

# Loudon Utilities Water Quality Report 2020

## Español

Este informe contiene información importante sobre la calidad de su agua de beber. Tradúscalo o hable con alguien que lo entienda.

## Is my drinking water safe?

Yes, our water meets all the State of Tennessee's and the USEPA's health standards. In 2019, numerous tests were conducted for a variety of contaminants that may be present in drinking water. As seen from the chart below, of the contaminants detected, all were at safe levels.

## What is the source of my water?

Water for the Loudon Utilities system is obtained from the Tennessee River. The water is processed and tested at the water filtration plant and distributed to the system.

Water for the Piney system is obtained from Clear Branch Spring. The water is processed and tested at the Piney filtration plant and distributed to the water system.

The Tennessee Department of Environment & Conservation has prepared a Source Water Assessment Program Report for the untreated water sources. The report assesses the susceptibility of untreated water sources to potential contamination. To ensure safe drinking water, all public water systems treat and routinely test their water. Water sources have been rated as exceedingly susceptible, moderately susceptible, or slightly susceptible based on geological factors and human activities in the vicinity of the water source. The current rating given to both sources is exceedingly susceptible. An explanation of the Tennessee Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings, and the overall TDEC report to EPA can be viewed at (<https://www.tn.gov/environment/article/wr-wq-sourcewater-assessment>) or you may contact the water system to obtain copies of specific assessments.

## Why are there contaminants in my water?

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals, and in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.

Contaminants that may be present in source water:

- Microbial Contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic Contaminants, such as salts and metals which can be naturally occurring or result from urban stormwater runoff, industrial, or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, and septic systems.
- Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.

In order to insure that tap water is safe to drink, EPA and the Tennessee Department of Environment and Conservation prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. FDA regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

## How can I get involved?

Loudon Utilities Board's regularly scheduled meetings are held at 4:30 p.m. on the second and fourth Mondays of each month at the City of Loudon / Loudon Utilities offices located at 2360 Hwy. 72 North, Loudon TN, Tennessee. Please feel free to participate in these meetings.

## Is our water system meeting other rules that govern our operations?

Loudon Utilities meets State and EPA requirements for regular testing and reporting to ensure water quality and safety.

## Do I Need To Take Special Precautions?

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have under-gone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about not only their drinking water, but food preparation, personal hygiene, and precautions in handling infants and pets from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbiological contaminants are available from the Safe Drinking Water Hotline (1-800-426-4791).

## Lead in Drinking Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. Loudon Utilities is responsible for providing high quality drinking water but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at <http://www.epa.gov/lead/protect-your-family%23water%23water>

## Water System Security

Following the events of September 2001, we realize that our customers are concerned about the security of their drinking water. We urge the public to report any suspicious activities at any utility facilities, including treatment plants, pumping stations, tanks, fire hydrants, etc. to 865-458-2091

## Think before you flush!

Flushing unused or expired medicines can be harmful to your drinking water. Properly disposing of unused or expired medication helps protect you and the environment. Keep medications out of Tennessee's waterways by disposing in one of our permanent pharmaceutical take back bins. There are nearly 100 take back bins located across the state, to find a convenient location please visit: [https://www.tn.gov/content/dam/tn/environment/sustainable-practices/documents/opsp\\_pharm-take-back-locations-master-list.pdf](https://www.tn.gov/content/dam/tn/environment/sustainable-practices/documents/opsp_pharm-take-back-locations-master-list.pdf)

## Water Quality Data

### What does this chart mean?

- **MCLG** - Maximum Contaminant Level Goal, or 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.
- **MCL** - Maximum Contaminant Level, or the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.
- **MRDL**: Maximum Residual Disinfectant Level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial contaminants.
- **MRDLG**: Maximum residual disinfectant level goal. The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- **AL** - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- **Below Detection Level (BDL)** - laboratory analysis indicates that the contaminant is not present at a level that can be detected.
- **Non-Detects (ND)** - laboratory analysis indicates that the contaminant is not present.
- **Parts per million (ppm) or Milligrams per liter (mg/l)** - explained as a relation to time and money as one part per million corresponds to one minute in two years or a single penny in \$10,000.
- **Parts per billion (ppb) or Micrograms per liter** - explained as a relation to time and money as one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- **Nephelometric Turbidity Unit (NTU)** - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- **RTCR** - Revised Total Coliform Rule. This rule went into effect on April 1, 2016 and replaces the MCL for total coliform with a Treatment Technique Trigger for a system assessment.
- **TT** - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	Unit Measurement	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria (RTCR)	No	0		2019		0	TT Trigger	Naturally present in the environment
Turbidity <sup>1</sup>	No	0.60 NTU 97%		2019	NTU	n/a	TT (99% <0.3 NTU)	Soil runoff
Copper	No	0.164 90 <sup>th</sup> Percentile		2018	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Fluoride	No	0.53	0.38-0.67	2019	ppm	4	4	Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
Lead <sup>4</sup>	No	0.5 90 <sup>th</sup> Percentile		2018	ppb	0	AL=15	Corrosion of household plumbing systems, erosion of natural deposits
Sodium	No	6.1		2019	ppm	N/A	N/A	Erosion of natural deposits; used in water treatment
TTHM <sup>6</sup> [Total trihalomethanes]	No	37	16-83	2019	ppb	n/a	80	By-product of drinking water chlorination
Haloacetic Acids (HAA5)	No	33	17-57	2019	ppb	N/A	60	By-product of drinking water disinfection.
Chlorine	No			2019	ppm	4	4	Water additive used to control microbes.

During the most recent round of Lead and Copper testing, only 100 out of 100 households sampled contained concentrations exceeding the action level.

<sup>1</sup>100% of our samples were below the turbidity limit. Turbidity is a measure of the cloudiness of the water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

<sup>4</sup>Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

<sup>6</sup>While your drinking water meets EPA's standard for trihalomethanes, it does contain low levels. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.