



# CHECKING FOR LEAD IN DRINKING WATER

PUBLIC INFORMATION BULLETIN FROM BEDFORD PUBLIC SCHOOLS—SMITH ROAD ELEMENTARY SCHOOL

February 2017

*Educating for Life!*

Bedford Public Schools is focused on health and safety in our schools. We have conducted random samples of the drinking water at our facilities to check for lead. We wish to share this educational information about lead in drinking water as well as the results received from National Testing Laboratories, Ltd. for:

## SMITH ROAD ELEMENTARY SCHOOL

ROOM	STRUCTURE	LEVEL DETECTED (parts per billion or ppb)
Cafeteria	Sink faucet	7
Hall outside Room 25 near Restrooms	Newer Elkay drinking fountain	3
Room 19	Sink faucet	None detected
Room 18	Countertop drinking fountain	1
Hall outside Room 5 and 12	Elkay drinking fountain	2
Room 9	Countertop drinking fountain	None detected
Hall outside Rooms 7 and 10 near Restrooms	Elkay drinking fountain	None detected
Hall outside Room 2 near Restrooms	Recessed drinking fountain	1
Gym	Recessed drinking fountain	11
Northwest Room off Gym	Sink Faucet	5
Staff Lounge	Sink faucet	21

■ Above 15 ppb   ■ Above 5 ppb   □ Below 5 ppb

**ABOUT THE RESULTS:** The EPA sets an action level for lead in Public Water Systems (PWS) of 15 parts per billion (ppb), or 0.015 milligrams of lead per liter of water (mg/L). This regulation would be for the supplier of our water. The EPA has a separate, recommended, action level for lead in drinking water of 20 parts per billion (ppb). This number would be for the point of consumption, for example, drinking fountains and sink faucets used for drinking and cooking. These EPA levels for lead are not a health standard. For this reason, the Michigan Department of Environmental Quality (MDEQ) is recommending that schools take action to lower the lead in their drinking water if the test results are over 5 ppb, which is the bottled water standard. Bedford Public School is not legally required to test for lead, but has made the decision to voluntarily, and proactively, test and implement lead reduction actions with the goal of having direct consumption sources of water that are used for drinking and cooking to be no higher than the 5 ppb level.

### CORRECTIVE ACTIONS TAKEN

We have taken the following steps to correct or minimize lead exposure in the drinking water by:

- Replaced sink faucet in the staff lounge.
- Staff and students have been instructed not to use any of the highlighted fixtures for drinking water or the fixture has been disabled until it can be replaced. In most instances, simply replacing the older fixture with a newer model reduces the concentration of lead to an acceptable level. New fixtures have been ordered to replace the sampled fixtures with the high levels. All other fixtures in the building that are the same model will also be replaced.
- Once the fixture is replaced, the water will be resampled and tested at that location to ensure the source of the excessive lead levels has been removed before use.

### LEAD IN DRINKING WATER

Lead in drinking water, although rarely the sole cause of lead poisoning, can significantly increase a person's total lead exposure, particularly the exposure of infants who drink baby formulas and concentrated juices that are mixed with water. EPA estimates that drinking water can make up 20% or more of a person's total exposure to lead.

### HOW LEAD ENTERS OUR 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 buildings to water mains (service lines). In 1986, Congress banned the use of lead solder containing greater than 0.2% lead, and restricted the lead content of faucets, pipes, and other plumbing materials to 8.0%.

When water stands in lead pipes or plumbing systems for several hours or more, the lead may dissolve into

the drinking water. This means the first water drawn from the tap in the morning, or later in the afternoon if the water has not been used all day, can contain fairly high levels of lead.

### HEALTH EFFECTS OF LEAD

Lead is 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 can cause damage to the brain, red blood cells and kidneys. The greatest risk is to young children and pregnant women. Amounts of lead that won't hurt adults can slow down normal mental and physical development of growing bodies. 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 try to make sure they only put food in their mouths.

Bathing, showering, and hand washing should be safe even if the water contains lead over EPA's action level. Human skin does not absorb lead in water.

### REDUCING EXPOSURE TO LEAD IN DRINKING WATER:

- 1. FLUSH YOUR SYSTEM** Let the water run from the cold water tap for about 15-30 seconds before using it for drinking or cooking any time the water in a faucet has gone unused for more than six hours. Although using the toilet or shower flushes water through a portion of the plumbing, you still need to flush the water in each faucet before using it to drink or cook.
- 2. USE ONLY COLD WATER FOR COOKING AND DRINKING** Do not cook with, or drink water from the hot water tap. Hot water can dissolve more lead more quickly than cold water. If you need hot water, draw water from the cold tap and then heat it. Note that boiling water will NOT get rid of lead contamination.
- 3. USE BOTTLED WATER** The steps described above will reduce the lead concentrations in your drinking water. However, if you are still concerned, you may wish to use bottled water for drinking and cooking.

**Lead Information Sources:** United States Environmental Protection Agency, The Centers for Disease Control and Prevention, and Michigan Department of Environmental Quality.

**For More Information,** please contact Mark Kleinhans, Superintendent of Bedford Public Schools at 734-850-6002 or mark.kleinhans@mybedford.us