Frequently Asked Questions Protecting New Jerseyans from Lead in Water

The primary lead concern in New Jersey has been the old lead-based paint in our old housing stock. New Jersey is a leader in the nation in protecting children and addressing lead contaminated housing. Very rarely is lead ever found in the sources of our drinking water. However, this page identifies how it can leach into water delivery systems and the precautions that can be taken.

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

The United States Environmental Protection Agency 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

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 the vast majority of 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. 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. The corrosion control treatment may have been added by the system on its own or as a result of a lead or copper action level exceedance. Other drinking water utilities do not need to add inhibitors or adjust pH to comply with the Lead and Copper Rule.

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.

Initially, water is tested for two consecutive six-month periods, once during the first half of the calendar year and again during the second half of the calendar year. Initial monitoring occurs when a new water system comes online or may be required when a water utility switches the source of its water or changes its treatment process.

If fewer than 10% of the lead and copper results from the initial sampling are greater than the levels that require remedial action, then the water utility can reduce their monitoring frequency to test once a year for the following two consecutive years. These tests must be conducted between June 1 and September 30. This is the period when it is most likely that water temperature increases and pH decreases, and therefore the period when water may be more corrosive than during the colder months.

If, after three consecutive years of testing, the water is not found to contain lead above the level requiring remedial action, then the water utility is required to test for lead every three years.

What is the testing looking for?

The testing takes place to determine if drinking water contains lead at levels that require remedial action to reduce the corrosivity of the water. The level at which action is required 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 EPA, when a certain number 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 that are most susceptible to high lead concentrations. Because in the vast majority of cases lead enters the water supply through the delivery system (the pipes and fixtures) and not at the source, samples are generally taken at the tap in areas that have older homes (constructed before 1986). These buildings are more likely to have either lead service lines, copper pipes with lead solder, or fixtures that contain lead.

How is the testing conducted?

Because lead tends to enter water in the delivery system, water is drawn from the taps at the ultimate destination (usually customers' homes). The water utility sends instructions and collection bottles to a statistically significant number of customers in their service areas.

The customers who receive the testing collection kits are selected by the water utility taking into account the age of the infrastructure in a particular area, since older homes are more likely to be serviced by lead service lines or to contain copper pipes with lead solder or plumbing fixtures containing lead.

Customers are instructed how to collect the water sample (first thing in the morning from a water faucet in the kitchen or bathroom that has not been used for at least six hours). The sample is then returned to the water utility for testing.

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

The utility is required to take the following steps:

- Inform the public of the results and provide guidance on how to reduce the level of lead in their drinking water
- Perform Water Quality Parameter monitoring (WQP), to determine the extent of the corrosive nature of the water
- Monitor the source water and if necessary make recommended source water treatment for lead
- Initiate corrosion control treatment to reduce the likelihood of lead leaching into water

What steps can water users take to minimize the presence of lead in their drinking water? Consumers can flush their water lines each morning by running their cold bathroom or kitchen taps for about a minute, so that any water that has been sitting in the pipes into which lead has leached is removed from their pipes. Consumers can tell when their lines have been flushed when the water turns cooler than what originally came out of the tap.

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

Consumers should contact their water utility. Water utilities are required to provide consumers with information on how to get their water tested.

If consumers are served by a private well rather than by a water utility, they can hire a New Jersey-certified laboratory to have their drinking water sampled and analyzed.