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Lead in School Drinking Water Information for Parents and Guardians

Maine CDC Childhood Lead Poisoning Prevention Unit • 11 SHS, Augusta, ME 04330 • 287-4311 • maine.gov/healthyhomes

Can lead in school drinking water affect my child's health?

How drinking water with lead in it may affect your child's health depends on your child's age, how much water your child drinks, how long they have been drinking the water, and the amount of lead in the water. The impact will also depend on whether or not your child is exposed to lead in other ways. A common way that young children are exposed to lead is through dust from lead paint found in houses and apartments built before 1950.

With lead, we are most concerned about children under the age of 6 years because

- A young child's brain is still growing and is more easily harmed by lead
- Young children put their hands and toys in their mouths a lot, making it easy for them to take in dust from lead paint found on floors and windowsills in old homes
- Young children absorb more lead than older children and adults

In young children, lead can affect brain development and cause learning disabilities and behavior problems. For older children and adults, ongoing lead poisoning can damage the brain, nervous system, and kidneys. It can also cause high blood pressure in older children and adults.

Medical treatment for lead poisoning only occurs when a child or adult has a very high amount of lead in the body. Most of the time, when a child or adult finds out they have an elevated amount of lead in the blood, the only action is to find and remove the source of the lead.

Should I have my child tested for lead?

You should talk to your child's doctor about testing your child. A blood lead test can tell you how much lead is in your child's blood. If your child drank water with lead in it, the level of lead in the blood may rise. Because our bodies get rid of lead over time, your child's blood lead level will tell you about the amount of lead your child consumed in the 3 or 4 months before your child's blood was tested, and mostly about the month before the test.

To figure out if your child should be tested, you and your child's doctor should talk about

- Your child's age
- How much time your child spends at school, including before or after school care or activities
- How much water from the school your child drinks in a typical day
- The lead levels found in the school's drinking water

You and your child's doctor should also talk about other ways your child may have contact with lead, including

- Living or spending time in a house or apartment built before 1978, and especially any homes or apartments that were built before 1950 when lead paint was commonly used
- Living in an older home that is being renovated or that has been renovated in the last 6 months
- Living with someone who may bring dust from lead paint home on work clothes and shoes (examples: painters, construction workers, metal recyclers)
- Doing certain hobbies, such as making stained glass, shooting, making ammo, or casting bullets or lead sinkers.
- Any unusual oral behaviors your child may have such as chewing on woodwork in the home or eating things that are not food

Where does lead in a school's drinking water come from?

In most cases, if there is lead in a school's drinking water it comes from pipes and plumbing fixtures inside the school building. Lead can be found in brass fixtures and fittings, or in solder used in copper plumbing. Until 2014, plumbing fixtures could have up to 8 percent lead content. Before 1987, solder that contained lead was commonly used to join copper pipes.

How does the lead get from the plumbing into the water?

Lead in pipes or plumbing can dissolve into water, especially if the water is corrosive. Water that has been sitting in a pipe for a long time can have more lead in it. Lead levels are usually highest after the water has been sitting in the pipes overnight or for more than 6 hours. Typically, lead levels decrease after water is run for about a minute. This means that there is likely to be less lead in the water as fountains and faucets are used during the day.

Understanding Lead Test Results from School Drinking Water

To understand the test results from your child's school, it is important to know how the water was tested. You may want to find out if the results were from a first draw test or a follow-up flush test.

- **First Draw Test:** Water tested after it has been sitting in pipes overnight or for 8-18 hours is called a first draw test. A first draw test measures if lead is dissolving into the water. Usually, the lead level found in a first draw test is the highest amount of lead in the water.
- **Follow-up Flush Test:** In a follow-up flush test, the water is tested after it has been run for about 30 seconds. A follow-up flush test helps figure out where the lead is coming from. The amount of lead found in a follow-up flush test is likely to be what students consume while at school since faucets and fountains are used for many reasons throughout the day.

Water test results are reported in parts per billion or ppb. Sometimes parts per billion is written as micrograms per liter or ug/L. The US Environmental Protection Agency recommends that schools stop using water with lead levels higher than 20 parts per billion found during a first draw test.

Should I test the drinking water where I live for lead?

Just like schools, homes may have plumbing that contains lead. Since you cannot see, taste, or smell lead in water, testing is the only way to find out if there is lead in your drinking water. Testing for lead is especially important if young children or pregnant women drink the water. A first draw test is the recommended test for lead in water. You can find more information and a list of labs where you can test your water for lead at www.wellwater.maine.gov.

It is always a good idea to use cold tap water for drinking and cooking. Run your water until it feels cold before using it for drinking and cooking. This will flush any water that has high levels of lead because it has been sitting in the pipes.

For More Information

To learn more about childhood lead poisoning, sources of lead in the home, and testing your child for lead, visit www.maine.gov/healthyhomes.