



Your Partner for a Healthy Community

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FACT SHEET
on
Lead Exposures from Drinking Water at
Caroline Elementary School
Slaterville Springs, N.Y.
February 2016

The purpose of this fact sheet is to share information regarding lead exposures and lead sampling results for the Caroline Elementary School water system. Samples collected previously in 2012, 2009 and 2006 had no results exceeding the action level. In late August 2015, when the water system was not being used, five drinking water samples from Caroline were analyzed for Lead. When water stands in the pipes unused for very long periods of time (many days), more lead can dissolve into the drinking water, leading to the elevated August test result. The results for one of the samples exceeded the action level of 15 parts per billion (ppb).

As required by Tompkins County Health Department, ten samples were collected in January of 2016 – 5 from the same locations and 5 from new locations. All results were significantly lower. Only one sample (at 21 ppb) exceeded the action level of 15 ppb. The results from the January sampling are more representative of normal conditions when water is being used on a more regular basis.

Room Tested	January 2016 Results	August 2015 Results
Kitchen	3.3 ppb	4.6 ppb
Nurse 70	3.7 ppb	4.9 ppb
Room A16	6.1 ppb	10 ppb
Room A46	3.7 ppb	3.5 ppb
Room 27	21 ppb	140 ppb
Room 38	7.7 ppb	Not Tested in August
Room 19 DW Fountain	2.8 ppb	Not Tested in August
Room 13 DW Fountain	5.5 ppb	Not Tested in August
Room 53 DW Fountain	15 ppb	Not Tested in August
DW Fountain 58/50	0.1 ppb	Not Tested in August

Next Steps

Because of the elevated August results, state and federal regulations require Caroline Elementary School to conduct lead testing again in 6 months. However, ICSD is committed to testing all water fountains and sinks that are used for drinking or cooking during the next 6 months. The Ithaca City School District has replaced the drinking water fountain near Room 53 (where the result was 15 ppb when tested in January). The fixtures and piping for the sink in Room 27, the other location with a slightly elevated January test result, has also been replaced. Both the drinking fountain and the sink will be re-sampled during the first weeks of February. The Tompkins County Health Department and the Ithaca City School District will be monitoring future sample results to determine if additional action is needed.

General Information on Lead

Lead is regulated in New York State public drinking water supplies through the NYS State Sanitary Code (SSC) and under the federal Safe Drinking Water Act. The Lead and Copper Rule (LCR) was enacted by the EPA to minimize the corrosion of lead and copper in water supplied by public water systems. The LCR established an action level of 15 ppb for lead. When more than 10 percent of the samples from a given set of samples exceed the action level, the regulations require that some form of action must be taken, such as public education, water monitoring, water treatment, or lead service line replacement.

Lead can be found throughout the environment in lead-based paint, air, soil, household dust, food, certain types of pottery, porcelain and pewter, and water. Lead can pose a significant risk to your health if too much of it enters your body. Lead builds up in the body over many years and for people who have had substantial exposure, it can cause damage to the brain, red blood cells and kidneys. The greatest risk is to young children and pregnant women. In addition, a child at play often comes into contact with sources of lead contamination—like dirt and dust—that rarely affect an adult. It is important to wash children's hands and toys often, and to try to make sure they only put food in their mouths.

Lead Exposure Risk for Children

Young children (i.e., under six years of age), and pregnant women are more sensitive than other adults to the health effects from lead exposure. Parents should minimize their child's overall exposure to lead. Paint is by far the primary and most significant source of lead exposure for most children. Although drinking water can contribute to a child's lead burden; it is not likely to cause a substantial increase. Lead in drinking water is primarily a concern for infants whose total daily consumption is formula and juice made with tap water. Parents that use their home water supplies for formula or juice preparation for infants should use cold water for food and beverage preparation and run taps for 30 – 60 seconds after water has been standing in pipes for 6 hours or more. Lead is not absorbed through skin during activities such as hand washing, bathing or showering.

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 the corrosion, or wearing away, of materials containing lead in the water distribution system and household plumbing. These materials include lead-based solder used to join copper pipe, brass and chrome-plated brass faucets, and in some

cases, pipes made of lead that connect houses and buildings to water mains (service lines). Corrosion is accelerated by water characteristics such as low pH (acidity), low mineral content and high temperature. Corrosion is a continuous process that is affected by the amount of time that water is in contact with plumbing pipes. For example, in a school's water systems, lead levels may increase when water in the plumbing system stands overnight, over the weekend, and throughout term breaks when there are no classes. In 1986, Congress banned the use of solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes and other plumbing materials to 8.0%.

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