

Lead in Drinking Water – Public and Nonpublic Schools

Important Notice: Elevated Water Sample Results Arthur Middleton Elementary School

Charles County Public Schools (CCPS) tests all schools for the presence of lead in school drinking water to comply with a state regulation requiring lead testing of drinking water outlets in all Maryland schools. On November 7, 2024 (44) lead water samples were collected from Arthur Middleton Elementary School. Of these samples, seven had levels of lead exceeding the action level of 5.5 parts per billion (ppb) for lead in drinking water in school buildings. The action level is the concentration of lead, which, if exceeded, triggers required remediation.

The elevated lead results from the samples collected at Arthur Middleton were as follows:

Middleton ES fixture #1 Left fixture on 3 comp kitchen sink	8.1 parts per billion (ppb)
Middleton ES fixture #4 Island kitchen sink	11.3 parts per billion (ppb)
Middleton ES fixture #5 kitchen sink	6.54 parts per billion (ppb)
Middleton ES fixture #9 Pre-K classroom 112 left sink	15 parts per billion (ppb)
Middleton ES fixture #10 Pre-K classroom 112 bubble	6.94 parts per billion (ppb)
Middleton ES fixture #11 Pre-K classroom 112 right sink	7.20 parts per billion (ppb)
Middleton ES fixture #25 Art room sink	8.03 parts per billion (ppb)

Once CCPS received the laboratory results, the impacted water outlets were disabled (i.e. shut down or removed) within 12 hours to prevent physical access to the water coming from the fixture. All lead sampling test results are accessible on the school system website at <https://www.ccboe.com/index.php/water-quality-reports>.

Next steps

If follow-up sample results have lead levels exceeding the action level, the fixture will be replaced.

Health effects of lead exposure

Lead can cause serious health problems if too much enters the body from drinking water or other sources. It can cause damage to the brain and kidneys and can interfere with the production of red blood cells that carry oxygen to all parts of the body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Lead is stored in the bones, and it can be released later in life. During pregnancy, the fetus receives lead from the mother's bones, which may affect brain development. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults.

There are many different sources of human exposure to lead. These include lead-based paint, lead-contaminated dust or soil, some plumbing materials, certain types of pottery, pewter, brass fixtures, food and cosmetics, exposure in the workplace and exposure from certain hobbies, brass faucets, fittings, and valves. According to the Environmental Protection Agency (EPA), 10 to 20 percent of a person's potential exposure to lead may come from drinking water, while for an infant consuming formula mixed with lead-containing water this may increase exposure to 40 to 60 percent.

To reduce exposure to lead in drinking water:

1. Run your water to flush out lead: If water hasn't been used for several hours, run water for 15 to 30 seconds or until it becomes cold or reaches a steady temperature before using it for drinking or cooking.
2. Use cold water for cooking and preparing baby formula: Lead from the plumbing dissolves more easily into hot water.

Please note that boiling the water will not reduce lead levels.

More information

For additional information, contact Michael Heim, Chief of Operations and Supporting Services, at 301-934-7270 or mheim@ccboe.com.

For more information on reducing lead exposure around your home/building and the health effects of lead, visit the EPA website at www.epa.gov/lead. If you are concerned about exposure, contact your local health department or healthcare provider to find out how you can get your child tested for lead.