



Organizing a Lead in Drinking Water Workshop or Open House

Agenda and Discussion Guidelines

A workshop or open house provides the ideal forum for sharing information, dispelling misconceptions, and allowing guests to voice their concerns. Because the issues are complex, we encourage you to introduce a series of such events. To bolster attendance, tie the workshop in with regularly scheduled events such as PTA meetings.

Tasks/Activities to do prior to the workshop:

1) Form an Organizing Committee

Create an organizing committee to oversee planning, promotion, implementation, and follow-up in newsletters. This committee should draw from a variety of concerned groups, including: teachers, parents, students (pre-teens and teens), school board members, public health officials, chamber of commerce, drinking water system representatives, local civic leaders, etc.

2) Seek out Partnerships

Leverage the contacts of your organizing committee to secure workshop/open house partners willing to support your efforts and help with costs for printing, promotion, audiovisual aids, etc. Pursue partnerships with commercial and not-for-profit entities (e.g., testing laboratory, advocacy group, etc.) that have a significant stake in the lead in drinking water issue.

3) Develop an Agenda

Keep your formal presentation to 45 minutes, allowing another 15 minutes for speakers to take questions from the floor.

4) Special Equipment to Consider

- ◆ Audiovisual aids
- ◆ Podium
- ◆ Microphone and sound system
- ◆ Portable microphone for Q&A session
- ◆ Recording or videotaping equipment
- ◆ Additional seating

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5) Promoting the Workshop

To secure the broadest awareness of your workshop or open house, you may want to use the *Lead in Drinking Water* announcement (Refer to Information Update Announcement or Letter in your toolkit).

During the Workshop:

6) Provide Brochures and Handouts

- 💧 Distribute a workshop agenda. List your discussion topics and speakers, providing brief biographies that include academic and professional credentials as well as contact information.
- 💧 Also make available your *Lead in Drinking Water* display pamphlets and handouts (Refer to "Ways to Display Onsite Information" in your toolkit).

7) Document the Workshop Proceedings

Take notes, record or videotape your workshop/open house presentation. Doing so will accurately document:

- 💧 What and how the issues were presented and received
- 💧 Attendee interest and participation
- 💧 Questions asked and answers provided
- 💧 What decisions or courses of action were proposed
- 💧 What commitments were made
- 💧 What follow-up action is necessary

After the Workshop:

8) Follow-up Publicity

Newsletter Follow-up: Run your workshop/open house success story in your own newsletter and distribute it for inclusion in the newsletters of partner organizations as well as neighborhood homeowner's associations, service clubs, major employers, community centers and environmental groups.

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Additional Information:

Sample Agenda and Discussion Guidelines

These guidelines are designed to engage your audience, garner support and enhance public trust. The potential health effects of exposure to elevated lead levels is a complex issue that must be presented clearly and honestly. Your overriding message should resonate as an endorsement of education, transparency and full disclosure.

Sample Agenda

- 💧 Welcome by Principal or School Superintendent <or head of the Department of Health which licenses Child Care Centers>

Welcoming remarks should provide a brief overview of EPA's **3Ts for Reducing Lead in Drinking Water in Schools and Child Care Facilities** call to action and your facility's proactive response.

- 💧 Introduction by School Principal or Child Care Administrator
 - 💧 Thank guests for attending to hear and be heard.
 - 💧 Introduce the experts who will be participating in the presentation. Speakers should include authorities drawn from the following sources:
 - School Board
 - Local Water Utility/Supplier
 - Healthcare Professionals
 - Building and Engineering Community

- 💧 Discussion and Presentations by Speakers

These are suggested areas of discussion. Speakers should be candid and comprehensive but concise, avoiding the use of unfamiliar acronyms and complicated technical language.

Question & Answer Session

The school principal or child care administrator should open the floor to questions and direct questions to the appropriate expert.

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Q. What is lead?

A. Lead is a toxic metal commonly used in plumbing materials and water service lines. When ingested or inhaled, high levels of lead can produce lead poisoning, which poses the greatest health risk to fetuses, infants and children up to the age of six.

Q. How are children and adults exposed to lead?

A. There are a number of sources that can produce excess lead exposure. These include lead-based paint; lead in the air from industrial emissions, dust and soil; lead in food from crops or lead glaze on imported dinnerware; lead dust brought home by industrial workers on their shoes and clothing; and lead in water as a result of the corrosion of plumbing materials containing lead.

Q. How does lead get into drinking water?

A. Typically, the lead in plumbing pipes, solder and other plumbing materials is the source of lead in drinking water. The most common cause is corrosion. Corrosion is a chemical reaction between the water and the lead pipes and solder. Corrosion is accelerated by water characteristics such as low pH (acidity), low mineral content, high temperature, and extended contact time with plumbing pipes. For example, corrosion accelerates when water in the plumbing system stands overnight, over the weekend, and throughout term breaks when there are no classes.

Q. What health risks are associated with lead?

A. Lead poses a significant health risk to young children, especially infants and fetuses, where the danger is very severe. This is because growing children absorb lead more rapidly and are negatively impacted by a level of lead exposure that would have little effect on an adult. A child's mental and physical development can be irreversibly impaired by over-exposure to lead. EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead. Infants who consume mostly mixed formula can receive 40% to 60% of their exposure to lead from drinking water.

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Q. Who are the most at-risk populations and why?

A. Young children, infants and fetuses are most at-risk. This is due to a number of factors:

- 💧 The extended periods of time children spend in school and child care facilities.
- 💧 The age of buildings, plumbing and fixtures that are subject to corrosion and the leaching of lead into drinking water.
- 💧 The on again/off again water use patterns that promote corrosion as water stands in plumbing pipes when systems are not in use.

Q. How does a school or child care facility proceed with lead testing?

A. Before testing and taking corrective action, it is essential to assess the status of the plumbing system and identify any factors that might contribute to lead contamination. To do this, a plumbing profile must be developed.

The plumbing profile helps administrators understand whether they have a widespread contamination problem or only localized concerns. It also helps identify and prioritize sample sites, giving the following top priority: drinking fountains, kitchen sinks, home economics rooms, teacher's lounge sinks, nurse's office sink, classroom sinks in special education classrooms, and any sink visibly used for consumption.

It is important to note that large variations in lead concentrations may be found among individual outlets in a facility because of differences in flow rates and/or building materials used.

If potential problems are identified through the completion of a plumbing profile, the next step is to have the water tested. A sampling plan is developed that indicates where to take samples and how to prioritize the sample sites. In most cases, a laboratory or consultants are retained to conduct the testing in adherence to EPA sampling protocols designed specifically for schools and child care facilities. After that, a certified laboratory conducts sample analyses to ensure the accuracy of the results, which should be made public immediately.

Q. How much lead is too much?

A. In school or child care settings, EPA has set a guidance level of 20 ppb (0.020 mg/L) when testing 250 ml first-draw samples from water fountains and outlets. (First draw refers to the first water to come out of the tap after an 8-18 hour period of inactivity.) When results show lead

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levels exceeding 20 ppb, those fountains and outlets should be taken out of service until remediation is complete.

Q. How safe is this facility's source water?

A. While EPA and state governments set and enforce standards, local governments and private water suppliers have direct responsibility for the quality of the water that ultimately flows through the tap into homes, businesses, office buildings, schools and child care centers.

Water systems test and treat their water, maintain the distribution systems that deliver water to consumers, and report on their water quality to the state. States and EPA provide technical assistance to water suppliers and can take legal action against systems that fail to provide water that meets state and EPA standards.

As a result of this "multiple barrier" approach to drinking water protection, our source water meets or exceeds all regulatory standards. By way of documentation, we are making available our supplier's Annual Water Quality Report, so be sure to pick up a copy on your way out.

Q. How safe is this facility's plumbing system? (Optional)

A. We believe our plumbing system is safe. Nevertheless, we want to be absolutely certain our drinking water does not pose a health risk to children or adults. That is why we are responding to EPA concerns with this initiative to reduce the potential for lead exposure from our drinking water.

Q. What can be done immediately, short-term, and on a long-term basis to minimize the potential lead risk from onsite drinking water? (Optional)

A. Based on available human and financial resources, the following routine, short-term and long-term steps can be taken to help mitigate the problem:

Routine Control Measures

Below are examples of routine activities that should be conducted to prevent exposure to elevated levels of lead:

- 💧 Clean debris from all accessible screens frequently. If you discovered sediments in faucet screens, have the sediments tested for lead and continue to clean your screens frequently, even if the analysis finds no lead.
- 💧 Use only cold water for food and beverage preparation. Hot water will dissolve lead more quickly than cold water and is likely to contain increased lead levels. If hot water is needed, it should be taken from the cold water tap and heated on a stove or in a microwave oven.
- 💧 Instruct the users (students and staff) to run the water before drinking or staff could run the water before students arrive, so they are drinking water that has not been in contact with the faucet interior since faucets are often a major source of lead in drinking water.
- 💧 Placard bathroom sinks with notices that water should not be consumed. You should use pictures if there are small children using bathrooms.

Interim (Short-Term) Control Measures

(Please see the *3Ts for Reducing Lead in Drinking Water in Schools* for a more detailed description of the interim control measures.)

- 💧 "Flush" the piping system in your building.
- 💧 Provide bottled water.
- 💧 Shut off problem outlets.

Permanent Remedies

After obtaining an understanding of your water supply and the lead conditions in your facility (as a result of testing), you should examine the permanent treatment options and select those most appropriate to your situation. (Please see the *3Ts for Reducing Lead in Drinking Water in Schools* for a more detailed description of the permanent remedies.)

- 💧 **Replace outlets.**
- 💧 **Reduce lead levels at the tap.** For example, install point-of-use (POU) devices that reduce lead at the tap.

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- 💧 **Check grounding wires.** Electrical current may accelerate the corrosion of lead in piping materials.
- 💧 **Lead pipe replacement.** Lead pipes within the school and those portions of the lead service lines under the water supplier's jurisdiction can be replaced.
- 💧 **Reconfigure plumbing.** In some facilities, the plumbing system might be modified so that water supplied for drinking or cooking is redirected to bypass sources of lead contamination.
- 💧 **Manual flushing.** Flushing individual problem outlets or all outlets may also represent a permanent, albeit ongoing, solution.
- 💧 **Automated flushing.** Time-operated solenoid valves can be installed and set to automatically flush the main pipes (headers) of the system.
- 💧 **Bottled water.** If other treatment fails or is impractical, bottled water can be purchased for consumption by the building community.
- 💧 **Use lead-free materials.** Make sure that any plumber who does repair or replacement work on the facility's plumbing system uses only "lead-free" solders and other materials.
- 💧 **Shut off problem outlets.**

Q. What is this facility's timeline for conducting testing and taking action as necessary?

A. We are currently developing an effective drinking water sampling and monitoring program. We are working with state and local water authorities to formulate our strategy, and we are coordinating with the school district to begin sampling if the results of our plumbing profile indicate that a health risk exists. However, we have already initiated a program of communication with students, parents, staff and the community at large. This communication is designed to keep all concerned audiences informed of the proactive steps being taken to minimize possible exposure to lead in this facility's drinking water.

Q. How can parents minimize their child's overall exposure to lead?

A. As there are other common sources of lead exposure that are in the control of individual caregivers, these precautions are recommended:

- 💧 Wash children's hands and toys frequently and try to keep your children from putting anything other than food in their mouths.
- 💧 Homes built before 1978 are likely to have lead based paint in them. In order to reduce lead exposure from deteriorated lead-based paint, keep floors, window frames, windowsills and other surfaces in the home clean and free of dust.

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- 💧 Don't bring lead dust into the house from your workplace or hobby. Make sure your child eats a healthy, well-balanced diet.
- 💧 Don't store food in high-lead pottery.
- 💧 Anytime the water in a particular faucet has not been used for six or more hours, "flush" your cold-water pipes by running the water until it becomes as cold as it will get. The more time water has been sitting in your home's pipes, the more lead it may contain. But be aware that flushing may not be effective in high-rise buildings with lead-soldered central piping.
- 💧 Use only water from the cold-water tap for drinking, cooking, and especially for making baby formula, as hot water is more corrosive and therefore likely to contain higher levels of lead.
- 💧 Have your water tested for lead and other contaminants. That is the only way to know how great a risk your home drinking water poses for the children and adults in your household.

Q. How can parents test for lead in home drinking water?

A. Have your water tested for lead by a certified laboratory. To assist you, we are making available a list of EPA-certified laboratories in the area, so please pick up a handout before you leave.

Household testing costs between \$20 and \$100. Because you cannot see, taste, or smell lead dissolved in water, testing is the only sure way to find out whether there are harmful quantities of lead in your home drinking water.

You should be particularly suspicious if your home has lead pipes (lead is a dull gray metal that is soft enough to be scratched easily with a house key), if you see signs of corrosion (frequent leaks, rust-colored water, and stained dishes or laundry), or if your non-plastic plumbing is less than five years old.

Your water supplier may have useful information, including whether the service connector used in your home or area is made of lead. Additionally, testing is especially important in high-rise buildings where flushing might not work.

Q. How can parents have their child's blood lead level tested?

A. Even if your children seem healthy, take them to a pediatrician for a blood test. The sample will be sent to a lab, and you'll have the results in a few days.

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While lead exposure may result in symptoms such as stomachaches, loss of appetite, inability to sleep and hyperactivity, far too often, the symptoms are much more subtle, but may be long-lasting and irreversible. To be on the safe side, please make sure that your children are tested for lead exposure.

Q. In the months ahead, how will this facility keep parents and caregivers informed?

A. To keep you informed, this is just the first in a series of workshops <name of school or child care facility> will be presenting to bring the issue to the forefront. We've also set up a *Lead in Drinking Water* Information Display in our main office, where pamphlets and other resources are available throughout the school day. We'll be making updates available to you as new information becomes available, and we invite you to contact us at <telephone number> or <email address> if you have questions or wish to provide input.

Q. What can parents do to support this facility's lead-awareness program?

A. Getting involved is the most important way to support our efforts. Attend future workshops. Take advantage of the information we're making available. Educate yourselves and discuss the issue with fellow parents and community members. Volunteer your time to help us promote our awareness initiative. And lastly, contribute your expertise as a business, education or healthcare professional by participating in future workshops or by manning our information center and help line.

Before you leave, please sign our clipboard and provide your contact information if you wish to volunteer for our awareness campaign.