



LOCAL NEWS

Risk of lead exposure in Ordway water low, local experts say

By Chris Henry, chenry@kitsapsun.com

March 11, 2016

BAINBRIDGE ISLAND — The day after Bainbridge Island School District issued an advisory about elevated lead levels in the water at Ordway Elementary School, the Bainbridge Pediatrics clinic was slammed.

"The next morning, our phone was ringing off the hook," said Dr. Fred Walters, a pediatrician with the clinic. "And I apologize for anyone who couldn't get through."

The district on Feb. 29 told parents it [was using bottled water](#) at the school after voluntary tests of faucets showed about one-third had lead levels that the EPA says should trigger replacement of fixtures or other mitigating action.

Walters said parents' concern was understandable, but given information the school district and health officials have gathered over the past week and a half, he believes the risk of exposure is low.

"I think the information we've received so far is very reassuring," said Walter, who was part of a panel of environmental and child health experts at a presentation hosted Thursday by the district at Bainbridge High School.

Some parents have asked that their children's blood be [tested for lead](#), Walters said. Of the 20 test results received back to date, all have been at or below one microgram of lead per deciliter. Blood levels above 5 micrograms per deciliter are considered "high," according to the state Health Department.

Experts on the panel said that paint in older homes is a more common source of lead exposure than water.

Unlike municipal water providers, schools and child care facilities are not now required to test their water for lead. A new law scheduled to go into effect in 2017 will change that, calling for regular testing and action if faucets test at or above 20 parts per billion of lead. Right now the 20 ppb threshold is offered as guidance only, under the federal Environmental Protection Act.

"Action" could involve taking a faucet out of service, installing auto-flush systems or replacing the faucet, said Katherine Rottell, an engineer with the state Department of Health's Office of Drinking Water.

Implementation of the law, passed in 2009, has been delayed to 2017 since the Legislature hasn't provided schools money to carry it out.

The district began water testing in December to try to get ahead of the curve, but the methods it used may have given inaccurately high readings, said Melinda Friedman of Confluence Engineering Group LLC, consultants recently hired by the district to retest fixtures at Ordway and other schools.

Municipal water provided to schools by the city of Bainbridge Island and Kitsap Public Utility District is not suspected as the source of elevated lead at Ordway. [According to local health experts](#), both utilities are in compliance with the state's Lead and Copper Rule, which regulates public water purveyors.

Lead leaches into drinking water in soluble form from pipes and plumbing components containing lead, Friedman explained. Small particles of lead can be present through corrosion. Both processes are caused by reaction of water chemistry with piping materials. Water utilities monitor water chemistry and use corrosion controlling technology to minimize release of lead into the water.

A 1986 lead "ban" dramatically reduced the amount of lead allowed in pipes, joints and solder, and a new federal law in 2014 implemented more stringent regulations. Lead in service lines from water mains to buildings has largely been eliminated in Washington state, Friedman said, but plumbing components in older buildings remains a potential source of contamination under certain conditions.

Why were so many faucets at Ordway found with elevated levels of lead? Friedman and her team are still working on that, but they think they can explain why 21 of 23 faucets at the school that initially tested OK, later showed elevated levels of lead.

"There can be huge variability in sample results collected between schools, from within the same school and even from the same fixture," Friedman said.

The district sampled taps from six schools in December. The school water testing protocol that will be mandatory in 2017 calls for letting pipes sit for at least eight hours before testing. Friedman believes the fact testing was done over winter break when pipes in some cases had sat much longer, gave exceptionally high results that don't reflect the amount of lead to which children are typically exposed when school is in session.

During the first round of testing, district officials found lead levels above the 20 ppb "action level" in eight faucets: Five at Ordway, two at Commodore Options School and one at Bainbridge High School. Four water fountains at Ordway and one at the high school also tested high.

The district took steps to correct the problem fixtures by removing aerators and flushing, and by replacing some fixtures and supply lines. When one faucet at Ordway remained high, the district performed "building wide, high velocity flushing for 16 hours. Friedman says that could have stirred up lead particles in the system that normally wouldn't be a problem.

When test results came back in February showing multiple fixtures above the action threshold, the district put all fixtures at the school out of service and went to bottled water.

Confluence Engineering has begun retesting all fixtures at the schools initially tested. Other schools will be tested later. Fixing the problem will be done fixture by fixture, taking into account all the variables, Friedman said. In cases where the source of lead is traced to pipes inside the walls, the solution could be to open the wall and replace the pipe. Friedman said she is confident the sources of lead can be found.

Superintendent Faith Chapel said in hindsight, she would have notified parents back in January when the first batch of results came in "given the high degree of interest and the concerns."

Chapel responded to a suggestion the district had delayed its announcement until after the Feb. 9 school construction bond by saying there was no connection.

"In my opinion, if we had communicated about this, it probably would have helped make the case for the bond in all honesty," Chapel said.

Although Ordway is not slated for replacement, the bond contains funding for major renovations, including plumbing, at Ordway and Commodore, two of the older schools in the district.

Find this article at:

<http://www.kitsapsun.com/news/local/risk-of-lead-exposure-in-ordway-water-low-local-experts-say-2dcafabf-98f5-534a-e053-0100007f6aba-371859231.html>

Check the box to include the list of links referenced in the article.