

LEAD: Frequently Asked Questions

What is lead?

Lead is a bluish-gray metal found in small amounts in the earth's crust. Lead is a metal that has many uses. It's found in household paint made prior to 1978, in plumbing fixtures, in solder, and in many other products. Leaded gasoline was available everywhere in the United States until it was finally phased out during the 1980s and early '90s.

What does "Pb" mean?

"Pb" is the symbol for lead.

What does µg/dL or mcg/dL mean?

Blood lead levels are measured in micrograms of lead per deciliter of blood, expressed as mcg/dL or µg/dL.

Is there lead in and around my house? Where?

Lead may be found in many places in your home, such as:

- Paint applied prior to 1978
- Dust from lead paint, generated by renovation work, by friction or impact of lead painted surfaces such as window and doors, or by simple paint deterioration. Most cases of lead poisoning found today are caused by exposure to lead-contaminated dust.
- Soil and dirt contaminated by lead paint debris or by leaded gas deposits
- Tap water contaminated by lead that has leached from service lines, solder, and/or brass fixtures
- Pottery, old bean pots, crystal and ceramic dishes
- Some imported goods, including certain toys, trinkets, candy and cosmetics

What is lead poisoning?

There is no known safe level of lead. When lead gets into the body, it is poisonous and harms people – including adults. Young children are especially vulnerable, because their brain and central nervous system are still developing, and lead can damage them because it is a powerful neurotoxin. Even a small amount of lead can affect a child's learning ability and cause other serious health problems, such as IQ loss, hyperactivity, and other behavior problems, including aggressive or even violent behavior.

Too much lead in the human body can also cause serious damage not only to the brain and nervous system, but also to kidneys and red blood cells. Lead poisoning can produce any or all of these significant health effects, and anyone can get lead poisoning. It crosses all socio-economic borders. Yet lead poisoning is ***completely preventable***.

How does one prevent lead poisoning?

The most important step is to keep old paint from deteriorating. It is critical to maintain paint in intact condition in homes built before 1978. If renovation, paint repair, or other similar maintenance activities are underway, make sure that lead-safe work practices are being used, so that no lead hazards are generated. Contact the District of Columbia Department of the Environment (DDOE) for more information about lead-safe work practices.

- It's also important to regularly wash horizontal surfaces around old windows and doors, because they can frequently generate lead dust, which then sticks to window sills, window troughs, and other horizontal surfaces such as floors -- ready and waiting for a child to get the lead dust on their fingers.
- Using a vacuum cleaner with a special filter called "HEPA" (high efficiency particulate air) is another good way to capture lead dust particles, which often are smaller than what the naked eye can see. If you are not sure about your water quality, using a filter known to filter out lead is a good precaution to take.

How does lead get into the body?

There are many ways lead can get into your body. Experts agree that lead paint, including the dust particles that come from it, remains the principal source of exposure, but a list of some of the most common pathways would include:

- Ingesting dust from lead paint
- Inhaling dust from lead paint (mostly when renovation work is going on)
- Ingesting lead chips (such behavior is known as "pica")
- Drinking tap water that has lead in it
- Eating fruits or vegetables that have lead on them from the soil
- Eating food that has been prepared or stored in dishes made with lead
- Drinking alcohol or other acidic liquid that has been stored in a crystal decanter (corked glass containers, usually used for storing wine)
- Chewing on a toy or other product that has lead in it

Who is at greatest risk?

Those at greatest risk are young children and pregnant women.

Who can be lead poisoned?

Anyone can be lead poisoned. When an adult becomes lead poisoned, it is almost always as a result of occupational exposure. It takes a lot of lead to poison an adult. However, lead is most dangerous to children, in particular to those under the age of six. It is very easy for toddlers to get exposed to lead. They put their hands, toys, and other things in their mouth. This hand-to-mouth behavior is normal for young children. They are exploring the world around them. Unfortunately, if children put objects with lead dust in their mouth, they can become lead poisoned. Lead is a naturally sticky substance, and children can touch lead dust on floors or window sills, get it on their fingers, put their fingers in their mouth, and the lead then enters the body.

How do I know if my child is lead poisoned?

The only way to know if your child is lead poisoned is via a blood test. If your child is under the age of six, ask your doctor about getting a blood lead test for your child at your next visit. After your child has been tested, ask your doctor about the test results and what you should do. The District requires that all children under the age of six be tested at least twice, preferably at ages one and two.

If I am pregnant, can I pass lead poisoning to my child?

Yes. Lead is stored in the bone. If a little girl was exposed to enough lead as a child, some of it is likely to have been stored there, and a "traumatic" event such as a broken bone or a pregnancy will then release the lead back into the blood stream. Lead crosses the placenta / blood barrier and penetrates the fetus. In addition, any lead the pregnant woman ingests or inhales, that enters her blood, will do the same. In both cases, the newborn will have a corresponding blood lead level.

What are the harmful effects of lead?

Too much lead in adults can cause serious damage to the brain, kidneys, nervous system, and red blood cells.

Lead poisoned children are likely to suffer life-long consequences as a result of their exposure at a young age. Since it can cause brain damage, it can result in irreversible harm. The tragedy of lead poisoning is that it robs children of their full potential.

What actions may be taken to reduce lead in drinking water?

If a faucet has not been used for six hours or longer, flush your lead pipes or plumbing fixtures by running the cold-water tap for at least 2 minutes prior to using for drinking or cooking. You should also periodically remove and clean the strainer/aerator on your faucet to remove debris that collects inside. See NSF International's website at http://www.nsf.org/consumer/drinking_water for more details.

Is the District's water safe for drinking?

The water supply in the District of Columbia passes all federal standards and complies with the federal Safe Drinking Water Act for quality and safety that all large drinking water systems must meet. Hot-water tap is likely to contain some level of lead or other sediments. Boiling water does not reduce lead levels. Use water from the cold-water tap for drinking, cooking, and especially for making baby formula.

What additional steps can I take?

As a precaution, avoid using tap water for baby formula. If you do use tap water, make sure it's from the cold-water tap and let it run for at least 2 minutes.

How may one be sure the water is safe?

If you are concerned about your water, contact a certified laboratory and have it tested. For more information, contact:

- District of Columbia Water and Sewer Authority (WASA): (202) 612 - 3440
- District of Columbia Department of Health (DOH): 311 or (202) 671-5000
- District Department of the Environment (DDOE): 311 or (202) 671-5000
- United States Environmental Protection Agency (EPA) Safe Drinking Water Hotline: 1-800-426-4791
- National Lead Information Center: 1-800-LEAD-FYI
- NSF International: 1-800-NSF-MARK

What other resources are offered in the District of Columbia to help with lead testing, medical assistances and make homes lead safe?

Information for Water Monitoring

The D.C. WASA, Water Quality Division, offers a the Lead and Copper Tap Water Monitoring Program, which monitors the quality of drinking water in the District through water sampling. For more information, please call (202) 612-3440 or go to www.dcwasa.com.

Information for Lead Testing in the District

The DDOE, Lead and Healthy Housing Division, offers a home-visit to check for possible presence of lead in dust and other potential lead hazards. For more information, please call (202) 535-2600.

Information for Medicaid and Uninsured Children

Generally, most insurance companies pay for lead testing (including Medicaid). The District of Columbia's Department of Health Care Finance (DHCF) offers free medical insurance for District children. Children under the DC Healthy Families insurance program are required to be tested for lead; these lead tests are free. To get more information about DHCF insurance programs, please call (202) 639-4030.

ADDITIONAL INFORMATION ABOUT THE LEAD TESTING PROCESS

LEAD TESTING

There are two times that lead testing is required for children in the District of Columbia – once at 12 months old and again at 24 months old.

Every child under six years old should get screened, through a process of asked questions, by their primary care provider about their exposure to lead every year. Any child over six years old who regularly is putting non-food items in their mouth needs to continue to be screened and tested.

LEAD RESULTS

What does it mean and what should be done?

Test Result (mcg/dL)	Meaning	Action
0-4	“Normal” result	Additional testing as needed by age or as result of change in risk of exposure.
5-9	Above normal result, or what’s called the “background” level	Avoid lead risks. The District Department of the Environment will offer a home- visit to check for possible presence of lead in dust and other potential lead hazards Encourage foods high in calcium, iron and vitamin C.
10-14	An elevated lead level, defined in D.C. law as “elevated blood lead level”	A venous test should be done to confirm lead level. From this level on, the District Department of the Environment sends a case worker who talks with the family about lead, along with an inspector who conducts an environmental investigation to determine if there is any source of exposure in the person’s home. Repeat blood test in 3 months.
15-20	An elevated lead level, defined in D.C. law as “lead poisoned person”	As above. If taken by finger stick, confirm with a venous draw as soon as possible.
20-44	Lead poisoned person	As above. Doctor should advise as to possible need for treatments or vitamins. The person should be removed from lead exposure immediately.
Above 45	Lead poisoned person requiring medical treatment	As above. Need to see a doctor right away to obtain chelation (process of removing lead from bloodstream) treatment. Regular testing needed to show reduction in lead levels. The person must be removed from lead exposure immediately.

