. Is a brass fixture considered a "lead component" for the purpose of the survey?**

No, a brass fixture is not considered a lead component for the purpose of the survey. Before January 2014, the brass used in faucets could contain up to eight percent lead by weight. Since then, all brass used in faucets and other components intended for human consumption can contain no more than 0.25% lead by weight.

**14. Is an old cast iron bell-and-spigot pipe with lead-joint packing considered a "lead component" for the purpose of the survey?**

No. For these cast iron pipes, packing was used in the bell to first seal the joint, and then lead was placed behind the packing to secure the packing in place. Given the presence of the packing and tiny potential area in contact with water, it is highly unlikely that these joints cause any lead exposure.

**15. How can lead get into my drinking water?**

Service lines to and plumbing within some customers' homes may contain lead or lead solder joints, which can leach lead into the water.

**16. Where does my water systems sample for lead and copper?**

The testing that water systems periodically conduct is intended to measure for lead and copper leached from faucets and plumbing. This testing also must be conducted at homes with the highest risk of having lead released from plumbing components. (For example, homes served by lead service lines and/or homes with copper plumbing installed before 1986, when the solder used to join copper plumbing contained up to 50 percent lead by weight).

**17. What is the history of lead and copper sampling for my water system?**

You can find this information in the DOH drinking water database:

[www.doh.wa.gov/DataandStatisticalReports/EnvironmentalHealth/DrinkingWaterSystemData/SentryInternet](http://www.doh.wa.gov/DataandStatisticalReports/EnvironmentalHealth/DrinkingWaterSystemData/SentryInternet)

**18. How can I learn more about lead in drinking water, and ways to reduce my exposure to lead?**

You can find this information on the DOH drinking water webpage:

[www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/Contaminants/Lead](http://www.doh.wa.gov/CommunityandEnvironment/DrinkingWater/Contaminants/Lead)