



Lead in Drinking Water

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Overview of Topics

Lead in Drinking Water

- **History of lead pipes and their use in homes and businesses.**
- **How lead gets into drinking water.**
- **Health effects of lead exposure.**
- **Florida's Voluntary Lead Testing Program for Schools and Childcare Facilities and how to participate.**





Leaded Pipes History

Lead in Drinking Water

- **Lead pipes commonly used in plumbing prior to 1930s.**
- **1930 – 1986, lead solder typically used to weld copper plumbing.**
- **Safe Drinking Water Act (SDWA) revised in 1986 to reduce lead in solder and flux to 0.2% and pipes to 8%.**

Source: <https://www.epa.gov/sdwa/use-lead-free-pipes-fittings-fixtures-solder-and-flux-drinking-water>





Current Rule

Lead in Drinking Water

Current “lead free” rule for fixtures and plumbing materials for drinking water (in effect 2014):

- **Maximum of 0.2 % lead in solder and flux.**
- **Maximum weighted average of 0.25 % lead of wetted surfaces of pipes, pipe fittings, plumbing fittings, and fixtures.**

Source: <https://www.epa.gov/sdwa/use-lead-free-pipes-fittings-fixtures-solder-and-flux-drinking-water>





Lead in Water Source

Lead in Drinking Water

How does lead get into drinking water?

- **Surface and ground water that supplies the drinking water is not usually the source.**
- **Corrosion of lead-based pipes, solder and fixtures.**
- **Lack of corrosion treatment control.**
- **Water sitting in pipes during weekends and long school closures.**





Lead in Water Source

Lead in Drinking Water

How do you know if lead is in the water?

- **Dissolved lead in water is not visible, nor has a taste or odor.**
- **Get to know your building and plumbing history.**
- **The only way to know is to test for lead.**





Lead in Water Source

Why Test for Lead?

- **Exposure is harmful to humans, especially children.**
- **Even low levels of lead can cause behavioral and learning issues in children.**
- **Pregnant and nursing individuals also at risk to harmful effects.**
- **There is no safe blood lead level.**

Source: www.floridahealth.gov/environmental-health/lead-poisoning/parent-info.html





Lead Testing Program

Lead in Drinking Water

Florida's Voluntary Lead Testing Program for Schools and Childcare Facilities

- **EPA has awarded approximately \$1.75 million to Florida for the state to implement the program.**
- **All participants receive benefits at no cost.**





EPA 3 Ts Guidelines

- **Training.**
- **Testing.**
- **Taking Action.**



*Source: USEPA WIIN Grant webinar
May 8, 2019*





Training

EPA 3Ts Guidelines

- **Guidance for effectively communicating with parents and the community.**
- **Methods for proper sample collection.**
- **Information on the health effects of lead in drinking water.**
- **Assistance with development of EPA's 3Ts program.**





Testing

EPA 3Ts Guidelines

- **On-site drinking water sampling and analysis by certified laboratory.**
- **Sample kits with drop-off and pick-up service to accommodate health safety protocols.**
- **All testing and communication is organized by project coordinator, and results will be posted on DEP's Voluntary Lead Testing Program for Schools and Childcare Facilities web page.**





Taking Action

EPA 3Ts Guidelines

- **Participants notified immediately for exceedance of 15 parts per billion (ppb).**
- **Guidance on ways to reduce lead exposure.**
- **Final copy of report with detailed explanation of results.**





Program Eligibility

Lead Testing Program

- **All licensed childcare facilities, public, charter, and tribal schools are eligible.**
- **Funding may be prioritized to:**
 - **Schools that serve children six years of age and younger.**
 - **Buildings constructed before 1986.**
 - **Low-income areas.**





Florida's Objectives

Lead Testing Program

- **Reduce lead exposure for children and facility staff.**
- **Focus on testing and targeting facilities serving vulnerable populations.**
- **Establish and leverage sustainable partnerships at the state and local level.**
- **Enhance community, parent, and teacher cooperation and awareness.**





How to Participate

Lead Testing Program

To participate in this voluntary and cost-free program, please contact DEP's Source and Drinking Water Program at:

850-245-8486

or

PWS@FloridaDEP.gov





Useful Links

Lead in Drinking Water

- <https://www.epa.gov/sdwa/use-lead-free-pipes-fittings-fixtures-solder-and-flux-drinking-water>
- <http://www.floridahealth.gov/environmental-health/lead-poisoning/parent-info.html>
- <https://www.epa.gov/safewater/3Ts>
- <https://floridadep.gov/water/source-drinking-water/content/voluntary-lead-testing-schools-child-care-facilities>





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