



## Introduction

This factsheet is intended to assist the public with frequently asked questions (FAQs) associated with lead in drinking water.

NOTE: Additional information is available at: <https://www.state.nj.us/dep/watersupply/dwc-lead-consumer.html>.

The primary lead exposure concern in New Jersey has been old lead-based paint in our old housing. We can also be exposed to lead through soil, hobbies (e.g., shooting ranges and fishing), and drinking water. Very rarely is lead found in the sources of our drinking water (e.g., lakes, streams, aquifers); however, it can leach into our drinking water from delivery systems containing lead (e.g., pipes, faucets, service line).

## What laws and regulations are in place to protect the public against lead in its drinking water?

The United States Environmental Protection Agency (USEPA) issued regulations in 1991 (known as the Lead and Copper Rule), which were revised in 2000 and again in 2007, to minimize lead and copper levels in drinking water.

The regulations focus on two areas:

- Periodic testing for lead
- Educating the public on minimizing lead in its drinking water

In addition, USEPA issued a regulation in 2020 to update the definition of “lead free” products allowed to be used in public water systems or plumbing in facilities providing water for human consumption.

The law currently allows end-use brass fixtures, such as faucets, with up to 0.25 percent lead to be labeled as “lead free”. However, prior to January 4, 2014, “lead free” allowed up to 8 percent lead content of the wetted surfaces of plumbing products including those labeled National Sanitation Foundation (NSF) certified.

The State of New Jersey adopted these regulations by reference, which means New Jersey implements the federal regulations.

## How does lead enter the drinking water system?

In most cases, lead enters the drinking water through the water delivery system itself when it leaches from either lead pipes, household fixtures containing lead, or lead solder. The leaching of lead is caused by corrosive properties in water and the amount of time the water is in contact with the plumbing (stagnation). Very rarely is lead present in the sources of drinking water.

## What steps are taken by drinking water systems to minimize the leaching of lead into drinking water?

Some drinking water utilities add anti-corrosive materials (inhibitors) and/or adjust the pH of the water to reduce the likelihood of lead leaching into the water before it comes out of the customers’ taps. Water utilities that incur a lead or copper action level exceedance are required to evaluate their water quality parameters (e.g., pH) and identify a corrosion control treatment that would reduce the amount of lead and/or copper leaching into the water, in addition to replacing lead service lines.

### **Can you expand upon the requirement for water systems to replace lead service lines?**

Systems that fail to meet the lead action level in tap samples, after installing corrosion control and/or source water treatment, must replace at least 7 percent (%) of the initial number of lead service lines (LSL) in its distribution system annually as long as they exceed the lead action level.

### **How often is testing for lead required?**

The Lead and Copper Rule contains schedules that determine how often water utilities are required to test for lead. Water utilities are required to test for lead every six-months, annually, or triennially depending on their previous lead and copper test results and whether the utility switches the source of its water or changes its treatment process. Water utilities testing annually or triennially must collect the samples between June 1 and September 30 as this is the period when it is most likely to have corrosive water based on water temperature increases and pH decreases during warmer months. Consumers can find their water utility's lead and copper testing schedule on Drinking Water Watch at <https://www.nj.gov/dep/watersupply/waterwatch>.

### **What does lead testing look for?**

The testing takes place to determine if drinking water at consumers' taps contains lead at levels that require remedial action to reduce the corrosivity of the water. The level at which action is required by a water utility is known as the Action Level. The Action Level is 0.015 milligrams of lead per liter of water (0.015 mg/L).

Under a formula developed by USEPA, when more than ten percent of results exceed the Action Level, the water utility must take steps to reduce the corrosivity of the water to minimize the leaching of lead.

### **Where is testing performed?**

Water utilities are required to test the water at locations within their service area that are most susceptible to high lead concentrations at a minimum number of locations based on the population served. Since lead typically enters the drinking water through the delivery system (e.g., pipes and fixtures), samples are required to be taken at consumers' taps in buildings that have lead pipes or plumbing components (e.g., homes constructed before 1987). The effective date for the lead ban in New Jersey was 1987 which means that buildings constructed prior to 1987 are more likely to have either lead service lines, copper pipes with lead solder, or fixtures that contain lead.

### **How is the testing conducted?**

Lead tends to enter drinking water via the delivery system (e.g., pipes and fixtures); therefore, water samples for lead testing are drawn from consumers' taps where the water is typically drawn for human consumption. Many water utilities have their customers collect the samples within their homes by sending them instructions and collection bottles to customers. Your water provider may use the Department's letter template to solicit your participation, which is available online at <https://www.state.nj.us/dep/watersupply/pdf/lead-copper-participation.pdf>.

Samples must be collected from a kitchen or bathroom faucet following a period of no water use within the building/residence for at least six hours. The sample is then returned to the water utility for testing. An example of instructions provided to customers is available at <https://www.state.nj.us/dep/watersupply/dwc-lead-public.html>. This is why it is very important to participate in the sampling program if requested by your water provider.

## **What is a water utility required to do if testing finds the water exceeds the Action Level for lead?**

Under a formula developed by USEPA, when more than ten percent of results exceed the Action Level, the water utility must take steps to reduce the corrosivity of the water to minimize the leaching of lead.

The water utility is required to take the following steps:

- Inform the public of the results and provide guidance on how consumers can reduce the level of lead in their drinking water;
- Perform Water Quality Parameter (WQP), monitoring (e.g., pH) to determine the extent of the corrosive nature of the water and make recommended corrosion control treatment for lead;
- Monitor the source water and, if necessary, make recommended source water treatment for lead; and
- Replace at least 7 percent (%) of the initial number of lead service lines (LSL) in its distribution system annually as long as they exceed the lead action level, if the system failed to meet the lead action level after installing corrosion control and/or source water treatment.

## **What steps can consumers take to minimize the presence of lead in their drinking water?**

- Determine if you have a lead service line or interior lead plumbing or solder.
- Replace plumbing fixtures and service lines containing lead. If there is a lead service line, replace it in full, from main to home. Contact your water system prior to replacing the lead service line on your property.
- Run the cold water to flush out lead. The longer the water resides in plumbing the more lead it contains. Flushing the tap means running the cold water faucet for about 15 to 30 seconds. For those with lead service lines or until you determine if you are served by one, let the water run from the tap longer based on the length of the lead service line and the plumbing configuration in your home. In other words, the larger the home or building and the greater the distance to the water main (in the street), the more water it will take to flush properly.
- Use cold water for cooking and preparing baby formula.
- Do not boil water to remove lead. Boiling water will not reduce lead.
- Use alternative sources or treatment of water.
- Remove and clean aerators/screens on plumbing fixtures.
- Test your water for lead.
- Get your child tested.

Refer to more details on each of these steps at: <https://www.state.nj.us/dep/watersupply/dwc-lead-consumer.html>.

## **Who should consumers contact if they are concerned about possible lead levels in their drinking water?**

- Your Water System should be able to answer any questions you have concerning lead in your water supply.
- Your health care provider (family doctor or pediatrician) can provide you with information about the health effects of lead and can perform a blood test for lead.
- The [NJ Department of Health website](#) can provide you with information about the health effects of lead.
- The National Lead Information Center at 800-424-Lead or the Safe Drinking Water hotline at 800-426-4791 can provide you with information on reducing lead exposure and the health effects of Lead.

## **Where can I obtain more information?**

- Additional information can be found on the New Jersey Department of Environmental Protection website via the Division of Water Supply and Geoscience's *Lead in Drinking Water* page: <https://www.state.nj.us/dep/watersupply/dwc-lead.html>. Information for schools, consumers, and public water systems are found there, along with additional links to the Environmental Protection Agency's pages on lead information.
- The Division of Water Supply and Geoscience can also be reached by phone at 609-292-5550 or by email at [watersupply@dep.nj.gov](mailto:watersupply@dep.nj.gov).