



# Get the Lead Out

**Contaminated drinking water in Atlantic County schools  
March 2022**



Written by: Julia Geskey, Clean Water Associate  
Environment New Jersey Research & Policy Center

## **Executive Summary**

Our children need safe drinking water — especially at school, where they go to learn and play each day. Unfortunately, lead has been contaminating drinking water at schools in New Jersey and across the country.<sup>1</sup> Our research found [t]his contamination has been particularly pervasive

---

<sup>1</sup> Information from the following sources: Arizona - Arizona Department of Environmental Quality, Arizona's Public School Drinking Water Lead Screening Program available at [https://static.azdeq.gov/dw/lead\\_screening.pdf](https://static.azdeq.gov/dw/lead_screening.pdf), Massachusetts - Massachusetts Executive Office of Energy and Environmental Affairs' Data Portal, "Lead and Copper in School Drinking Water Sampling Results," available at

in Atlantic County, with lead detected in 92% of schools in the county that provided testing data. Forty-five percent of the faucets and fountains tested in Pleasantville and Galloway Township schools had lead in their water.

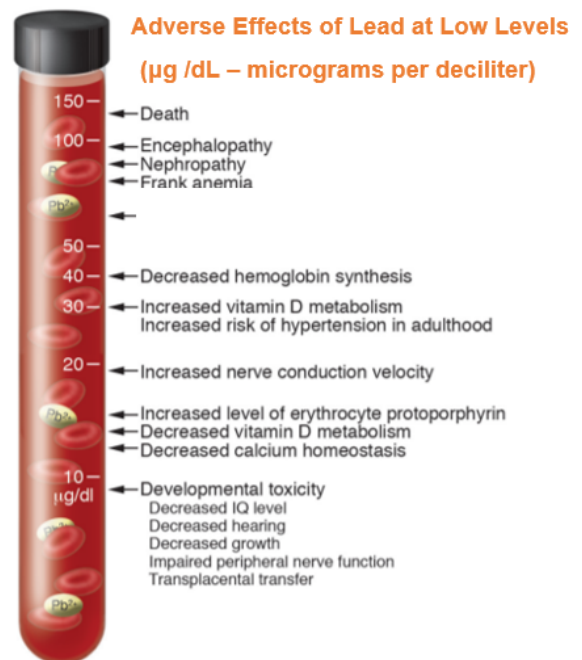
Fortunately, solutions to ensure safe water are at hand. By replacing lead-bearing fountains with filtered water stations and other measures, Atlantic County schools can prevent lead contamination and promote healthy hydration for our kids. Ample resources are now available to our school districts to implement these solutions for all taps used for cooking and drinking.

### Kids need clean water

Water plays a vital role in children’s health. Drinking water supports children’s muscles, joints, and tissues; improves their digestive system; and keeps their growing bodies hydrated. Adequate water intake can also have a positive impact on children’s cognitive performance, particularly short-term memory, as well as helping to improve their visual attention and fine motor skills.<sup>2</sup> Access to safe, clean water is fundamental to the healthy development of a child.

### Lead threatens children’s health

Lead threatens our kids’ health, especially how they learn, grow and behave. “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,” according to the U.S. Environmental Protection Agency (EPA).<sup>3</sup> Moreover, medical researchers estimate that more than 24 million children in America today risk



<https://www.mass.gov/service-details/lead-and-copper-in-school-drinking-water-sampling-results>, Illinois - Illinois PIRG, “Analysis finds Pervasive Lead Contamination in Schools,” available at <https://illinoispirgedfund.org/blogs/blog/ilf/analysis-finds-pervasive-lead-contamination-schools>, Montana - Environment Montana, “Lead Contamination in Montana Public Schools,” available at <https://environmentmontanacenter.org/reports/mte/get-lead-out>, Texas - Environment Texas, “71% of Texas schools test positive for lead in drinking water,” available at <https://environmenttexas.org/news/txe/71-texas-schools-test-positive-lead-drinking-water>, and Washington - Environment Washington, “Lead in the Water,” available at <https://environmentwashington.org/reports/wae/lead-water>  
<sup>2</sup> Voices for Healthy Kids, “Water Access in Schools Fast Facts,” available at <https://voicesforhealthykids.org/assets/resources/water-access-in-schools-fast-facts---february-2020-1582746312.pdf>  
<sup>3</sup> U.S. Environmental Protection Agency, “Basic Information about Lead in Drinking Water,” available at <https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water>

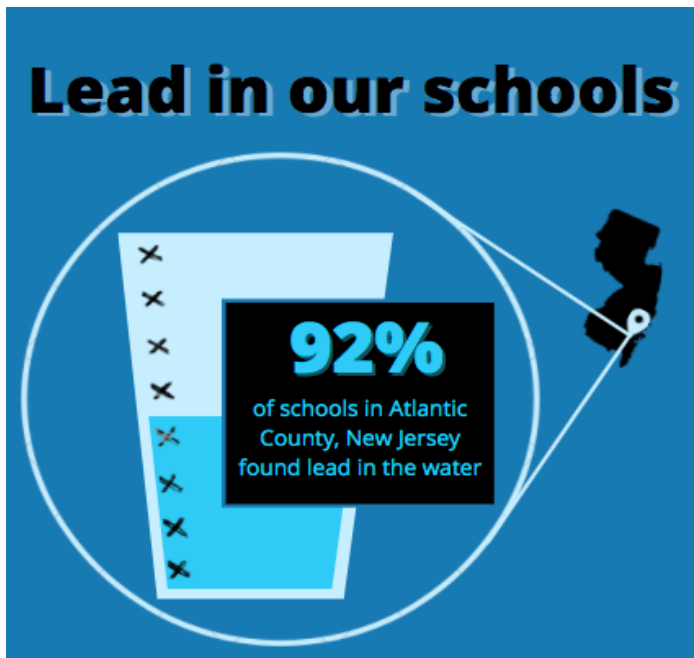
losing IQ points due to low levels of lead. They have also linked low levels of lead to ADHD, antisocial behaviors and depression.<sup>4</sup>

Experts agree there is no safe level of lead.<sup>5</sup> Lead is so toxic even at low levels that the EPA has set a goal of having no lead in drinking water.<sup>6</sup> The American Academy of Pediatrics says lead in schools' drinking water should not exceed 1 part per billion.<sup>7</sup>

### **Atlantic County schools have a lead problem.**

School districts in Atlantic County serve more than 43,000 students, all of whom rely on their schools to provide them with the safe, clean drinking water that they need every single day.<sup>8</sup>

In the wake of the water crisis in Flint, Michigan, the state of New Jersey ordered schools across the state to begin testing their water for lead in 2016.<sup>9</sup> In 2019, our researchers examined the available testing data and found lead contamination at 55 percent of the faucets and fountains in Bergen County schools.<sup>10</sup>



<sup>4</sup> American Academy of Pediatrics, Prevention of Childhood Lead Toxicity, (policy statement), July 2016, page 4, available at

<https://publications.aap.org/pediatrics/article/138/1/e20161493/52600/Prevention-of-Childhood-Lead-Toxicity>

Bouchard MF, Bellinger DC, Weuve J, et al. Blood Lead Levels and Major Depressive Disorder, Panic Disorder, and Generalized Anxiety Disorder in US Young Adults. Arch Gen Psychiatry. 2009;66(12):1313–1319, available at

<https://jamanetwork.com/journals/jamapsychiatry/fullarticle/210465>

<sup>5</sup> Centers for Disease Control and Prevention, "Health Effects of Lead Exposure", available at

<https://www.cdc.gov/nceh/lead/prevention/health-effects.htm>

<sup>6</sup> U.S. Environmental Protection Agency, "Basic Information about Lead in Drinking Water," Available at

<https://www.epa.gov/ground-water-and-drinking-water/basic-information-about-lead-drinking-water#:~:text=EPA%20has%20set%20the%20maximum,in%20the%20body%20over%20time>.

<https://www.epa.gov/system/files/documents/2021-07/epa-3ts-guidance-document-english.pdf>

<sup>7</sup> American Academy of Pediatrics, Prevention of Childhood Lead Toxicity, (policy statement), July 2016, page 11,

available at <https://www.greenandhealthyhomes.org/wp-content/uploads/AAP-Report.pdf>

<sup>8</sup> Atlantic County Office of Education, Overview available at

[https://www.atlantic-county.org/education/#:~:text=Atlantic%20County,-PUBLIC%20SCHOOL%20DIRECTORY&text=Enrollment%20in%20the%20county%20public,%2D12\)](https://www.atlantic-county.org/education/#:~:text=Atlantic%20County,-PUBLIC%20SCHOOL%20DIRECTORY&text=Enrollment%20in%20the%20county%20public,%2D12)

<sup>9</sup> New Jersey Department of Education "Summaries of Test Results," available at

<https://www.nj.gov/education/lead/summaries/#/>

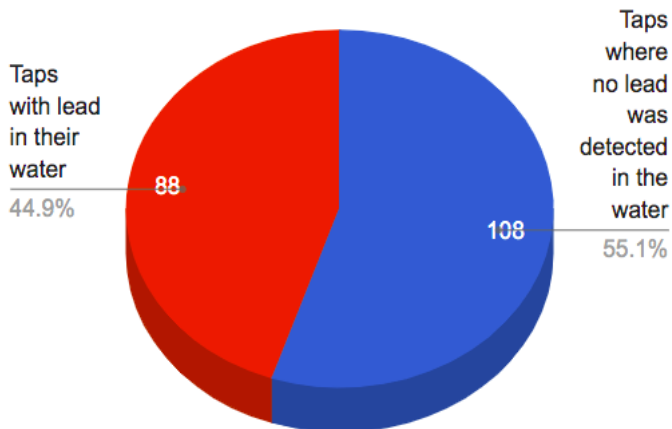
<sup>10</sup> Environment New Jersey, Lead in Bergen County School Drinking Water Analysis available at

<https://environmentnewjersey.org/reports/nje/lead-bergen-county-school-drinking-water-analysis>

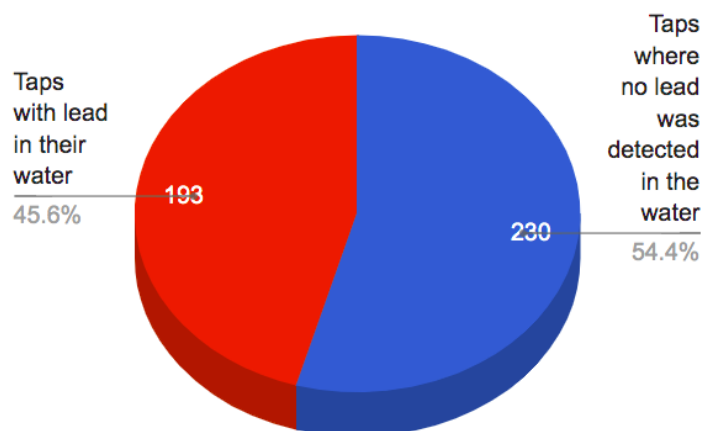
For our south Jersey analysis, we examined the testing data from 66 schools in all 25 school districts in Atlantic County. The results were alarming. **Ninety-two percent** of these Atlantic County schools had lead in their water at one or more taps.

To get a sense of how pervasive this contamination can be, we took a closer look at the tap by tap data from public schools in Pleasantville and Galloway Township. In these two school districts, lead was detected in the water at nearly half (45.4%) of the 619 faucets and fountains tested (44.9% in Pleasantville, 45.63% in Galloway Township).

**Lead Contamination in Pleasantville Schools**



**Lead Contamination in Galloway Township Schools**



We also found that:

- All 13 schools tested in these two districts had lead detected in the water at one or more taps.
- Four schools had more than 50% of their taps contaminated with lead, the highest being at Pleasantville’s North Main Street School with 72.73% of taps contaminated.
- Reeds Road School in Galloway Township showed lead contamination in 49 of their water sources, the most in either district.
- Notably high levels of lead were 695 ppb at Roland Rogers School in Galloway Township and 229 ppb at Washington Avenue School in Pleasantville, among others.

District Name	Number of Tests	Tests showing lead
Pleasantville Public Schools	196	44.9%
Galloway Township Public Schools	423	45.6%
<b>Total</b>	619	45.4%

The following charts detail the individual schools within Pleasantville and Galloway Township respectively, outlining the number of students, the number and percent of water sources with lead, as well as the highest lead reading at each school.<sup>11</sup>

School Name	Number of Students	Number of Sources with Lead	Percent of Taps with Lead	Tap with Highest Lead Content
Pleasantville High School ( <i>Pleasantville</i> )	757	25	46.30%	54.6
South Main Street School ( <i>Pleasantville</i> )	489	23	71.88%	13.9
Leeds Avenue School ( <i>Pleasantville</i> )	602	14	38.89%	15.4
Pleasantville Middle School ( <i>Pleasantville</i> )	756	12	26.67%	17
North Main Street School ( <i>Pleasantville</i> )	386	8	72.73%	57.1
Washington Avenue School ( <i>Pleasantville</i> )	442	3	23.08%	229
Decatur Avenue School ( <i>Pleasantville</i> )	73	3	60.00%	19
<b>Totals</b>	<b>3,505</b>	<b>88</b>	<b>44.9%</b>	<b>N/A</b>

School Name	Number of Students	Number of Sources with Lead	Percent of Taps with Lead	Tap with Highest Lead Content
Reeds Road School ( <i>Galloway Township</i> )	557	49	46.23%	32
Smithville School ( <i>Galloway Township</i> )	692	45	47.37%	20
Roland Rogers School ( <i>Galloway Township</i> )	526	39	40.21%	695
Galloway Township Middle School ( <i>Galloway Township</i> )	754	31	48.44%	28.9
Arthur Rann School ( <i>Galloway Township</i> )	648	21	43.75%	53.1
Pomona Preschool ( <i>Galloway Township</i> )	111	8	61.54%	38
<b>Totals</b>	<b>3,288</b>	<b>193</b>	<b>45.63%</b>	<b>N/A</b>

<sup>11</sup> Data for column “Number of students” gathered from Public School Review, available at <https://www.publicschoolreview.com/new-jersey/pleasantville-public-school-district/3413200-school-district> and <https://www.publicschoolreview.com/new-jersey/galloway-township-school-district/3405730-school-district>

In all likelihood, the confirmed cases of lead in school water are just the tip of the iceberg. Most schools have at least some lead in their pipes, plumbing, or fixtures. And where there is lead, there is risk of contamination. Moreover, tests — even when properly done — can fail to capture the lead hazard present. Part of this conundrum is that corrosion and breaking off of lead particles is highly variable. Multiple water tests from one tap can result in highly variable lead levels between samples.<sup>12</sup>

In addition to the inherent variability in testing, some testing techniques mask lead risks even further. In the case of Atlantic County schools, the presence of lead was determined solely from first-draw samples. First-draw samples only measure water sitting in contact with faucets and fountains; they do not measure lead concentrations in water that has been sitting in contact with lead pipes, solder and plumbing - all of which are potential sources of lead.<sup>13</sup>

Lastly, some of the labs analyzing water samples for Atlantic County schools only detected lead at 2 parts per billion (ppb) or greater, and other labs only detected lead at or above 1 ppb. Therefore, it is possible that a greater percentage of samples contained lead than is reflected in the results, as any sample that had a lead concentration below the labs' detection limits would be considered to have no lead.

### **It's time to get the lead out of Atlantic County schools.**

Clearly, data shows that lead contamination is a widespread problem at Atlantic County schools. And in some ways, that is not surprising: as long as schools have lead in their water delivery systems - without filters - our kids' water remains at risk. The scale of the problem demands preventive action at every tap used for cooking or drinking at Atlantic County schools.

To ensure safe drinking water, Atlantic County schools should:

- **Replace all fountains with water bottle/hydration stations equipped with filters certified to remove lead.** This solution eliminates one common source of lead (fountains) and captures lead coming from plumbing or pipes. Moreover, [kids tend to drink more water](#) when they have access to hydration stations, so there's an added health benefit to this solution. These hydration stations should be installed at a ratio of 1 per 100 students and staff, and have indicator lights so parents and teachers can see when the filters need to be replaced.
- **Install point of use filters** on any other taps used for drinking water, cooking or beverage preparation. Especially where under-sink filters are used, lead-bearing faucets should be replaced as well.

---

<sup>12</sup> Miguel A. Del Toral, Andrea Porter and Michael R. Schock, "Detection and Evaluation of Elevated Lead Release from Service Lines: A Field Study," Environmental Science and Technology Vol 47, No 16, July 2013, page 9304, accessible at <http://pubs.acs.org/doi/abs/10.1021/es4003636>.

<sup>13</sup> Yanna Lambrinidou, Simoni Triantafyllidou and March Edwards. "Failing Our Children: Lead in US School Drinking Water." available at <https://www.healthandenvironment.org/assets/images/Failing%20Our%20Children%202010b.pdf>



- **Shut off taps** where tests have detected lead in the water until they are fitted with lead-removing filters.
- **Get the lead out.** Lead-bearing fixtures or plumbing should be replaced over time where feasible. Lead service lines should be replaced as soon as possible for any schools that have them. New school construction or renovation should use taps and fixtures that meet the [strictest lead-free standards](#), and include adequate hydration stations for students and staff.
- After preventive steps are taken, test taps to ensure that lead levels do not exceed [1 part per billion](#), the limit recommended by the American Academy of Pediatrics.<sup>14</sup>

The good news is that Atlantic County school districts have ample resources to implement these solutions. For example, installing water bottle/hydration stations with filter systems would cost a small fraction of the just over \$100 million that Atlantic County school districts have received in eligible [American Rescue Plan Elementary and Secondary School Emergency Relief \(ARP ESSER\) funding](#). Based on the experience of school districts in [Michigan](#) and [Massachusetts](#), hydration stations with filters cost roughly \$3,000 (including installation). In addition, Michigan has reported yearly upkeep totalling \$295 (includes three filter replacements and two samplings each year to verify performance).

With around 43,000 students in Atlantic County school districts, the initial cost of filtered water bottle filling stations would be an estimated \$1.4 million - less than 2% of the county's cumulative, eligible ESSER funding. Accordingly, the cost for installation and upkeep of these filling stations in Pleasantville would be around \$105,000, less than 1% of the district's federal funding. Similarly, the cost for installation and upkeep of these filling stations in Galloway Township would be around \$99,000, just over 2% of the district's federal funding.<sup>15</sup>

Other funding is also available to New Jersey schools. The new federal infrastructure investment law includes \$200 million for schools to conduct lead reduction efforts.<sup>16</sup>

In any event, it is our moral obligation to provide New Jersey's kids with safe drinking water and it is well worth the cost, especially in light of the enormous harm lead causes to our children's health.

---

<sup>14</sup> American Academy of Pediatrics, Prevention of Childhood Lead Toxicity, (policy statement), July 2016, page 4, available at

<https://publications.aap.org/pediatrics/article/138/1/e20161493/52600/Prevention-of-Childhood-Lead-Toxicity>

<sup>15</sup> All data calculated from the New Jersey Department of Education's chart of ARP ESSER funding; total funding was derived by adding each district in Atlantic County in the column titled "Total ARP ESSER Mandatory Subgrant Award", total costs by county and district were then divided by the overall funding received to get percentages, "American Rescue Plan Elementary and Secondary School Emergency Relief (ARP ESSER) Fund Subgrant Awards as of January 26th 2022,

[https://www.nj.gov/education/esser/docs/ARP\\_ESSER%20III%20Fund%20Allocation%20Table.pdf](https://www.nj.gov/education/esser/docs/ARP_ESSER%20III%20Fund%20Allocation%20Table.pdf)

<sup>16</sup> United States Congress, Infrastructure Investment and Jobs Act. Available at

<https://www.congress.gov/bill/117th-congress/house-bill/3684/text>

## Methodology

This report analyzes lead testing data conducted by individual school districts throughout Atlantic County, New Jersey. Pursuant to state regulations, school districts were required to collect water samples from all outlets where water may be consumed, and we included all available reported test results for those water sources in our analysis.

In most cases, we were able to access this testing data from the [New Jersey Department of Education website](#). For any school district where testing data was not displayed on the state website, we reviewed and included data available on those school districts' websites as of January 20, 2022. This yielded testing data for 66 out of the 72 schools in the county.

We could not access testing data for the six remaining schools (three in Buena Regional School District and three Hammonton Public School District), as they were kept in Google drives that are not accessible to the public. We requested access to those drives but, as of January 25, 2022, the data remains publicly unavailable.

The method for compiling the data is as follows:

- Each page on the state/district website contains links to the respective school's testing data in PDF format. In order to access data, each PDF was individually downloaded.
- Once downloaded, the results from each school were manually sorted into categories of those with lead and those without, corresponding with the data reported.
- Once sorted and compiled, county-wide percentages were calculated from totals.

As there is no safe level of lead, the report presents the number of schools within the county that reported any level of lead in their drinking water.

However, some labs analyzing water samples only detected lead at 2 parts per billion (ppb) or greater, and other labs only detected lead at or above 1 ppb. Wherever the lab results reported a tap as having "less than 2 ppb" or "less than 1 ppb" of lead, we simply counted it as "zero"/not contaminated.

In addition, a deeper analysis was done on Pleasantville Public Schools and Galloway Township Public Schools by analyzing data from each tap tested at each school in the two districts. The method for compiling the data is as follows:

- Each page on both district websites contains links to the respective district's school testing data in PDF format. In order to access data, each PDF was individually downloaded.
- Once downloaded, the results from each tap at every individual school were manually sorted into categories of those with lead and those without, corresponding with the data reported.
  - Any duplicate tests from the same tap were not considered during analysis.
- Once sorted and compiled, school and district-wide percentages were calculated from totals.



As the main purpose of this report is to document the lead contamination of schools' water as measured in test results, we did not examine whether any taps were subsequently shut off, replaced, remediated or the effectiveness of that remediation. Of the 193 taps where tests confirmed lead contamination in Galloway Township schools, just 4 were disconnected and 10 had signs posted, according to the superintendent's results letters on the school district's website.<sup>17</sup>

## **Acknowledgments**

The authors wish to thank Voices for Healthy Kids and Cloud Mountain, for their contributions in funding and making this report possible. The authors also wish to thank the Black Churches Center for Justice and Equity for editorial support, as well as Danielle Melgar, Zero Out Toxics Advocate of U.S. PIRG Education Fund for data review.

The authors bear responsibility for any factual errors. Policy recommendations are those of Environment New Jersey Research & Policy Center. The views expressed in this report are those of the authors and do not necessarily reflect the views of our funders or those who provided review.

---

<sup>17</sup> Water/Lead Testing Result, Galloway Township Public Schools [http://www.gtps.k12.nj.us/lead\\_testing.htm](http://www.gtps.k12.nj.us/lead_testing.htm)