Analyze This: Real data on lead levels in school drinking water

Monitoring for lead (as in these data) is an important part of identifying risks to health.

by Lillian Steenblik Hwang

Water that appears clear and clean can be unsafe if it contains high amounts of lead, a toxic metal.
Image via iStock.com/Joseph Thomas Photography

You turn on the faucet to get a glass of water. The liquid comes out clear and odorless. It's safe, right? Maybe not. In some places, such as Flint, Michigan, water coming out of the tap may contain lead, a toxic heavy metal. Finding it can be hard because lead-tainted water has no unusual color, odor or taste. But once inside the body, that lead can damage nerves—including those in your brain!

There are many ways that lead can enter drinking water. The most common way is from the pipes that connect a home or school to a town's main water-supply lines. In many cities, there are still lots of old pipes made of lead. Lead also can be found in the material used to seal connections between pipes. (That sealant has been banned but may still exist in some pipes.) The metal in many faucets, fountains and water outlets also may contain lead.

The best way to avoid lead poisoning is to avoid exposure. While lead in water can't be seen or smelled, there are tests to detect it. If those tests reveal that the water has a lead level higher than 15 parts per billion (ppb), the U.S. Environmental Protection Agency (EPA) recommends that people take action to reduce the contaminant. But even low levels are not safe—just safer.

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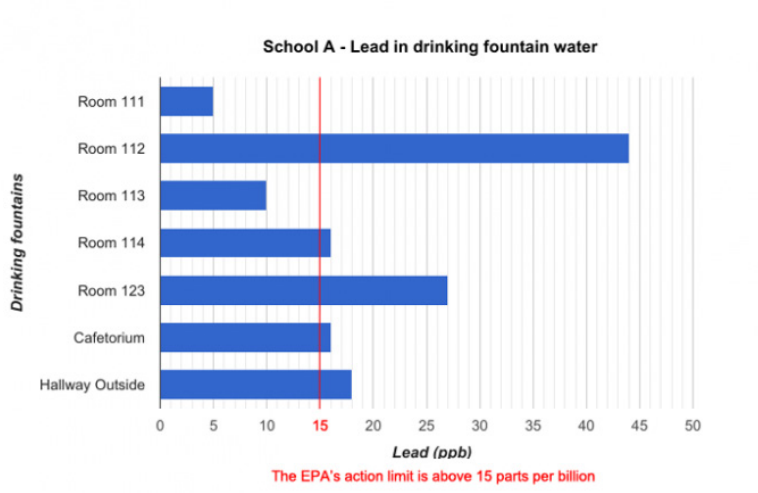
School districts around the country regularly test their water for lead. Last year, for instance, Portland Public Schools in Oregon had all of their buildings tested. Preliminary data from these tests are now available online. Some of the data from three schools are graphed below. The data graphed include six or seven locations from each of three Portland schools. The school district tested nearly 100 buildings.



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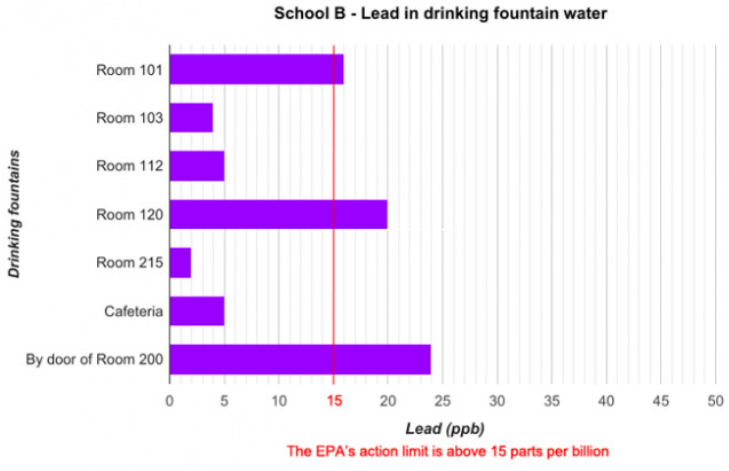

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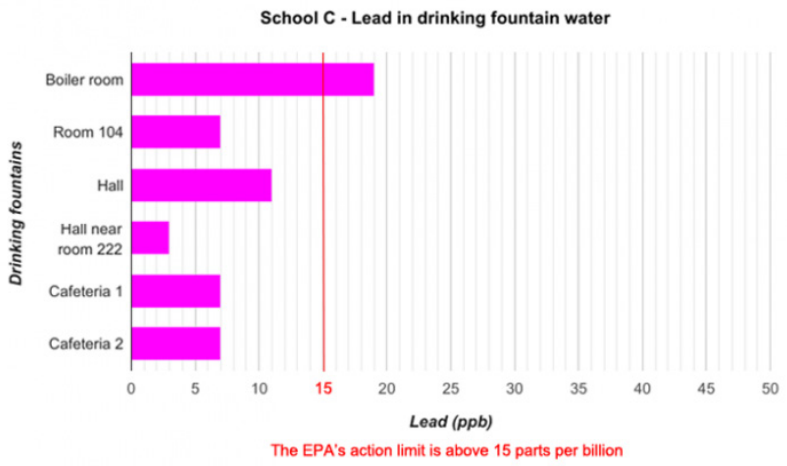

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