



Glenview School District 34 - Lead in Drinking Water FAQ

Why did the district conduct testing?

Following recent national news, Glenview District 34 engaged an environmental engineering firm to conduct sample testing of the water in all eight schools and the administrative offices. District 34 opted to participate in this additional form of testing as an extra precaution for our students and staff.

What does the government say about how much lead is acceptable in water?

The answer to this question has two parts. The U.S. EPA has set a treatment action level for lead in public drinking water supplies at 15 parts per billion (ppb). (This is also sometimes expressed as 15 micrograms per liter ($\mu\text{g}/\text{L}$), 0.015 parts per million (ppm), or 0.015 milligrams per liter (mg/L .) If public water systems detect lead concentrations above that level, they must implement additional treatment options and notify the public. District 34 has confirmed with representatives of the Village of Glenview Water Department that our publicly supplied water continues to meet or exceed all U.S. EPA and Illinois state drinking water standards. For additional information, see Glenview's Consumer Confidence Water Quality Report at <http://www.glenview.il.us/Pages/Water-Quality.aspx>

How much lead is in the drinking water at my child's school?

As of April 21st, 2016, D34 has completed testing for lead in drinking water at 246 separate locations -- including all drinking water fountains, kitchen taps, and staff lounges -- throughout the district. 97% of those locations were found to be within acceptable levels set by the EPA.

As a result of this additional testing, there were four kitchen taps where testing indicated lead levels greater than 15 ppb. Three of those are not accessible to students or used in food preparation. The remaining kitchen tap was shut down until fixed and re-tested to show it met EPA standards. Additionally, seven water fountains were found to have elevated levels of lead. These include one in a hallway at Springman; one in a hallway and room 106 at Pleasant Ridge; and four at Hoffman, one each in rooms 23-26. Each of these water fountain locations will remain out of service until appropriate corrective measures can be completed.

District 34 will conduct tests of additional water taps in bathrooms and other lower priority areas in coming months and undertake appropriate responsive measures as necessary.

Why could there be lead in District 34 school drinking water?

Our tap water is supplied from Lake Michigan by the Village of Glenview in cooperation with the Village of Wilmette. Regular testing of that water for numerous potential contaminants, including lead, indicates there is no problem with our public water supply.

Although the amount of lead allowed to be used in water fixtures and plumbing materials (as well as in gasoline, paint, cooking pans, and other household goods) has been declining over many years, it is very common for water pipes, fountain/faucet fixtures, and plumbing solder, to have parts that contain some amount of lead. In general, older parts contain more lead than newer parts, and lead can be released into tap water from these materials over time through a process called leaching. The amount of leaching, if any, that occurs depends not only on how much lead may be present in the plumbing materials themselves, but on other factors such as the pH of the water, whether the water is heated, and the amount and frequency of water flushing through the plumbing system.

What is lead?

Lead is a naturally occurring, bluish-gray metal found in small amounts in the earth's crust. Lead in air is usually released by power plants or smelters. Lead in soil and water usually occurs from natural sources in the ground, or when lead settles out of the air. (The use of unleaded gasoline in recent decades has greatly reduced the total amount of airborne lead, and reduced the amount that settles to the ground.)

Is exposure to lead a health concern?

Lead is a concern because it is a toxic metal that can cause immediate effects at high doses and long term effects if it builds up in the body over many years. Children are more vulnerable to lead because their bodies are smaller, and because they are still developing. Pregnant women and their unborn babies are also at higher risk for negative health effects associated with lead exposure. See American Water Association DrinkTap.Org
<http://www.drinktap.org/water-info/whats-in-my-water/lead-in-water.aspx#sthash.iVjLJSES.dpuf>

How can children come into contact with lead?

Lead is commonly found, usually at low levels, in food, air, soil, and water (both at school and at home). The most common source of children's overexposure to lead is aging lead-based paint. Lead-based paint is often found in homes that were painted or built before 1978. In these homes, old paint can peel, chip, or weather to produce dust that contains lead. Other household/consumer products may also contain lead.

What types of health effects can be caused by exposure to lead?

Depending on the amount of exposure, lead can impact many body systems. The most common symptoms of lead poisoning include effects on learning, behavior (attention span, hyperactivity), growth, hearing problems, headaches, and anemia (including fatigue). Children are considered more sensitive than adults to lead's health effects, especially effects involving development and learning. Children are most sensitive to these types of effects from the ages of birth until four years old.

A child's blood lead concentration depends on their environment, habits, and nutritional status. Each of these can influence lead absorption. In other words, children living, playing, or studying in the same general environment can have very different lead concentrations in their bloodstream depending on their individual habits and nutritional status. Similarly, children's potential lead exposure may change as they age or change residences, habits or environments. See PEHSU Medical Management Recommendations http://www.pehsu.net/_Library/facts/medical-mgmt-childhood-lead-exposure-June-2013.pdf

Does washing hands or showering in lead-contaminated water pose a risk?

No. According to the U.S. EPA, washing hands, and even bathing or showering, should be safe for children and adults, even if the water contains lead over U.S. EPA's action level. This is because human skin does not absorb lead in water. See <https://www.epa.gov/your-drinking-water/basic-information-about-lead-drinking-water#health>

How were these water samples collected and tested?

These samples were collected by Hygieneering, Inc., an independent environmental engineering firm, under the direction of certified industrial hygienist and certified hazardous materials professionals. The samples were then analyzed by independent licensed laboratories in accordance with applicable governmental and industry standards.

Throughout this testing process, we have been guided by the advice and services of licensed environmental engineers and independent laboratories. We also shared all of our test results with Dr. Jerrold Leikin, a leading medical toxicologist based at NorthShore University HealthSystem. It is through Dr. Leikin's confirmation that we were able to earlier share with confidence that it is very unlikely that our students or staff would have any adverse health effects solely attributable to water quality at Glenview District 34 Schools. This is the case even if we make very cautious assumptions about the amount of water intake by our youngest students at the locations showing the highest levels of lead concentration.

How are lead levels measured in people?

When scientists evaluate health effects from lead exposure, they usually look at the amount of lead found in blood or "blood lead level" (BLL), which is expressed in micrograms of lead per deciliter of blood, or " $\mu\text{g}/\text{dL}$ ". Blood testing is the most useful available measure for assessing lead exposure in children. Results from these tests can be compared to established governmental guideline levels, such as those from the Centers for Disease Control (CDC). Parents or guardians with any concerns about their children's potential exposure to lead from any source(s) should consult their pediatrician or a toxicologist about whether blood or other diagnostic testing is advisable. Blood lead level tests are covered by Medicaid and most private health insurance.

What do blood lead test results mean?

The CDC is the leading authority providing guidelines on interpreting the results of blood lead tests. Experts now use a reference level of 5 micrograms per deciliter (5 µg/dL) to identify children with blood lead levels that are much higher than most children's levels.

To put current average blood lead levels in perspective, the average blood lead level in the 1970's for children ages 1-5 was about 15 µg/dL. The average blood lead level for the same age group in 2000 was 2.2 µg/dL, about one-seventh (1/7) as much. Blood lead levels for all ages in the U.S. population have declined significantly over the last several decades due to the removal of lead from gasoline, the decreased use of lead-based paint, and the removal of lead-based solder in food cans.

Medical monitoring is advised for children with BLL equal to or greater than 5 µg/dL, and various forms of nutritional, environmental, and medical interventions may be appropriate depending upon the measured BLL. If parents or guardians have any concerns about their children's potential exposure to lead from any source(s), they should consult with their pediatrician or a toxicologist. For more information, see CDC's webpage at <http://www/cdc.gov/nceh/lead/nlppw.htm>

Where can I go for more information?

U.S. EPA's Website on Lead <http://www.epa.gov/lead/> and on Lead in Drinking Water <http://water.epa.gov/drink/info/lead/index.cfm>

U.S. EPA's Website on Reducing Lead in Drinking Water in Schools and Day Care Centers http://water.epa.gov/drink/info/lead/schools_index.cfm

Centers for Disease Control and Prevention's (CDC) Website on Lead <http://cdc.gov/lead/> and CDC Childhood Lead Poisoning Prevention Program <http://www.cdc.gov/nceh/lead/about/program.htm>

National Lead Information Center Hotline: (800) 424-LEAD

EPA's Safe Drinking Water Hotline: (800) 426-4791

American Water Works Association DrinkTap Website – What's in My Water?
<http://www.drinktap.org/water-info/whats-in-my-water.aspx>



Glenview School District 34
1401 Greenwood Road
Glenview, Illinois, 60026-1511
www.glenview34.org

NSF International - nonprofit organization that certifies bottled water and water filters.
Consumer Affairs Hotline: 1-800-673-8010 <http://www.nsf.org/>

American Academy of Pediatrics - Pediatric Environmental Health Specialty Units (PEHSUs)
http://www.pehsu.net/general_public.html

American College of Obstetricians and Gynecologists – Lead Screening During Pregnancy and Lactation <http://www.acog.org/Resources-And-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Lead-Screening-During-Pregnancy-and-Lactation>

Illinois Poison Center, <http://illinoispoisoncenter.org/leadpoisoning>
or call 1-800-222-1222