

# Gates Water System Water Quality Report for 2024

## Is my drinking water safe?

Yes, our water meets all of EPA's health standards. We have conducted numerous tests for over 80 contaminants that may be in drinking water. As you'll see in the chart on the back, we only detected eight of these contaminants. We found all of these contaminants at safe levels.

## What is the source of my water?

Your water, is purchased from Halls beginning July 2020, which is ground water, comes from the Memphis Sand Aquifer. Our goal is to protect our water from contaminants and we are working with the State to determine the vulnerability of our water source to **potential** contamination. The Tennessee Department of Environment and Conservation (TDEC) has prepared a Source Water Assessment Program (SWAP) Report for the untreated water sources serving water to this water system. The SWAP 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 reasonably susceptible, moderately susceptible or slightly susceptible based on geologic factors and human activities in the vicinity of the water source. The Gates Water System sources rated as moderately susceptible to potential contamination.

An explanation of Tennessee's Source Water Assessment Program, the Source Water Assessment summaries, susceptibility scorings and the overall TDEC report to EPA can be viewed online at <https://www.tn.gov/environment/program-areas/wr-water-resources/water-quality/source-water-assessment.html> or you may contact the Water System to obtain copies of specific assessments.

A wellhead protection plan is available for your review by contacting Jim Cooper at the Gates Water System between 8:00 A.M. to 4:30 P.M. weekdays except Wednesday.

## Why are there contaminants in my water?

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).

**Este informe contiene información muy importante. Tradúscalo o hable con alguien que lo entienda bien.**

**For more information about your drinking water, please call Jim Cooper at 731-414-1167.**

## How can I get involved?

Our Water Board meets on the first Monday of each month at 6:30 pm at City Hall, which is located at 10085 Second Street. Please feel free to participate in these meetings.

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

The State and EPA require us to test and report on our water on a regular basis to ensure its safety. We have met all of these requirements. Results of unregulated contaminant analysis are available upon request. We want you to know that we pay attention to all the rules.

## Other Information

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 ensure 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.

## 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 (800-426-4791).

## 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, tanks, fire hydrants, etc. to 731-836-7501.

## 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/environment/program-areas/opsp-policy-and-sustainable-practices/community-programs-and-services/unwanted-household-pharmaceuticals-takeback-program.html>

## Lead in Drinking Water

Lead can cause serious health effects in people of all ages, especially pregnant people, infants (both formula-fed and breastfed), and young children. Lead in drinking water is primarily from materials and parts used in service lines and in home plumbing. Gates Water System is responsible for providing high quality drinking water and removing lead pipes but cannot control the variety of materials used in the plumbing in your home. Because lead levels may vary over time, lead exposure is possible even when your tap sampling results do not detect lead at one point in time. You can help protect yourself and your family by identifying and removing lead materials within your home plumbing and taking steps to reduce your family's risk. Using a filter, certified by an American National Standards Institute accredited certifier to reduce lead, is effective in reducing lead exposures. Follow the instructions provided with the filter to ensure the filter is used





# 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.
- **Below Detection Level (BDL)** - laboratory analysis indicates that the contaminant is not present at a level that can be detected.
- **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.
- **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.
- **AVG** - Average

| Contaminant                    | Violation Yes/No | Level Found                  | Range of Detections | Date of Sample | Unit Measurement | MCLG       | MCL        | Likely Source of Contamination                                                                                            |
|--------------------------------|------------------|------------------------------|---------------------|----------------|------------------|------------|------------|---------------------------------------------------------------------------------------------------------------------------|
| Total Coliform Bacteria (RTCR) | No               | 0                            |                     | 2024           |                  | 0          | TT Trigger | Naturally present in the environment                                                                                      |
| Copper <sup>1</sup>            | No               | 90 <sup>th</sup> %<br>0.0626 | 0.00806-<br>0.625   | 2023           | ppm              | 1.3        | AL=1.3     | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives                    |
| Fluoride                       | No               | AVG<br>0.47                  | 0.44-0.52           | 2024           | ppm              | 4          | 4          | Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories |
| Lead <sup>1</sup>              | No               | 90 <sup>th</sup> %<br>4.87   | <2.0-<br>7.64       | 2023           | ppb              | 0          | AL=15      | Corrosion of household plumbing systems, erosion of natural deposits                                                      |
| Asbestos <sup>2</sup>          | No               | <0.17                        | <0.17*              | 2020           | MFL              | 7          | 7          | Decay of asbestos cement water mains; erosion of natural deposits                                                         |
| Sodium                         | No               | 7.24                         | 7.24*               | 2023           | ppm              | N/A        | N/A        | Erosion of natural deposits; used in water treatment                                                                      |
| Sulfate                        | No               | 3.72                         | 3.72*               | 2020           | ppm              | N/A        | N/A        |                                                                                                                           |
| TTHM [Total trihalomethanes]   | No               | 4.50                         | 4.50*               | 2024           | ppb              | n/a        | 80         | By-product of drinking water chlorination                                                                                 |
| Haloacetic Acids (HAA5)        | No               | <1.0                         | <1.0*               | 2024           | ppb              | N/A        | 60         | By-product of drinking water disinfection.                                                                                |
| Chlorine                       | No               | AVG<br>1.41                  | 0.72-1.63           | 2024           | ppm              | MRDLG<br>4 | MRDL<br>4  | Water additive used to control microbes.                                                                                  |

**Iron:** Iron occurs naturally in our raw water and occasionally accumulates in the distribution system. Iron shows up as "red" or "rusty" water at your tap. Although you do not want to drink water that is not clear, iron is not considered to be a hazard to your health. We test for iron daily and it is usually around 0.13 ppm. The aesthetic limit for iron is 0.3 ppm.

\*We are only required to collect one sample from a single location.

<sup>1</sup>During the most recent round of Lead and Copper testing, 0 out of 10 households sampled contained concentrations exceeding the action level.

<sup>2</sup>The laboratory did not meet the required detection limit therefore the data does not necessarily reflect that the water is contaminated to a level approaching the MCL.



**Our Annual Water Quality Report containing important information  
about the source and quality of your drinking water can now be  
viewed at**

**<http://www.taud.org/CCR/GatesCCR.pdf>**

**for a paper copy of the report call \_\_ (phone number)**