

# Lead in Drinking Water Presentation



## GET THE LEAD OUT!

Important information about  
drinking water and lead



Village of Garden City Environmental Advisory Board

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# Presentation Focus

## Topics of Discussion

How Lead Gets Into Drinking Water

Health Effects of Being Exposed to Lead

How to Find Out If You Have Lead in Your Drinking Water

Steps Residents Can Take to Reduce Their Exposure

# Readily Available Resources

Resource	Website
 <b>United States Environmental Protection Agency</b>	<a href="https://www.epa.gov/ground-water-and-drinking-water">https://www.epa.gov/ground-water-and-drinking-water</a>
 <b>New York State Department of Health</b>	<a href="https://www.health.ny.gov/environmental/lead/">https://www.health.ny.gov/environmental/lead/</a>
 <b>Centers for Disease Control and Prevention</b>	<a href="https://www.cdc.gov/nceh/lead/default.htm">https://www.cdc.gov/nceh/lead/default.htm</a>

# How Lead Gets Into the Drinking Water

## Sources of LEAD in



**Copper Pipe with Lead Solder:** Solder made or installed before 1986 contained high lead levels.

**Lead Service Line:** The service line is the pipe that runs from the water main to the home's internal plumbing. Lead service lines can be a major source of lead contamination in water.



**Faucets:** Fixtures inside your home may contain lead.

**Galvanized Pipe:** Lead particles can attach to the surface of galvanized pipes. Over time, the particles can enter your drinking water, causing elevated lead levels.

**Lead Goose Necks:** Goose necks and pigtails are shorter pipes that connect the lead service line to the main.

# How Lead Gets Into the Drinking Water

**According to the U.S. Environmental Protection Agency (EPA), lead can enter drinking water when plumbing materials that contain lead corrode, especially where the water has high acidity or low mineral content that corrodes pipes and fixtures.**

The most common sources of lead in drinking water are lead pipes, faucets, and fixtures.

Lead service lines which connect the home to the water main are typically the most significant source of lead in drinking water.

These lead service lines are generally the responsibility of the homeowner.

Among homes without lead service lines, the most common problem is with brass or chrome-plated brass faucets and plumbing with lead solder.

# Health Effects of Being Exposed to Lead

## Prevent Childhood Lead Poisoning

Exposure to lead can seriously harm a child's health.

-  Damage to the brain and nervous system
-  Slowed growth and development
-  Learning and behavior problems
-  Hearing and speech problems

**This can cause:**

- Lower IQ
- Decreased ability to pay attention
- Underperformance in school



# Health Effects of Being Exposed to Lead

**Lead can be harmful to all adults even if they don't feel sick. Levels of lead once thought harmless are now shown to be toxic. Studies have shown lead exposure can:**

Decreased brain function

Decreased kidney function

Raise blood pressure and your chances of having a heart attack or stroke

Increase chances of having a miscarriage and harm your baby's development before birth

# Health Effects of Being Exposed to Lead

**Lead can be particularly harmful to pregnant woman and their developing fetuses.**

It can damage the brain, kidneys, nerves and other parts of the body.

It can cause miscarriage, stillbirth or difficulty getting pregnant.

Lead can affect children's behavior and make it harder for them to learn.

Lead can be stored in a woman's body for years, and then passed from mother to baby.

# How to Find Out If You Have Lead in Your Drinking Water



## Free Lead Testing Pilot Program Through the NYS Department of Health

A 1.5-million-dollar state program to test for lead in drinking water is now available to New York State residents. The Free Lead Testing Pilot Program (FLTPP) will provide NYS residents who are served by either a private well or public water system with an opportunity to have their residential drinking water tested for free.

You can go to the Free Lead Testing Pilot Program Website at

[https://www.health.ny.gov/environmental/water/drinking/lead/free\\_lead\\_testing\\_pilot\\_program.htm](https://www.health.ny.gov/environmental/water/drinking/lead/free_lead_testing_pilot_program.htm)

Fill out a short form and e-mail it to the Bureau of Water Supply Protection (BWSP).

Alternately, you can email **FreeWaterTesting@health.ny.gov** directly or call the State Health Department at (518) 402-7650 to request a free drinking water lead test kit.

# How to Find Out If You Have Lead in Your Drinking Water



## Free Lead Testing Pilot Program – You Will Need to Provide the Following:

1. Name:
2. Phone Number:
3. Your E-mail Address:
4. Address for sample location and address for mailing test kit, if different:
5. County for sample location:
6. 1st choice for participating laboratory selected from the list below:
7. 2nd choice for participating laboratory selected from the list below:

Laboratory	City/Town	County
Advanced Analytical Technologies	Orangetburg	Rockland
EMSL Analytical, Inc.	New York	New York
Envirotest Laboratories, Inc.	Newburgh	Orange
Erie County Public Health Laboratory	Buffalo	Erie
NY Environmental and Analytical Labs Inc.	Port Washington	Nassau
Westchester County Department of Laboratories and Research	Valhalla	Westchester

# How to Find Out If You Have Lead in Your Drinking Water



## Free Lead Testing Pilot Program Through the NYS Department of Health

The laboratory will be notified of your request. The laboratory will then send you a sample kit that includes:

- two 250 ml sample containers, one marked “first-draw sample” and another “flush sample”
- sampling instructions with a mailing box
- Return postage

You will need to collect and return the samples to the laboratory within 30 days from receiving the sample kit. The laboratory will analyze the samples, and mail the test results and information back to you within 30 days from the day they received your samples.

You can watch an instructional video on Testing Your Drinking Water For Lead at

[https://www.health.ny.gov/environmental/water/drinking/lead/free\\_lead\\_testing\\_pilot\\_program.htm](https://www.health.ny.gov/environmental/water/drinking/lead/free_lead_testing_pilot_program.htm)

# How to Find Out If You Have Lead in Your Drinking Water

## Other Methods to Check for Lead

Purchase a drinking water test kit which checks for lead and other contaminants.

Perform a scratch test to determine if you have a lead service line. First, identify where the water service line enters the building. This is typically in a basement or near a water meter. Next, identify a test area on the pipe between the point where it enters the building and the inlet valve before the water meter. Using the flat edge of a screwdriver, gently scratch the outside of the pipe. If the pipe is easily scratched (i.e. the pipe is relatively soft) and the scratched area is shiny and silver, it is likely a lead service line (a magnet will not stick to a lead pipe).

Have your service line and exposed pipes inspected for lead by a licensed plumber.

# Steps Residents Can Take to Reduce Their Exposure

**EPA** **Reduce Your Exposure To Lead**

Use only cold water for drinking, cooking and making baby formula. *Boiling water does not remove lead from water.*

Regularly clean your faucet's screen (also known as an aerator).

Consider using a water filter certified to remove lead and know when it's time to replace the filter.

Before drinking, flush your pipes by running your tap, taking a shower, doing laundry or a load of dishes.

To find out for certain if you have lead in drinking water, [have your water tested](#).

**Replace Your Lead Service Line**

Water systems are required to replace lead service lines if a water system cannot meet EPA's Lead Action Level through optimized corrosion control treatment.

Replacement of the lead service line is often the responsibility of both the utility and homeowner.

Homeowners can contact their water system to learn about how to remove the lead service line.

**Identify Other Lead Sources In Your Home**

Lead in homes can also come from sources other than water. If you live in a home built before 1978, you may want to have your paint tested for lead. Consider contacting your doctor to have your children tested if you are concerned about lead exposure.



# Steps Residents Can Take to Reduce Their Exposure



## Take Steps to Reduce Lead in Household Drinking Water

Run water for at least 30 seconds if it hasn't been used in several hours to flush out lead or until water is cold before using it for drinking or cooking.

Use only cold tap water for cooking, drinking or making a baby's formula; lead dissolves more easily into hot water. Avoid cooking with or drinking hot tap water; **DO NOT USE HOT TAP WATER TO MAKE BABY FORMULA.**

Do **NOT** boil water to remove lead. Boiling water will not reduce lead.

Replace plumbing fixtures if they are found to contain lead with [Lead Content Certified Products](#).

Use bottled water that is [certified by New York State](#) or a [Lead Content Certified water filter](#) if your home is served by a lead service line, or if lead-containing plumbing materials are found in your home. Follow the manufacturer's instructions to maintain and replace all water filters.

# Steps Residents Can Take to Reduce Their Exposure



## Filters Certified to Reduce Lead

Several different types of water filters have been certified by the National Science Foundation (NSF) for reducing lead in drinking water:

**Pour-through pitcher/carafe:** Water drips through a filter in a water pitcher using gravity.

**Faucet mount:** Mounts on kitchen faucet. Uses diverter to direct water through a filter.

**Counter-top connected to sink faucet:** Connects to existing sink faucet through a hose/tubing.

**Plumbed-in to separate tap or to kitchen sink:** Installs under a sink; filtered water is usually dispensed through a separate faucet directly to the kitchen sink.

**Refrigerator filter:** Installed in your refrigerator and typically dispensed through the refrigerator door.

# Concluding Remarks

## Summary and Conclusions

Excellent resources on lead in drinking water are readily available on-line.

The most common sources of lead in drinking water are lead pipes, faucets, and fixtures. In homes with lead pipes that connect the home to the water main, also known as lead service lines, these pipes are typically the most significant source of lead in the water.

Lead can harm a young child's growth, behavior, and ability to learn. It can also cause anemia, kidney damage, and hearing loss.

Adults can experience lead poisoning too even if they don't feel sick. Lead can be particularly harmful to pregnant women and their developing fetuses.

Find out if you have lead in your drinking water by ordering a test kit through the Free Lead Testing Pilot Program available to all New York State residents. You can also purchase a drinking water test kit, perform a scratch test, and have a licensed plumber inspect your service line and exposed pipes.

Take the necessary steps to reduce lead in household drinking water.