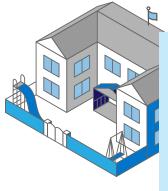


# Testing Drinking Water in Schools & Childcare Facilities in Philadelphia

Our free program can reveal potential sources of lead in your plumbing system.

The Philadelphia Water Department (PWD) is offering to test water from schools and childcare facilities, including daycares, in Philadelphia, free of charge.



#### Lead Basics:

Lead is a metal that's harmful to human health. Lead enters the body through ingestion or inhalation.

If lead is found in tap water, the source is somewhere in the property's plumbing.





IT'S THE LAW: We're required by State and Federal law to offer this testing service. Facilities built after 2014 are excluded from the testing regulations that guide our program.

#### What to expect:

### Plan

You'll connect with our team, and we'll answer any questions. We'll coordinate a visit to your facility, provide a sampling kit, and train you to collect water samples.

### **Test**

You'll collect water samples. We'll test and analyze the samples in our certified laboratory.

## Get Results & Take Action

We'll share the results with you. Based on your facility's results, we'll provide further guidance and recommend actions to take.

## The Science of Drinking Water Quality

### Learn the basics of how we treat and deliver safe drinking water.





#### Philadelphia's drinking water sources are the Delaware and Schuylkill rivers.

**Philadelphia's rivers are not sources of lead.** Drinking Water Treatment Plants use processes like disinfection and filtration to treat source water. This produces clean safe drinking water.

From treatment plants, a network of water mains delivers water to properties across Philadelphia. Water is tested throughout distribution. **Our water mains are not made of lead.** 

#### Our treatment process helps protect your water.

#### **Corrosion Control:**

*Zinc Orthophosphate*, added during treatment, forms a protective coating on the inside of pipes.

For over 25 years, Philadelphia has successfully used this process to reduce the amount of lead that can dissolve from plumbing into water. However, different building plumbing systems and usage patterns can affect how well corrosion control works.





Inside a pipe with **no** corrosion control

Inside a pipe with corrosion control



#### A History of Testing

Philadelphia has tested for lead in water at homes and schools for decades. We share the results from homes at <u>water.phila.gov/lead</u>. The School District of Philadelphia shares sampling results, as well. Our latest testing program makes **all schools and childcare facilities eligible** for free sampling, including daycares, charter schools, and private schools.



## **Health Effects of Lead** There is no safe level of exposure.

Exposure to lead in drinking water can cause serious health effects in all age groups. Infants and children can have decreases in IQ and attention span. Lead exposure can lead to new learning and behavior problems or exacerbate existing learning and behavior problems. The children of women who are exposed to lead before or during pregnancy can have an increased risk of these adverse health effects. Adults can have increased risks of heart disease, high blood pressure, kidney, or nervous system problems.

Look for additional sources of lead throughout a child's environment.

Lead can be found in other sources throughout a facility or environment. **Peeling paint and lead-dust are the most common sources of exposure.** Other sources include soil, food, toys, jewelry, and other products. It's important to look at all sources to prevent exposure to lead.

Reducing exposure to lead can improve health outcomes, especially for children.

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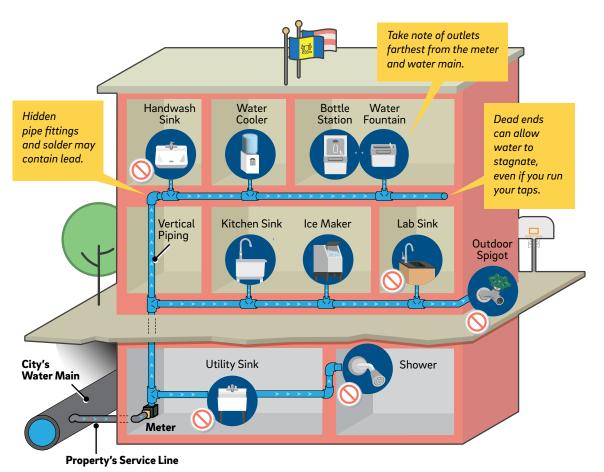
Parents and caregivers of a child aged 1-6 should ask their doctor to test the child's blood for lead.

## **Drinking Water Plumbing in Schools**

## Get to know the plumbing and fixtures, also called "outlets," of your facility.

#### This diagram shows one example of how drinking water might flow in a school.

Your facility's configuration may differ. For example, there might be more vertical piping between floors, more than one building on a campus, or a water tank on the roof. But the basics remain the same: water enters from a service line. It's distributed to different outlets throughout the facility.



Lead can be found throughout a structure, including **pipes**, **faucets**, and **plumbing fixtures**. **Solder** and **pipe fittings** may also contain lead. Even plumbing equipment classified as "lead-free" may still contain small amounts of lead.<sup>1</sup>

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#### Using Point-of-Use (POU) Filters

Some outlets may be equipped with filters. Only use filters certifed to remove lead. As water passes through a filter, fine particles and lead are removed and captured in the filter. Filters must be replaced regularly according to the manufacturer's instructions. **Age matters:** Older fixtures and buildings are more likely to contain lead. Lead was used less after the 1950s, but fixtures and solder could still contain lead. Brass fixtures could contain lead until as late as 2014.

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#### "Do Not Drink"? Different fixtures, different risks.

Even though they share the same water source, some outlets or fixtures may contain different amounts of lead. Testing helps identify these fixtures in your facility. Drinking or eating is a safety concern in certain areas, like labs, bathrooms, and utility areas.

## Areas can include:

- Hallways
- Recreation areas (indoor and outdoor)
- Classrooms
- Kitchens
- Nurse's office
- Break rooms

## Water outlets can include:

- Water fountains,
- Water coolers
- Bottle fillers /hydration stations
- Ice makers
- Kettle filler
- Refrigerators with water dispensers
- Sinks
- Showerheads

<sup>1.</sup> Phrases like "lead-safe" and "lead-free" were defined differently by government regulators over the last half-century. They allow for small amounts of lead. These phrases may provide a false assurance that plumbing does not contain lead.

## Take Action: Reduce the Risks of Lead from Plumbing

#### Learn about Flushing Pipes:

#### Flushing means running fast, cold water from a tap.

Flushing gets rid of water sitting in pipes and outlets. Creating an ongoing flushing program is one of the easiest and quickest ways to maintain water quality.

Flushing won't require installation of equipment. Without the work of a plumber, it can limit exposure to lead and promote overall building water quality.

#### Your flushing times will depend on your outlets and plumbing configuration.

In general, outlets that are farther away from a water meter will need to be flushed for longer periods of time. PWD can offer guidance for your facility following a walk-through.

Learn more: epa.gov/safewater/3Ts and search for "Flushing Best Practices".

#### More Tips:



#### Use cold.

Use only cold water for cooking and drinking, including preparing baby formula. Hot water can help metals dissolve into water.



**Regularly clean and replace aerators.** Aerators are also called "faucet screens." These can collect tiny amounts of lead over time, and contribute to lead exposure.



Regularly replace filters.

Point-of-Use (POU) filters are often used in drinking water fountains or bottle fillers. They need to be replaced regularly, or contaminants can get into water.

#### Good to know: Boiling water does not remove lead!

#### Next Steps:

#### Get your facility's results, and follow guidance.

Based on the results of your facility's water sample, PWD will provide recommendations and guidance.

Long-term solutions can include replacing outlets or pipes, removing outlets, or adding filters.

#### Finding properties with lead service lines in Philadelphia.

We're creating an online map to show what we know so far about the materials in a customer's service line.

The map uses data from a variety of sources. It will be updated over time. The data will inform future lead service line replacement efforts.

# More information and resources: > water.phila.gov/lead/school-childcare

#### **Drinking Water Quality Report**

Philadelphia's annual report highlights the results of hundreds of water tests, and gives an overview of how we keep water safe thoughout its journey to your tap.

Learn more: water.phila.gov/quality

#### Philadelphia's Lead Guide

This online guide covers lead and its impact on health. You can find out how to reduce risks throughout a facility or environment.

City of Philadelphia's Lead Guide phila.gov/lead

#### **Guidance from the EPA**

The federal government offers comprehensive recommendations for Training, Testing, and Taking action.

"3T's for Reducing Lead in Drinking Water" epa.gov/safewater/3Ts