

Lead in Drinking Water – Public and Nonpublic Schools

Important Notice: Elevated Water Sample Results **Arthur Middleton Elementary School**

July 11, 2019

Charles County Public Schools (CCPS) tests all schools for the presence of lead in school drinking water to comply with state regulation requiring lead testing of drinking water outlets in all Maryland schools.

On March 30, 2019, 47 lead water samples were collected from Arthur Middleton Elementary School. Of these lead water samples, seven had levels of lead exceeding the action level of 20 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 sample(s) collected at Middleton were as follows:

Kitchen Kettle	130 parts per billion (ppb)
Science B108-sink	172 parts per billion (ppb)
Science B108-sink	656 parts per billion (ppb)
Special Ed D106-bubbler	324 parts per billion (ppb)
2nd Grade-sink	120 parts per billion (ppb)
2nd Grade-bubbler	65.4 parts per billion (ppb)
2nd Grade-sink	819 parts per billion (ppb)

Once CCPS received and reviewed the laboratory results, disabled (i.e. shut down) the impacted water outlets within 12 hours to prevent physical access to the water coming from the fixture and collected a follow-up sample. All lead sampling test results are posted on the school system website at <https://www.cchoe.com/index.php/water-quality-reports>.

Next steps

CCPS will repair or replace any fixtures that have lead levels exceeding the action level. Staff will collect a follow-up sample after remediation, and will not place any fixture back in service until water level results are at acceptable levels.

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 work place 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, assistant superintendent of 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 EPA's 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.