Wright State University is a public water system (PWS) responsible for providing drinking water that meets state and federal standards.

Wright State's University water system collected 40 tap samples for lead and copper analysis on dates between September 24-28, 2024. All 40 tap water samples had lead levels less than the federal action level 15.5 parts per billion (ppb). The levels of lead reported at these locations ranged from <2.0 to 4.4 ppb. Lead can cause serious health problems, especially for pregnant women and young children. Please read this information closely to see what you can do to reduce lead in your drinking water.

The table lists the lead content results for the forty (40) routine compliance samples collected between September 24-28, 2024.

What Does This Mean?

Under the authority of the Safe Drinking Water Act, the U.S. Environmental Protection Agency (EPA) established the action level for lead in drinking water at $15.5 \mu g/L$. This means PWSs must ensure that water from taps used for human consumption do not exceed this level in at least 90 percent of the sites sampled (90th percentile value). The action level is the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a PWS must follow.

In 2018, Ohio EPA established the threshold level for lead in drinking water at 15.5 μ g/L. The lead threshold level is the concentration of lead in an individual tap water sample which, if exceeded, triggers additional notification requirements for those served by the tap sampled.

Because lead may pose serious health risks, US EPA established a Maximum Contaminant Level Goal (MCLG) of zero for lead. The MCLG is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

What are the Health Effects of Lead?

Lead can cause serious health problems if too much enters your body from drinking water or other sources. It can cause damage to the brain and kidneys, and can interfere with the production of red blood cells that carry oxygen to all parts of your body. The greatest risk of lead exposure is to infants, young children, and pregnant women. Scientists have linked the effects of lead on the brain with lowered IQ in children. Adults with kidney problems and high blood pressure can be affected by low levels of lead more than healthy adults. Lead is stored in the bones, and it can be released later in life. During pregnancy, the child receives lead from the mother's bones, which may affect brain development.

Where Can I Get Health Screenings and Testing of Blood Lead Levels?

Health Screenings and testing of blood lead levels are available through your personal health care provider. The Physician can determine if an exposure warrants testing and can be available to interpreting the results.

Assistance is available at:

Student Health Services Wright State Physicians Health Center 725 University Boulevard Fairborn, OH 45324 937-245-7200

Greene County Public Health, the Ohio Department of Health (https://odh.ohio.gov/wps/portal/gov/odh/know-ourprograms/Childhood-Lead-Poisoning/about-lead/) and the Ohio EPA (https://epa.ohio.gov/divisions-and-offices/drinking-andground-waters/public-water-systems/lead-and-copper-in-publicwater-systems) provide additional information about lead levels.

What Can I Do to Reduce Exposure to Lead if Found in My Drinking Water

- Run your water to flush out lead. If water has not been used for several hours, run water for thirty seconds to three minutes before using it for drinking or cooking. This helps flush any lead in the water that may have been leached from the plumbing.
- Use cold water for cooking and preparing baby formula. Do not cook with, drink water, or make baby formula from the hot water tap. Lead dissolves more easily in hot water.
- **Do not boil water to remove lead.** Boiling water will not reduce lead.
- You may wish to test your water for lead at additional locations in your home.
- Identify if your plumbing fixtures contain lead and consider replacing them when appropriate.

What are the Sources of Lead?

Lead is a common, natural, toxic, and often useful metal that was used for years in products found around the home. It can be found throughout the environment in lead-based paint, air, soil, household dust, and certain types of pottery, porcelain, and pewter. Although most lead exposure, especially in children, occurs when paint chips are ingested, dust inhaled, or absorbed from contaminated soil, the U.S. EPA estimates that 10 to 20 percent of human exposure of lead may come from lead in drinking water.

Lead is unusual among drinking water contaminants in that it seldom occurs naturally in water supplies like rivers and lakes. Lead enters drinking water primarily as a result of corrosion, or wearing away, of materials containing lead in the plumbing. Buildings built prior to 1986 are more likely to have lead pipes, fixtures, and solder. New buildings can also be at risk, since even legally 'lead-free' plumbing may contain up to 8 percent lead. The most common problem is with brass or chrome-plated brass fixtures which can leach significant amounts of lead into water, especially hot water.

For More Information

- Contact Marjorie Markopoulos, PhD, Director of Environmental Health and Safety at 927-775-2797 or <u>ehs@wright.edu</u>;
- Visit US EPA's Web site at <u>www.epa.gov/lead;</u>
- Call the National Lead Information Center at 800-424-LEAD; or
- Contact your health care provider.

Lead and copper enter drinking water from the corrosion of service line and household plumbing fixtures; therefore, reducing corrosivity is the primary method for reducing the health risk of lead and copper in drinking water. To measure the corrosivity of drinking water in contact with service lines and household plumbing, federal and state rules require samples be taken at residential taps or taps typically used for water consumption within the distribution system.

The EPA requires that the first-draw lead and copper samples are collected from Tier 1 sample sites, which are single family structures that contain copper pipes and lead solder installed between January 1, 1983 and December 1988 or contain lead pipes with lead service I lines. Because Wright State does not have Tier 1 locations, Tier 2 sampling sites are used. Tier 2 sampling sites are buildings that contain copper pipes with lead solder installed between January 1, 1983 and December 31, 1988. These buildings include Library Annex (LX), Math & Micro (MM), Health Sciences (HS), and a portion of Child Development Center (CDC or MiniU).

Table 1.Lead and Copper (LC) Sample Monitoring Plan (SMP) Results

| # | SMP ID | Tap Location | Date | Cu, μg/L | Pb, μg/L | Was tap water lead content less than 15.5 ppb or 15.5 µg/L? |
|----------|----------------|--|----------------------------------|----------|--------------|--|
| 1 | LC266 | CDC 120 - RR - MENS | 09/28/24 14:30 | 46 | <2.0 | Yes |
| 2 | LC267 | CDC 124 - RR - WOMENS | 09/28/24 14:29 | 57 | <2.0 | Yes |
| 3 | LC228 | CDC 131 - SINK - HAND | 09/28/24 14:22 | 92 | <2.0 | Yes |
| 4 | LC308 | CDC 131 - SINK - WASH | 09/28/24 14:23 | 71 | <2.0 | Yes |
| 5 | LC261 | CDC 134 - PINK - DF | 09/28/24 14:23 | 39 | <2.0 | Yes |
| 6 | LC256 | CDC 134 - PINK - SINK | 09/28/24 14:22 | 58 | <2.0 | Yes |
| 7 | LC263 | CDC 156 - RED - DF | 09/28/24 14:28 | 49 | <2.0 | Yes |
| 8 | LC258 | CDC 156 - RED - SINK | 09/28/24 14:27 | 59 | <2.0 | Yes |
| 9 | LC262 | CDC 157 - BLUE - DF | 09/28/24 14:25 | 44 | <2.0 | Yes |
| 10 | LC257 | CDC 157 - BLUE - SINK | 09/28/24 14:24 | 55 | <2.0 | Yes |
| 11 | LC264 | CDC 172 - PURPLE - DF | 09/28/24 14:27 | 31 | <2.0 | Yes |
| 12 | LC259 | CDC 172 - PURPLE- SINK | 09/28/24 14:27 | 51 | <2.0 | Yes |
| 13 | LC265 | CDC 173 - RAINBOW - DF | 09/28/24 14:25 | 40 | <2.0 | Yes |
| 14 | LC260 | CDC 173 - RAINBOW - SINK | 09/28/24 14:24 | 48 | <2.0 | Yes |
| 15 | LC310 | HS 059 - RR - WOMENS | 09/25/24 05:12 | 97 | <2.0 | Yes |
| 16 | LC270 | HS 120 - RR - MENS - RIGHT | 09/25/24 05:00 | 94 | <2.0 | Yes |
| 17 | LC213 | HS 120 - RR - MENS - LEFT | 09/26/24 06:05 | 83 | <2.0 | Yes |
| 18 | LC314 | HS 122 - RR - WOMENS - RIGHT | 09/25/24 05:03 | 100 | <2.0 | Yes |
| 19 | LC272 | HS 224 - RR - LEFT | 09/25/24 04:51 | 97 | <2.0 | Yes |
| 20 | LC273 | HS 226 - RR - LEFT | 09/25/24 04:55 | 96 | <2.0 | Yes |
| 21 | LC302 | LX 002 - RR - WOMENS - RIGHT | 09/25/24 05:27 | 75 | <2.0 | Yes |
| 22 | LC248 | LX 004 - RR - MENS - LEFT | 09/25/24 05:32 | 74 | <2.0 | Yes |
| 23 | LC306 | LX 049 - RR - MENS - RIGHT | 09/25/24 05:20 | 90 | <2.0 | Yes |
| 24 | LC307 | LX 053 - RR - WOMENS - RIGHT | 09/25/24 05:23 | 72 | <2.0 | Yes |
| 25 | LC286 | MM 003A - SINK | 09/26/24 05:01 | 120 | <2.0 | Yes |
| 26 | LC276 | MM 023 - RR - WOMENS - LEFT | 09/26/24 05:07 | 86 | <2.0 | Yes |
| 27 | LC288 | MM 023 - RR - WOMENS - RIGHT | 09/26/24 05:09 | 50 | <2.0 | Yes |
| 28 | LC291 | MM 025 - RR - MENS - LEFT | 09/26/24 05:15 | 61 | <2.0 | Yes |
| 29 | LC290 | MM 025 - RR - MENS - MIDDLE | 09/26/24 22:27 | 82 | <2.0 | Yes |
| 30 | LC294 | MM 147 - RR - WOMENS - LEFT | 09/26/24 05:22 | 54 | <2.0 | Yes |
| 31 | LC296 | MM 147 - RR - WOMENS - RIGHT | 09/26/24 05:24 | 38 | <2.0 | Yes |
| 32 33 | LC242 LC292 | MM 151 - RR - MENS - LEFT MM 151 - RR - MENS - MIDDLE | 09/26/24 05:30 09/26/24 05:28 | 63 62 | <2.0 <2.0 | Yes Yes |
| 33 34 | LC292 LC278 | | 09/26/24 05:36 | 120 | <2.0 | Yes |
| 35 | LC278 | MM 222 - SINK MM 247 - RR - LEFT | 09/24/24 05:41 | 78 | <2.0 | Yes |
| 35 36 | LC299 LC300 | MM 247 - RR - LEFT MM 247 - RR - MIDDLE | 09/26/24 05:40 | 70 | <2.0 | Yes |
| 37 | LC218 | MM 247 - RR - MIDDLE MM 251 - RR - LEFT | 09/26/24 05:47 | 54 | <2.0 | Yes |
| 38 | LC218 LC298 | MM 251 - RR - RIGHT | 09/26/24 05:45 | 84 | <2.0 | Yes |
| 39 | LC298 | LX 004 - RR - MENS - MIDDLE | 09/25/24 05:34 | 69 | 2.2 | Yes |
| 40 | LC262 | HS 005 - SINK | 09/25/24 05:10 | 290 | 4.4 | Yes |
| | | rs than: ug/l maans micrograms por Liter: CDC maans Ch | | | | |

Notes: "<" means less than; µg/L means micrograms per Liter; CDC means Child Development Center; HS means Health Sciences; LX means Library Annex; MM means Math & Micro; RR means rest room; DF means drinking fountain; Cu means copper; Pb means lead.