

# Education

[http://www.stltoday.com/news/local/education/report-details-lead-contamination-in-water-at-st-louis-schools/article\\_6e0bbeae-b273-58e7-8662-95281e175a3d.html](http://www.stltoday.com/news/local/education/report-details-lead-contamination-in-water-at-st-louis-schools/article_6e0bbeae-b273-58e7-8662-95281e175a3d.html)

## Report details lead contamination in water at St. Louis schools

By Elisa Crouch and Blythe Bernhard St. Louis Post-Dispatch Aug 25, 2016



**ST. LOUIS** • Water samples from 16 schools in the city school system contained lead levels that exceeded those most commonly found in homes in Flint, Mich., after a contamination crisis there, according to results released Thursday by an environmental engineering company.

In several schools, including Fanning Middle School, Langston Middle School and Gallaudet Elementary, multiple sources produced water samples with lead levels four to five times higher.

[Results from the district wide water testing effort](#) were presented to the public at the Special Administrative Board meeting. Within minutes, the three-member board unanimously approved up to \$1 million to eliminate the contamination. District staff have begun replacing the sinks, drinking fountains, and pipes causing the contamination.

"We're taking aggressive action," Superintendent Kelvin Adams said. "We are working really hard to make sure that water that students drink is safe water."

Last winter, national concerns about lead in drinking water amid the Flint crisis prompted the district to ask its environmental engineering contractor to test consumable water in every school. In March, Environmental Consultants LLC began testing the samples taken from sites that serve babies, toddlers and preschoolers at Parent Infant Interaction Programs, early childhood centers and preschool locations. Water from those locations did not contain any or enough lead to require action.

Then came testing at elementary schools, followed by middle and high schools. The testing finished before the school year began, with samples tested from 797 water sources in all 72 active school buildings.

“What we looked at were the drinking fountains,” said Jeff Faust, managing principal of Environmental Consultants LLC. “We went to the cafeterias and kitchens and sampled the sinks, the hand washing and dish washing stations. We also went to the teachers’ lounge where we sampled the sinks, the water used to make coffee.”

Samples were “first draw” samples, meaning the water had been in the pipes for at least six hours prior to sampling to get the highest readings possible.

“They wanted to know: How bad can this problem be?” Faust said.

The Environmental Protection Agency requires action to be taken if lead levels in drinking water reach 15 parts per billion. St. Louis school officials made 10 parts per billion their action level — turning off any water source that met or exceeded that amount.

At least one sink or drinking fountain was shut off in 32 buildings. Bottled water is being distributed at 13 schools where a significant number of drinking fountains are turned off or inoperable.

First draw readings above 30 parts per billion are considered a serious lead contamination problem, according to researchers at Virginia Tech who tested water samples from homes in Flint last year after corrosive water caused pipes to leach lead. However, no level of lead exposure is safe. In Flint, 90 percent of the water samples from homes had lead measures of 27 parts per billion or less.

Sixteen schools in St. Louis had water samples with levels at 30 parts per billion, with the highest readings between 200 and 300.

The highest levels came from samples taken from a third-floor drinking fountain at Beaumont High School; first- and second-floor drinking fountains at Fanning Middle School; two first-floor drinking fountains at Gallaudet Elementary School; two kitchen sinks at Langston Middle School; and a kitchen sink and a storage room drinking fountain at Northwest High School.

Any children younger than 6 or pregnant women should consider having their blood tested for lead if they were exposed to water from those sources, according to the Flint researchers. Parents of older children should watch for weight loss, loss of appetite or behavioral changes in their children and consider testing.

Dr. Sandeep Rohatgi, a Mercy Kids pediatrician, called the water test results worrisome and thinks the problem could be more widespread throughout the region.

“Especially if it’s in a school, that is very concerning,” Rohatgi said. “We expect our kids to be safe there and not exposed to dangerous elements like lead.”

Children in the affected schools in St. Louis should have their blood lead levels tested, he recommended. The city health department is offering the tests to students and pregnant women for free. The district will have on-site lead testing at affected schools if parents request it.

[The majority of school districts in the St. Louis Area have announced intentions to test](#) or are scheduled to do them.

They include Clayton, Parkway, University City, Maplewood-Richmond Heights, Rockwood, Ladue, Pattonville, Francis Howell, Jennings, Ritenour, Hazelwood and Affton. Confluence Academies, a network of charter schools in the city, also has plans to

test. Testing is underway in Ferguson-Florissant and at some Catholic schools. Normandy tested its water last spring and found no contamination.

In St. Louis, water at district administration buildings will be tested this weekend.

So far in the affected schools, 18 sink faucets have been replaced, said Roger CayCe, the district's superintendent of operations. Water samples from 11 of them have lead levels below the district's action level, he said. Water from two of the new sinks remain above acceptable levels. In those cases, operations crews will begin replacing pipes to eliminate the source of contamination.

The percentage of young children with lead poisoning in St. Louis has been steadily declining for decades to 9 percent in 2014. The primary threat in St. Louis remains dust from lead-based paints, which were commonly used before 1978. St. Louis Public Schools has remediated all lead paint in classrooms that serve children under the age of 7.

Babies and young children are most prone to the irreversible damage caused by ingesting lead. Their growing bodies and brains absorb lead more than older children and adults.

St. Louis municipal tap water is tested regularly for lead and is found to be safe. Lead enters drinking water on the premises, when service pipes containing lead corrode. Occasionally, lead leaches from solder, brass valves and components found in faucets and drinking fountains.

The district's testing efforts will continue even after the sources of contamination are eliminated. CayCe said the district will retest sources that had levels above 10 parts per billion annually. All other water sources will be retested every three years.

"We still have old buildings," Faust said. "We still have the potential for lead. Over time corrosion is only going to continue."



Districts move to test water for lead after elevated levels found in some St. Louis schools





How toxic is lead-tainted tap water?





Editorial: Addressing lead problem in St. Louis schools must take top priority

## Highest Lead Levels

St. Louis Public Schools has tested 797 water sources, such as drinking fountains and sinks, for lead. The following are water sources with lead levels that exceed 40 parts per billion, which is twice the federal threshold for removing a water fixture from service.

- 280 ppb • Fanning Middle, fountain, second floor north
- 243 ppb • Gateway STEM High, kitchen sink north by restroom
- 228 ppb • Langston Elementary, kitchen sink, south
- 202 ppb • Northwest High, kitchen sink, southern back
- 168 ppb • Langston Elementary, kitchen sink, main
- 154 ppb • Beaumont High, fountain near room 324
- 148 ppb • Fanning Middle, fountain, first floor north
- 115 ppb • Gallaudet Elementary, fountain near room 106
- 109 ppb • Northwest High, fountain PE storage room
- 107 ppb • Gallaudet Elementary, fountain near room 103
- 97.1 ppb • Northwest High, kitchen sink, southeast
- 94.2 ppb • Roosevelt High, kitchen sink, central east
- 72.3 ppb • Roosevelt High, fountain, first floor south, east
- 67.8 ppb • Laclede Elementary, fountain, basement, southwest wall

64.3 ppb • Shenandoah Elementary, fountain, first floor west

63 ppb • Langston Elementary, sink, room 318

62.3 ppb • Sigel Elementary, fountain, first floor east

61.3 ppb • Shenandoah Elementary, fountain, second floor west

55.1 ppb • Clyde C. Miller Academy, sink, room 127, center aisle south

54.7 ppb • Beaumont High, fountain near room 324

45.9 ppb • Clyde C. Miller Academy, kitchen sink, center

45.4 ppb • Gallaudet Elementary, music room sink

43.9 ppb • Clay Elementary, fountain near room 102

43.5 ppb • Busch Middle, fountain near room 127

40.7 ppb • Beaumont High, fountain near room 215

Source: St. Louis Public Schools, Environmental Consultants, LLC

## **Elisa Crouch**

Elisa Crouch is a reporter for the St. Louis Post-Dispatch.