

Water Testing in Residence Halls

William & Mary's Environment, Health and Safety (EH&S) office performed a quality assurance assessment of drinking water in residence halls over winter break.

Although the results of that testing showed no lead present in most of the 90 samples that were taken, two locations in Jefferson Hall — the sink faucets in the third-floor kitchen and the first-floor head resident apartment kitchen — were found to have lead levels above the Environmental Protection Agency's regulatory (threshold) limit of 0.05 milligrams per liter (mg/L).

Those levels were found in water drawn from the tap after sitting in the building distribution system for an extended period when the university was closed during winter break. The university tested the water at this time — after it had been sitting in the building's pipes over the break — because we wanted to make sure our results reflected the most likely scenario for higher lead levels.

Follow-up samples from the two locations, taken after running the water for two minutes, showed significantly reduced levels of lead. In the third-floor kitchen, it was well below the EPA's drinking water limit, and in the first-floor kitchen, the lead was no longer detectable.

While there is no immediate health risk, we are asking students in this residence hall to take some precautions. Below are answers to questions you might have.

What happened? What is the concern?

Two water samples from one of our residence halls — Jefferson Hall — initially showed what the Environmental Protection Agency terms as a “threshold level” of lead. A second sampling, after flushing, found only one location above action level and all other undetectable. It is important to note that this level is not in excess or violation of the standards in the Safe Drinking Water Act

What is the cause of the lead in the water?

We need to do some more testing. Work was done over the break in the impacted residence hall on the water distribution system which had the water completely shut off in that building for a period of time. That in-and-of-itself may

be the culprit. Our follow-up testing, which will begin next week, will provide more information.

What will be necessary to fix the lead levels?

Until we do the additional testing it will be hard to say. We don't have a health risk situation, but as a precaution, we have asked the residents of that building to run the water cold before they consume it (drink or cook). And for drinking or cooking, to heat the water on a stove if they need hot water. Using hot water from the system is fine for showers.

Why did you test? Was there a complaint?

The testing was done voluntarily/proactively. Upon seeing news reports about water quality on college campuses in other parts of the country, residence life staff at William & Mary asked the university's EH&S office to conduct sampling in our residence halls over winter break.

We use city water on campus and Williamsburg tests their water annually, which we are aware of. We had not tested specifically in our buildings and thought it a good idea to do so.

What is my health risk?

In this situation, next to none. As we know, long-term exposure to high-levels of lead can pose health risks, but that is not the case here. According to the CDC, most studies show that exposure to lead-contaminated water alone would not be likely to elevate blood lead levels in most adults. More on these studies is available on the CDC's website.

Have the students been notified?

Yes. We sent a message to all residents of the building impacted and to the student body at large.

What are you doing about the lead levels?

We will be re-sampling in the impacted residence hall and then take the appropriate next action based on those results. In the interim, we are asking residents in the impacted building to run the water cold before they consume it (drink or cook). And for drinking or cooking, to heat the water on a stove if they need hot water. Using hot water from the system is fine for showers.

What do the terms “actionable level” and “threshold level” mean?

These terms/levels are determined by the EPA. An “actionable level” of lead is one above 0.015 mg/L and a “threshold level” is one above 0.05 mg/L. Lead levels above “threshold level” are not allowed by the EPA and require corrective action – which includes determining the source of the lead. For levels in the actionable range EPA advises that steps be taken to reduce the lead level in the tap water as much as possible.

How many samples were taken? And when?

William & Mary’s EH&S Office collected 90 water samples from across the residence halls at the end of Winter Break (early January). Twenty-four different buildings were tested over a two-day period (Jan. 11 & 12).

When did you get the results?

EH&S received the results this week.

Is the water safe to use? Drink?

Yes, with some precautions. We are asking the residence of that dorm to run the water from the tap until it is cold before they drink the water or cook with it.

Where can I find additional information?

Additional information may be found on the CDC website, <https://www.cdc.gov/nceh/lead/tips/water.htm>