



Maryland PIRG

SB546: School Buildings - Drinking Water Outlets - Elevated Level of Lead (Safe School Drinking Water Act)

Education, Health, and Environmental Affairs

February 24th, 2021

FAVORABLE

Environment Maryland is a citizen-based environmental advocacy organization. We work to protect clean air, clean water, and open space.

Maryland PIRG is a state based, non-partisan, citizen funded public interest advocacy organization with grassroots members across the state.

We would like to thank Delegate Solomon for introducing this bill, and for putting in so much work over the last 3 years. A version of this bill passed the House in 2019 and the Senate in 2020. This year let's get it done.

Since 2017, we have said we should have a more [health protective action level](#) for lead in school drinking water. We strongly support this bill to lower the action level to 5ppb. Our children need safe drinking water – especially at school where they go to learn and play. Unfortunately, lead is contaminating drinking water at schools in Maryland. [The American Academy of Pediatrics recommends that school drinking water sources not exceed 1 part per billion.](#)¹

- [Illinois requires testing in all schools and daycares and has a 2ppb action level.](#)²
- [Vermont requires testing in all schools and daycares and has a 4ppb action level.](#)³
- [In 2019, the LA Unified School District moved to an action level of 5ppb.](#)⁴

Thanks to this Committee's leadership, Maryland was one of the first states in the country to require testing for lead in school drinking water, and we were pleased that you worked last year to expand grant funds for schools to remediate for lead. In 2019, the legislature also required schools to report on all lead tests over 5ppb, with reporting due in December, but we have not yet seen the results.

Jurisdictions in Maryland have gone further than required by state law: [Montgomery County](#) and [Baltimore County](#) have enacted an action level of 5ppb and [Prince George's County](#) has enacted an action level of 10ppb.⁵⁶⁷

¹ Prevention of Childhood Lead Toxicity, Council on Environmental Health, <http://pediatrics.aappublications.org/content/early/2016/06/16/peds.2016-1493>

² New Analysis, 78% of suburban Cook County schools test positive for lead in water fixture, Illinois PIRG, September 26, 2018, <https://illinoispirgedfund.org/news/ilf/new-analysis-78-suburban-cook-county-schools-test-positive-lead-water-fixtures>

³ Vermont Health and the Environment, State of Vermont <https://www.healthvermont.gov/environment/school/lead-drinking-water-schools>

⁴ Los Angeles Unified School District Redouble Efforts to Get the Lead Out of Drinking Water, May 6, 2019, <https://calpirg.org/news/cafi/los-angeles-unified-school-district-redoubles-efforts-get-lead-out-drinking-water>

⁵ Montgomery Co. passes stricter limits on lead in public school water, WTOP, May 7, 2019. <https://wtop.com/montgomery-county/2019/05/montgomery-co-to-set-stricter-limits-on-lead-in-public-school-water/>

⁶ “[Baltimore County School Board sets tighter standards for lead levels in drinking water](#)” from Capital Gazette, released October 9th 2019. <https://www.capitalgazette.com/maryland/cng-co-at-county-schools-lead-vote-20191009-zzaxkncjveovn53iromznpedq-story.html>

⁷ Prince George's County Water Quality Program, <https://www.pgcps.org/water-quality-program/>

In 2019, Maryland PIRG and Environment Maryland released a report, [Get the Lead Out: Ensuring Safe Drinking Water for Children At School](#), which gave Maryland a “C” on efforts to protect kids from lead in school drinking water. This was an improvement from the “F” we received in 2017.

We understand that some of the Boards of Education are concerned about costs to remediate for lead. We are glad that this committee was able to increase access to grant funding for lead remediation last year through the Healthy School Facility Fee. HB1 and SB1 also include an additional year of funding for that fund. When taps test above the action level they can shut off access until they are able to remediate or add in filling stations. We are pleased the MDE has received [\\$513,000 from EPA](#) to test for lead in school drinking water, and we hope the state will pursue further federal grant money to help with remediation.⁸

When it comes to this bill, the question you should ask yourself is: if we have taps testing at levels over 5, should they be left on or turned off?

BACKGROUND

Public and private schools across the state are finding lead at frightening levels.

- In Baltimore City, some schools have been using bottled water since 2007.
- [Some Harford County schools have also had students on bottled water since 2009.](#)⁹
- Since testing began after the 2017 law, elevated levels of lead have been found in counties across the state: Anne Arundel, Baltimore County, Baltimore City, Carroll, Calvert, Howard, Montgomery, Prince George’s, Washington, Wicomico, and Queen Anne’s.
- [Some came back with astonishing levels of lead.](#) For example, a classroom water fountain at Lucy V. Barnsley Elementary School in Silver Spring tested 356 ppb and in Kensington a kitchen faucet at Einstein High School tested at 700 ppb.¹⁰

According to [MDE’s summary of test results so far](#) (attached), of the 2,528 samples exceeded the Action Level (AL) of 20 parts per billion (ppb) of lead, just under half of which were drinking water outlets.

Our existing law:

1. Requires all schools to conduct testing for lead in drinking water every 3 years.
2. Required the state to report to the General Assembly by December 2019 on all tests that came in above 5ppb.
3. Attaches the action level to the federal standard as outline by the EPAs 3Ts, which at the time of the law’s enactment was 20ppb.
4. When elevated levels are found, it requires immediate shut off, parental notification, and other remediation actions.

All too often, schools (like homes) have pipes, plumbing and/or fixtures that leach lead into drinking water. In some cases, old service lines – the pipes that brings water from the mains in the street into buildings – are made entirely of lead. And where there is lead, there is a risk of contamination and exposure.

⁸ EPA Awards Maryland Department of the Environment \$513,000 to test for lead in drinking water at schools, April 1 2020, <https://www.epa.gov/newsreleases/epa-awards-maryland-department-environment-513000-test-lead-drinking-water-schools>

⁹ High lead levels a costly concern at schools in Maryland, Associated Press April 9, 2016.

<http://www.washingtontimes.com/news/2016/apr/9/high-lead-levels-a-costly-concern-at-schools-in-ma/>

¹⁰ Water testing finds 86 Montgomery Co. schools had high lead levels, WTOP, August 9, 2018.

<https://wtop.com/montgomery-county/2018/08/water-testing-finds-86-montgomery-co-schools-had-high-lead-levels/>

The health threat of lead in schools' water deserves immediate attention from state policymakers for two reasons. Lead is highly toxic and especially damaging to children — impairing how they learn, grow, and behave. We ought to be particularly vigilant against this health threat at schools and pre-schools, where our children spend their days learning and playing.

A potent neurotoxin, lead affects how our children learn, grow and behave. [According to the EPA](#), "In children, low levels of [lead] exposure have been linked to damage to the central and peripheral nervous system, learning disabilities, shorter stature, impaired hearing, and impaired formation and function of blood cells."¹¹

SOLUTION

Given the high toxicity of lead to children, the most health-protective policy is simply to “get the lead out” of our schools and pre-schools. This involves removing lead-bearing parts from schools' drinking water systems — from service lines to faucets and fixtures.

Because all this prevention work will take time to complete, schools should immediately begin regular and proper testing of all water outlets used for drinking or cooking and promptly remove from service those outlets where elevated lead levels are detected. And schools should provide the public with easy access to testing data and the status of remediation plans.

The promise and viability of this “get the lead out” approach can be seen in municipal and voluntary programs across the country. Madison, Wisconsin and Lansing, Michigan have removed all lead service lines from homes, and New York City has replaced them at schools. Yes, this will cost money.

Undoing this toxic legacy in our communities will take time. But we can and should act now to protect our schools— the places where our children go each day to learn and play.

We respectfully request a favorable report

Attachments: Partial Summary of Lead Testing Results in Maryland Schools

¹¹ *Basic Information about Lead in Drinking Water*, <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>

Test Results

These counties have published test results, and [MDE has a summary report](#) (attached).

- [Anne Arundel Schools](#)
- [Calvert County Public Schools](#)
- [Carroll County](#)
- [Howard County Schools](#)
- [Prince George's County Public Schools](#)
- [Queen Anne's County Public Schools](#)
- [Washington County Public Schools](#)

Anne Arundel County

Since lead testing commenced in 2018, 105 drinking water outlets in Anne Arundel County Public Schools have shown elevated levels of lead.^{12 13} Of the 23 of the 33 schools tested, testing found 30 sources of drinking water with lead levels testing at 20 ppb or higher. Ten were at High Point Elementary School in Pasadena.

Baltimore County

Baltimore County found 23 schools test positive for elevated levels of lead.^{14 15} Pot Spring Elementary in Timonium had one of the highest percentages of fixtures with lead, with seven of 48 tests finding elevated levels. At Padonia and West Towson, none of the affected fixtures were drinking fountains.

Calvert County

4 out of 21 Schools in Calvert county tested so far in the 2017-2018 school year were found to have fixtures with elevated levels of lead.¹⁶

Charles County

In 2019, Charles County conducted lead testing and published all results online.¹⁷ [The results found](#) 11 elementary schools, 5 middle schools, 2 highschoools, and 8 additional schools using well water had taps that tested above the action level.

Harford County

In Harford County lead levels exceeding federal standards were found in 12 schools. The private John Carroll School in Bel Air found lead levels higher than 20 ppb in 19 sources in the building, though none of the drinking fixtures were affected.¹⁸

Howard County

A first round of testing at Clarksville, St John's Lane, Talbott Springs, Jeffers Hill, and Pointers Run

¹² State-mandated testing finds lead in water at two dozen local schools; Baltimore, Howard counties will test this year. Baltimore Sun. August 17th 2018. <https://www.baltimoresun.com/news/maryland/investigations/bs-md-sun-investigates-school-lead-testing-20180817-story.htm>

¹³ "High Levels of Lead Found in some Anne Arundel County Public Schools drinking water" from WMAR Baltimore, published February 25th 2019, <https://www.wmar2news.com/news/region/anne-arundel-county/testing-shows-elevated-lead-levels-in-some-drinking-water-at-anne-arundel-county-public-schools>

¹⁴ First round of Baltimore County water tests finds lead at Pot Spring, West Towson and Padonia elementaries, other schools. Baltimore Sun. Nov. 19th 2018. <https://www.baltimoresun.com/news/maryland/baltimore-county/towson/ph-tt-lead-1121-story.html>

¹⁵ "High levels of lead found in drinking water at several Baltimore County elementary schools" from WMAR Baltimore, published March 14th 2019, <https://www.wmar2news.com/news/working-for-the-future/high-levels-of-lead-found-in-drinking-water-at-several-baltimore-county-elementary-schools>

¹⁶ Calvert County Public Schools: Testing for Lead in Drinking Water
http://www.calvertnet.k12.md.us/departments/school_facilities/facilities_program_information/water_testing

¹⁷ Charles County Public Schools, <https://www.cbcoe.com/index.php/water-quality-reports>

¹⁸ Tests indicate high lead levels in water at three Harford schools. Baltimore Sun. August 15th, 2018.
<https://www.baltimoresun.com/news/maryland/harford/aegis/ph-aq-lead-in-water-harford-schools-0815-story.htmlgram/>

Elementary School showed that 28 fixtures across 9 of the 15 schools were shown to have lead.¹⁹ One sink fixture at Clarksville Elementary School was over the limit, and at Clarksville Middle two teacher office sinks were found unsafe. Howard County has made all tests results available online.²⁰

Montgomery County^{21 22}

In Montgomery County 246 of the 13,248 fixtures tested were found to have lead levels above 20 ppb. 86 Schools tested positive for elevated levels of lead. And some tests far exceeded the 20ppb limit, going as high as 700 ppb. Montgomery County Public Schools repaired 249 outlets above the state action level, but recently found some fountains tested for above 253 parts per billion.

Schools reported with high lead levels include Broad Acres Elementary School (85.7 parts per billion), New Hampshire Estate (42 parts per billion), Gaithersburg Elementary (253 parts per billion).

Prince George's County

7 out of 14 schools tested in Bowie 2017 showed elevated levels of lead in drinking water. Prince George's county began a much earlier program of lead testing and remediation in 2004 and all schools are expected to be fitted with lead free fountains by June 28th 2019.²³

Queen Anne's County

"As of December 11, 2018, QACPS has results from 1,639 outlets; including drinking water and non-drinking water fixtures. Of those, 1478 (90%) do not have elevated levels of lead, and 161 (10%) have elevated levels of lead. Of the 161, eight (.05%) are drinking fountains with the remainder being mainly classroom or science lab sinks."²⁴

Washington County

Elevated levels of lead found.²⁵

Worcester County

Seven sinks at Buckingham Elementary School in Worcester County were found to have above average amounts of lead, with a sink in the women's bathroom coming back at 62 parts per billion.

Wicomico County

Two schools in Wicomico tested positive for elevated levels of lead. In Fruitland Primary and Pinehurst Elementary officials tested "371 water fixtures throughout their schools and found that 19 of those did not meet the state's standards."²⁶

¹⁹ Lead Found in Water in 9 Howard County Schools. Baltimore Sun. October 31st 2018.

<https://www.baltimoresun.com/news/maryland/howard/ph-ho-cf-lead-water-1023-story.htm>

²⁰ Howard County Schools: <https://www.hcps.org/schools/water-quality-reports/>

²¹ "Montgomery County working to get lead out of school drinking water" from WJLA, published March 19th 2019,

<https://wjla.com/news/local/montgomery-county-working-to-get-lead-out-of-school-drinking-water>

²² "Officials work to lower lead levels in public drinking water across Montgomery county" from Local DVM, published March 20th 2019,

<https://www.localdvm.com/news/i-270/officials-work-to-lower-lead-levels-in-public-drinking-water-across-montgomery-county/>

²³ Prince George's County Public Schools Water quality program and test results. <https://www.pgcps.org/water-quality-pro>

²⁴ Queen Anne's County Public Schools Water Test Results

<https://www.qacps.org/site/default.aspx?PageType=3&DomainID=1&ModuleInstanceID=9296&ViewID=6446EE88-D30C-497E-9316-3F8874B3E108&RenderLoc=0&FlexDataID=13141&PageID=1>

²⁵ Washington County: http://wcpmsmd.com/sites/default/files/documents/doub_water_test_results_04_18.pdf

²⁶ Two Wicomico Co. schools test positive for lead in water. ABC47. June 28th 2018.

<https://www.wmdt.com/2018/06/two-wicomico-co-schools-test-positive-for-lead-in-water/>

Results for Public Schools

Twenty two public school systems have submitted results for a total of 906 schools as of January 25, 2021, with a total of 50,634 first-draw samples collected and analyzed. Of these, 1,001 samples collected at consumption outlets exceeded the Action Level (AL) of 20 parts per billion (ppb) of lead, and 1,120 samples collected at non-consumption outlets exceeded the AL of lead. There were 22 samples that exceeded the AL of lead for which a use determination could not be made.

Test Results for Public Schools Received as of January 25, 2021: 2017-2018 School Year									
County	# Schools Completing Testing	# Total First Draw Samples	# First Draw Samples from Drinking Water Outlets	# First Draw Samples from Nonconsumption Outlets	# First Draw Samples with Unknown Use	# Total Elevated First Draw Samples	# Elevated First Draw Samples from Drinking Outlets	# Elevated First Draw Samples from Nonconsumption Outlets	# Elevated First Draw Samples with Unknown Use
Allegany	0								
Anne Arundel	32	3,861	1,084	2,459	318	277	50	226	1
Baltimore County	0								
Baltimore City	9	733	0	0	733	15	0	0	15
Calvert	8	480	480	0	0	1	1	0	0
Caroline	0								
Carroll	0								
Cecil	0								
Charles	0								
Dorchester	0								
Frederick	0								
Garrett	12	420	420	0	0	24	24	0	0
Harford	12	658	554	104	0	13	5	8	0
Howard	0								
Kent	0								
Montgomery	207	13,248	13,248	0	0	229	229	0	0
Prince George's	0								
Queen Anne	8	319	102	217	0	32	5	27	0
St. Mary's	12	1,597	1,451	119	27	144	67	72	5
Somerset	0								
Talbot	0								
Washington	39	3,039	831	2,207	1	120	6	114	0
Wicomico	13	498	464	34	0	25	21	4	0
Worcester	0								
Total	352	24853	18634	5140	1079	880	408	451	21

Test Results for Public Schools Received as of January 25, 2021: 2018-2019 School Year

County	# Schools Completing Testing	# Total First Draw Samples	# First Draw Samples from Drinking Water Outlets	# First Draw Samples from Nonconsumption Outlets	# First Draw Samples with Unknown Use	# Total Elevated First Draw Samples	# Elevated First Draw Samples from Drinking Outlets	# Elevated First Draw Samples from Nonconsumption Outlets	# Elevated First Draw Samples with Unknown Use
Allegany	0								
Anne Arundel	13	1390	429	907	54	41	8	32	1
Baltimore County	155	6784	4278	2506	0	368	202	166	0
Baltimore City	1	under review	under review	under review	under review	under review	under review	under review	under review
Calvert	5	298	298	0	0	0	0	0	0
Caroline	6	156	156	0	0	0	0	0	0
Carroll	0								
Cecil	21	2205	387	1818	0	236	20	216	0
Charles	29	1752	1567	185	0	77	58	19	0
Dorchester	5	70	70	0	0	2	2	0	0
Frederick	56	1349	1347	2	0	46	44	2	0
Garrett	0								
Harford	12	1371	880	491	0	85	4	81	0
Howard	59	3990	3961	29	0	85	83	2	0
Kent	0								
Montgomery	1	121	121	0	0	0	0	0	0
Prince George's	120	2646	2646	0	0	63	63	0	0
Queen Anne	0								
St. Mary's	0								
Somerset	6	219	219	0	0	18	18	0	0
Talbot	8	40	24	16	0	0	0	0	0
Washington	1	43	11	32	0	0	0	0	0
Wicomico	6	328	325	3	0	29	29	0	0
Worcester	10	690	274	416	0	135	41	94	0
Total	514	23452	16993	6405	54	1185	572	612	1

Carroll	0									
Cecil	1	17	17	0	0	0	0	0	0	0
Charles	0									
Dorchester	0									
Frederick	4	75	46	29	0	1	1	0	0	0
Garrett	0									
Harford	3	161	41	120	0	19	0	19	0	0
Howard	3	120	31	89	0	2	0	2	0	0
Kent	1	7	2	5	0	0	0	0	0	0
Montgomery	32	2,376	674	1,668	34	56	5	51	0	0
Prince George's	12	347	233	114	0	15	5	10	0	0
Queen Anne	0									
St. Mary's	2	69	69	0	0	0	0	0	0	0
Somerset	0									
Talbot	3	72	35	37	0	2	2	0	0	0
Washington	3	60	25	35	0	2	0	2	0	0
Wicomico	1	2	2	0	0	1	1	0	0	0
Worcester	1	36	36	0	0	4	4	0	0	0
Total	107	5204	2377	2758	69	148	35	111	2	2

Test Results for Nonpublic Schools Received as of January 25, 2021 for 2018-2019 School Year

County	# Schools Completing Testing	# Total First Draw Samples	# First Draw Samples from Drinking Water Outlets	# First Draw Samples from Nonconsumption Outlets	# First Draw Samples with Unknown Use	# Total Elevated First Draw Samples	# Elevated First Draw Samples from Drinking Outlets	# Elevated First Draw Samples from Nonconsumption Outlets	# Elevated First Draw Samples with Unknown Use
Allegany	1	43	43	0	0	2	2	0	0
Anne Arundel	10	250	141	109	0	2	0	2	0
Baltimore County	24	651	332	319	0	39	8	31	0
Baltimore City	23	1381	621	750	0	26	7	19	0
Calvert	0								
Caroline	0								
Carroll	3	76	32	44	0	8	1	7	0
Cecil	2	14	14	0	0	1	1	0	0
Charles	1	13	12	1	0	0	0	0	0

Dorchester	0									
Frederick	4	268	222	46	0	54	53	1	0	0
Garrett	0									
Harford	4	73	44	29	0	0	0	0	0	0
Howard	13	347	195	152	0	26	5	21	0	0
Kent	1	3	3							
Montgomery	27	1350	492	761	97	65	4	61	0	0
Prince George's	7	129	40	89	0	2	1	1	0	0
Queen Anne	0									
St. Mary's	1	9	8	1	0	0	0	0	0	0
Somerset	0									
Talbot	0									
Washington	2	125	32	93	0	9	0	9	0	0
Wicomico	0									
Worcester	0									
Total	123	4732	2231	2394	97	234	82	152	0	0

Test Results for Nonpublic Schools Received as of January 25, 2021 for 2019-2020 School Year

County	# Schools Completing Testing	# Total First Draw Samples	# First Draw Samples from Drinking Water Outlets	# First Draw Samples from Nonconsumption Outlets	# First Draw Samples with Unknown Use	# Total Elevated First Draw Samples	# Elevated First Draw Samples from Drinking Outlets	# Elevated First Draw Samples from Nonconsumption Outlets	# Elevated First Draw Samples with Unknown Use
Baltimore County	1	6	6	0	0	0	0	0	0
Kent	1	3	3	0	0	0	0	0	0
Montgomery	2	214	96	118	0	1	0	1	0
Prince George's	1	26	3	23	0	1	0	1	0
Total	5	249	108	141	0	2	0	2	0

Results for Charter Schools

As of January 25, 2021, MDE has received test results from 8 charter schools. A total of 317 first-draw samples have been collected and analyzed. Of these, one sample result collected at non-consumption outlet exceeded the Action Level (AL) of 20 parts per billion (ppb) of lead.

Test Results for Charter Schools Received as of January 25, 2021: 2017-2018 School Year

County*	# Schools Completing Testing	# Total First Draw Samples	# First Draw Samples from Drinking Water Outlets	# First Draw Samples from Nonconsumption Outlets	# First Draw Samples with Unknown Use	# Total Elevated First Draw Samples	# Elevated First Draw Samples from Drinking Outlets	# Elevated First Draw Samples from Nonconsumption Outlets	# Elevated First Draw Samples with Unknown Use
Anne Arundel	1	50	10	34	6	0	0	0	0
Baltimore City	0								
Frederick	2	44	19	25	0	0	0	0	0
Prince George's	0								
St. Mary's	1	57	57	0	0	0	0	0	0
Total	4	151	86	59	6	0	0	0	0

Test Results for Charter Schools Received as of January 25, 2021: 2018-2019 School Year

County*	# Schools Completing Testing	# Total First Draw Samples	# First Draw Samples from Drinking Water Outlets	# First Draw Samples from Nonconsumption Outlets	# First Draw Samples with Unknown Use	# Total Elevated First Draw Samples	# Elevated First Draw Samples from Drinking Outlets	# Elevated First Draw Samples from Nonconsumption Outlets	# Elevated First Draw Samples with Unknown Use
Anne Arundel	1	72	26	45	1	0	0	0	0
Prince George's	3	94	44	50	0	1	0	1	0
Total	4	166	70	95	1	1	0	1	0

*Only these counties have charter schools