

February 2016

Q: What are the standards for lead in drinking water?

A: The water coming from Fort Wayne City Utilities' Three Rivers Water Filtration Plant meets all federal and state water quality regulations – including those for lead. In fact, Fort Wayne's drinking water quality is better than regulations require and Fort Wayne has been ranked as having the best water quality among cities our size in the state of Indiana. The Environmental Protection Agency has established a limit for lead in drinking water of 15 parts per billion (ppb), which can also be expressed as 0.015 milligrams per liter. To better understand parts per billion, you might think in terms of money. One part per billion is equal to one dollar out of one billion dollars, so 15 parts per billion is like \$15 dollars out of one billion.

Although the water distributed by Fort Wayne City Utilities meets or is better than standards for lead, lead can enter drinking water as a result of corrosion of pipes inside homes and businesses and lead water services. City Utilities collects water samples from homes and businesses in the water service area as directed by the Indiana Department of Environmental Management (IDEM), which is normally every two years, and analyzes them for lead. If more than 10% of the samples exceed the federal action level of 15 ppb, City Utilities is required to provide public notification and take other steps to reduce lead levels.

Q: What causes high levels of lead in water?

- A: Lead gets into drinking water as a result of the corrosion or breaking down of plumbing materials that are made of or contain lead. Lead may get into drinking water from:
 - 1. The lead service line that connects a house to the public water main;
 - 2. Lead solder used to join copper pipes together
 - 3. Brass and chrome plated brass faucets
 - 4. Old galvanized household plumbing.

Q: Is it safe to drink the water that comes out of my tap in Fort Wayne?

A: Water distributed by Fort Wayne City Utilities meets or is better than all state and federal regulations require. The water from City Utilities is safe to drink. Lead in drinking water is rarely the only source of lead exposure, but it can account for 20 percent or more of a person's total lead exposure.

However, in order to minimize the potential of having lead in your tap water, City Utilities, the State Board of Health and the Indiana Department of Environmental Management suggest that you do the following:

1. Before using your water for drinking or cooking, especially first thing in the morning, let the cold water run for 30-seconds. When water sits in household pipes and plumbing fixtures, it can absorb lead from the plumbing. Flushing your tap before using the water brings fresh water into your home.

- 2. Do not use water from the hot water tap for cooking or drinking. If you need hot water, draw water from the cold water tap then heat the water.
- 3. Do not mix infant formula with water from the hot tap.
- 4. Pregnant women and children are at the greatest risk for health effects from lead exposure. If you have a lead water service line (typically in homes that were built before 1950) and you are pregnant or have young children, consider using a National Science Foundation Certified filter at the tap or use a filtering water pitcher that removes lead. Use filtered tap water to prepare infant formula or concentrated juices.

Q: How can I find out if I have a lead service line or other plumbing fixtures in my house?

A: If your home was built before 1950, it is more likely that you have a lead service line. The use of lead solder was banned in 1987, so if your home was built before 1987, lead solder may have been used. At that time, the amount of lead permitted in plumbing fixtures was also limited. So if you live in a house built since 1987, the possibility of having an elevated lead level in your water is greatly reduced.

Q: How can I find out what the lead level is in my water?

A: There are laboratories that will test your water for a fee – typically between \$35 and \$50. A list of those laboratories is available online at <u>www.in.gov/isdh/22452.htm</u>.

Q: Is it safe to take a bath or shower in water that may contain lead?

A: Yes, bathing and showering is safe even if the water were to contain an amount of lead over EPA's action level. Human skin does not absorb lead that may be present in water.

Q: Does boiling water reduce lead?

A: No. Boiling water does not reduce lead. Although boiling is sometimes recommended to eliminate some contaminants in drinking water, boiling can actually concentrate the lead. Always use cold water for cooking and making infant formula. After taking water form the cold water faucet, you can warm it on the stove or in the microwave if you want hot water.

Q: What is lead?

A: Lead is a common metal. Before we knew some of the possible effects of lead, it was used in many items such as paint, gasoline and fertilizer. Lead is rarely found in sources of drinking water such as rivers. But it can enter drinking water systems as a result of corrosion that happened in plumbing, faucets and lead water service lines.

Q: What does exposure to lead do to a person?

A: Although it has been used in numerous consumer products, lead is a toxic metal now known to be harmful to human health if too much is inhaled or ingested. Sources of lead exposure include: the air around us, soil and dust (both inside and outside the home), food (which can be contaminated by lead in the air or in food containers), and sometimes

water (from the corrosion of plumbing). On average, it is estimated that lead in drinking water contributes between 10 and 20 percent of total exposure (from all sources).

Lead may cause health problems if too much enters your body from various sources. The most common source of exposure to lead is from lead paint and dust created when lead paint chips away or is being removed. It can cause damage to the brain and kidneys and can interfere with the production of the red blood cells that carry oxygen to all parts of your body. The greatest risk of exposure is to infants, young children and pregnant women. Scientists have linked the effects of lead with lower 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 the child's brain development. Your doctor can provide you with more information.

Q: Does lead affect everyone equally?

A: Young children, infants and fetuses appear to be particularly vulnerable to lead exposure.

Q: How do I know if I or my children have high lead levels?

A: Your health care provider can perform a blood test for lead and provide you with information about the health effects of lead. The Indiana State Department of Health and the Fort Wayne-Allen County Department of Health also have information, but do not perform testing.

Q: What can I do to be sure I don't have a high level of lead in my water?

- A: There are several precautions you can take to reduce any possible exposure to lead in drinking water:
 - 1. **Flush the pipes by running water:** Let the water run from the tap before using it for drinking or cooking any time the water in the faucet has gone unused for more than six hours. The longer the water resides in the plumbing, the more lead it may contain. Flushing the tap means running the cold water faucet until the water gets noticeably colder. Although toilet flushing or showering flushes water through a portion of your home's plumbing system, you still need to flush the water in each faucet before using it for drinking or cooking. Flushing tap water is a simple and inexpensive measure you can take to protect your health. It usually uses less than one or two gallons of water. To conserve water, fill a couple of bottles for drinking water after flushing the tap and, whenever possible, use the first flush water to wash dishes or water the plants.
 - 2. Use cold water: Don't cook with or drink water from the hot water tap. Hot water can dissolve lead more quickly than cold water. If you need hot water, draw it from the cold tap and then heat it. Boiling water does not remove lead content and can concentrate it. In addition, do not mix baby formula with water from the hot water tap.
 - **3.** Do not mix infant formula with water from the hot water tap. These steps will reduce the lead concentration in your drinking water. However, if you are sill concerned, you may wish to purchase bottled water for dinking and cooking or install a filter at the tap or use a filtering pitcher that removes lead.

Q: Won't running the tap increase my water bill?

A: Running the tap water before using it for drinking it or using it for cooking is the simplest and **most inexpensive measure you can take to protect your family's health**. It

usually takes only a couple of gallons of water to flush your tap and would cost you approximately \$1 per month. To help reduce "wasted" water, you can use the water that comes from the tap while flushing it to water your plants, household cleaning or other purposes that do not involve cooking or drinking. Once you have flushed the tap you can conserve by filling a pitcher or bottles with fresh water to drink later.

Q: How does lead get into the water?

A: Fort Wayne's water is virtually lead free when it leaves the Three Rivers Water Filtration Plant and it meets or is better than all state and federal health and safety standards require. 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 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). In 1986, Congress banned the use of lead solder containing greater than 0.2 percent lead and restricted the lead content of faucets, pipes, and other plumbing materials to 8.0 percent. A new federal law that went into effect in 2014 reduced the amount of lead allowed in plumbing fixtures to 0.25 percent.

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

Q: What does City Utilities do to control the level of lead in the water?

A: When water leaves Fort Wayne's Three Rivers Water Filtration Plant, it meets, or is better than, all state and federal standards require for lead levels. Lead enters the water when it stands in lead pipes or when it comes into contact with plumbing fixtures that contain lead. The City works to reduce the possibility that lead pipes will corrode (causing lead to enter the water) by adjusting the chemical and physical properties of the water including pH (a measure of acidity or alkalinity), and by adding chemicals that help to form a protective coating on the inside of lead pipes as a barrier between the lead pipes and the water.

None of the water mains in Fort Wayne's water distribution system are made of lead but about 27% of the service lines that connect public water mains to individual properties are made of lead. City Utilities will work with property owners to replace these lead water service lines. The part of the line that is in the public right of way belongs to City Utilities. The part on private property belongs to the property owner. City Utilities will replace its portion of the lead service line if the property owner will replace their portion. Studies have found that full replacement is more effective in reducing lead levels than just reducing one part or the other. Most homes built after 1950 do not have lead service lines.

If you would like to know more about working with City Utilities to replace a lead water service line, please call Fort Wayne's Citizens Services Department by dialing 311 or (260) 427-8311.