



To: Occupants of Wilson Library
 From: Catherine Brennan, Executive Director of Environment, Health and Safety
 Date: Aug. 30, 2022
 Re: Lead in Drinking Fountains

Occupants of Wilson Library,

Environment, Health and Safety would like to inform you that three drinking fountains have been removed from service in your building due to detectable levels of lead in the water of those three fountains. There are signs on the fountains directing people not to use them.

The University did preliminary testing of 16 drinking fixtures across the building and three fountains were found to have detectable levels of lead.

The testing procedure – The University used the Environmental Protection Agency (EPA) sampling protocol for testing fixtures in K-12 schools. This protocol involves collecting a first draw sample in the morning, followed by a flushing protocol to clear stagnant water from the lines. Environment, Health and Safety (EHS) personnel returned in the afternoon to collect another sample for comparison with the first draw sample to determine the effect of flushing. EHS compared the results to the EPA action level of 15 parts per billion (ppb).

Third floor historic drinking fountains - The University’s testing found detectable levels in two historic drinking fountains from the early 1900s. The first draw sample test the University ran came back with 15.8 parts per billion (ppb) for the drinking fountain on the right and 3.5 ppb for the drinking fountain on the left. Then they ran the flushing protocol test, which resulted in 9 ppb for the drinking fountain on the right and 3.1 ppb from the drinking fountain on the left.

Second floor drinking fountain - The third drinking fountain is on the second floor located adjacent to room 506. The University’s first test for this one came back non detectable. However, the second flushing protocol test of this drinking fountain came back with a result of 185 ppb. The University conducted a third test and got a result of 193 ppb.

Location	First Draw (ppb)	2 nd Sample After Flushing (ppb)	EPA Action Level (ppb)
3 rd Floor Historic drinking fountain (right side of hallway)	15.8	9	15
3 rd Floor Historic drinking fountain (left side of hallway)	3.5	3.1	
2 nd Floor drinking fountain (located adjacent to room 506)	Non-Detectable	185*	

* The University requested the lab reanalyze this sample which the second result was 193 ppb.



The investigation into the cause of detectable levels of lead in the three fixtures is on-going but in general lead in drinking water can be attributed to three sources: lead pipe, lead solder and lead brass fittings. Lead can enter drinking water from these sources due to corrosion of these plumbing materials.

For reference purposes, 0.015 mg/L, or 15 ppb, is the level at which the EPA requires public water systems to deliver education materials and to take action to reduce the concentration of lead in the water. The level is based on what an infant could ingest at 1 liter per day without causing elevated blood lead levels. It would take much higher lead levels in water to cause elevated blood lead levels in most adults.

Information about the effects of lead in water can be found on the [CDC's website](#) and on the [EPA's website](#). Questions about the ongoing investigation can be directed to the Environment, Health and Safety Department at 919-962-5507. If you are an employee who is pregnant or breast feeding and have further concerns, please contact the University Employee Occupational Health Clinic at 919-966-9119.

Thank you,

Catherine Brennan

Executive Director of Environment, Health and Safety

UNC-Chapel Hill