

# Lead in Drinking Water – Public and Nonpublic Schools

Updated in response to legislation effective as of June 1, 2021

## **IMPORTANT NOTICE: ELEVATED LEAD WATER SAMPLE RESULT(S)**

Dayton Oaks Elementary School

### **ELEVATED LEAD WATER SAMPLE RESULT(S)**

Howard County Public School System (HCPSS) is required to test all of our schools' designated water drinking outlets for the presence of lead pursuant to the Code of Maryland Regulations.

On May 16, 2019, eighty-five (85) lead water samples were collected from Dayton Oaks Elementary School. Of these lead water samples, fifty-five (55) additional sample(s) had levels of lead exceeding the State's revised action level of 5 parts per billion (ppb) (*formerly 20 ppb; 5 ppb effective June 1, 2021*) for lead in drinking water in school buildings. The additional elevated lead results from the sample(s) collected at Dayton Oaks Elementary School were as follows:

<u>Fixture #</u>	<u>Location &amp; Type</u>	<u>Parts Per Billion</u>	<u>Fixture #</u>	<u>Location &amp; Type</u>	<u>Parts Per Billion</u>
1	kitchen sink	11.3	6	classroom sink	8.9
7	classroom sink	8.6	8	classroom sink	10.8
9	classroom sink	6.8	10	classroom sink	10.9
13	classroom sink	8.0	14	classroom sink	10.0
15	classroom sink	7.1	16	classroom sink	7.7
19	classroom sink	5.3	20	classroom sink	6.2
21	classroom sink	7.1	22	classroom sink	10.1
23	classroom sink	8.0	24	classroom sink	6.1
25	classroom sink	11.9	26	classroom sink	8.3
28	classroom sink	8.6	29	classroom sink	8.2
30	classroom sink	8.2	31	classroom sink	7.3
32	classroom sink	10.0	36	classroom sink	9.9
37	classroom sink	9.6	38	classroom sink	9.0
39	classroom sink	7.8	47	media sink	9.7
50	classroom sink	7.8	52	classroom sink	10.8
53	classroom sink	11.8	54	classroom sink	10.4
55	classroom sink	7.1	56	classroom sink	8.2
59	classroom sink	7.2	60	classroom sink	6.7
61	classroom sink	8.8	62	classroom sink	16.9
64	classroom sink	12.9	65	classroom sink	17.0
66	classroom sink	8.2	67	classroom sink	10.1
68	classroom sink	8.0	69	classroom sink	7.4
71	classroom sink	7.5	72	classroom sink	7.1
73	classroom sink	7.3	74	classroom sink	7.9
75	classroom sink	7.5	78	classroom sink	11.4
79	classroom sink	8.5	80	classroom sink	7.5
82	classroom sink	9.7	85	classroom sink	14.5
87	classroom sink	16.8			

### **ACTION LEVEL (AL)**

Effective June 1, 2021, the State's AL for lead in drinking water samples collected from outlets in school buildings has been lowered to 5 ppb. The AL is the concentration of lead which, if exceeded, triggers required remediation of drinking water outlets.

### **IMMEDIATE ACTIONS TAKEN**

HCPSS reviewed results of the school's most recent sampling episode. The impacted fixtures were addressed during the 2021 summer break by removing, labeled/designated not for consumption hand washing only, and/or shut off and tagged.

## **NEXT STEPS**

Appropriate actions will be taken which can include the following:

- Evaluate possible cause such as infrequent use, the fixture itself or another component.
- Permanently prevent access to water from impacted fixture(s).
- Replace necessary fixture and/or plumbing.
- Reconfigure plumbing to bypass source of lead.
- HCPSS will not accept point of use filters as a permanent remedial action due to maintenance upkeep and potential hygiene issues due to lack of maintenance. However, due to the new action level impacting more water outlets, HCPSS will provide and maintain temporary point of use (POU) filtration devices for sinks and/or bottled water in critical areas, as necessary, to avoid disruption in student instruction or services until a successful permanent remedial action is completed. Critical areas include Family Consumer Science classrooms, teacher lounge, health rooms, Food Services kitchens, and concessions. The POU's were completed prior to the start of the 2021-2022 school year.
- The school is served by well water and does not currently have corrosion control treatment nor did it require, however, HCPSS intends to submit a systematic corrosion control treatment design for approval by the Maryland Department of the Environment.
- A remedial sample will be collected after a remedial action is completed to determine effectiveness. The fixture will be turn back on if sample result is below the action level.

## **HEALTH EFFECTS OF LEAD**

Lead can cause serious health problems if too much enters your 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 your 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.

## **SOURCES OF HUMAN EXPOSURE TO LEAD**

There are many different sources of human exposure to lead. These sources 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 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.*

## **ADDITIONAL INFORMATION**

For additional information, please visit <https://www.hcpss.org/schools/water-quality-reports/> or contact Christopher Madden at 410-313-8874. For additional information on reducing lead exposure around your home/building and the health effects of lead, visit EPA's website at [www.epa.gov/lead](http://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.