Water and Wastewater Authority of Wilson County
Lebanon Supply Water Quality Report 2020

Is my drinking water safe?
We have conducted numerous tests for contaminants that may be in the drinking water and our water meets all of EPA′s health standards.

What is the source of my water?
Your water, which is surface water, comes from the Cumberland River at 231 North & Gilmore Hill Road and is delivered to the Water and Wastewater Authority of Wilson County by the Lebanon Water System. 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 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. Our source is rated as slightly 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 http://www.tn.gov/environment/article/wr-wq-source-water-assessment or you may contact the Water Authority to obtain copies of specific assessments.

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 Chris Leauber at 615-449-2951.

How can I get involved?
Our Water Board meets Quarterly except for special called meetings at the Water Authority office. 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 undergone 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).

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. The Water Authority 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/safewater/lead.

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 615-449-2951.

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W a t e r Q u a l i t y D a t a

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 Levels are set at very stringent levels. 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.
- AL - Action Level, or the concentration of a contaminant which, when exceeded, triggers treatment or other requirements which a water system must follow.
- 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.
- TT - Treatment Technique, or a required process intended to reduce the level of a contaminant in drinking water.
- BDL- Below Detection Limit
- ND- Non-Detects-laboratory analysis indicates that the contaminant is not present.
- mrem/yr- Millirems per year- measure of radiation absorbed by the body.
- MRDL-Maximum Residential Disinfectant Level-The highest level of disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for the control of microbial disinfectants.
- MRDLG – Maximum residual disinfection 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.

Unless otherwise noted, data presented in table is from sampling performed by the Lebanon Water System during the 2020 calendar year.

Contaminant	Violation Yes/No	Level Detected	Range of Detections	Date of Sample	MCLG	MCL	Likely Source of Contamination
Total Coliform Bacteria[1]	No	0	N/A	2020	N/A	TT	Naturally present in the environment
Turbidity*	No	0.25 NTU	0.03-0.25 NTU	2020	N/A	TT = < 1 NTU	Soil run-off
Turbidity (Lowest monthly percent of samples meeting limit)*	No	100%	N/A	2020	N/A	TT (95% of samples <0.3 NTU)	Soil run-off
HAA[1] Stage 2 (Haloacetic Acids)	No	38 ppb	14 – 43 ppb	2020	N/A	60 ppb	By-product of drinking water disinfection
Copper[1] 0 out of 30 sites exceeded action level	No	90th%= 0.148 ppm	N/A	2018	1.3 ppm	AL=1.3 ppm	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
Lead[1] 1 out of 30 sites exceeded action level	No	90th%= 0.50 ppb	N/A	2018	0 ppb	AL=15 ppb	Corrosion of household plumbing systems, erosion of natural deposits
TTHM[1] Stage 2 (Total Trihalomethanes)	No	58 ppb	19 - 79 ppb	2020	N/A	80 ppb	By-product of drinking water chlorination
TOC** (Total Organic Carbon)	No	0.925 ppm avg.	0.742 – 1.08 ppm	2020	N/A	TT	Naturally present in the environment
Chlorine[1]	No	1.20 ppm avg.	0.8 – 1.7 ppm	2020	MRDLG 4 ppm	MRDL 4 ppm	Water additive used to control microbes
Nitrate	No	0.255 ppm	N/A	2020	10 ppm	10 ppm	Runoff from fertilizer
UNREGULATED SUBSTANCES							
Sodium	No	12.1 ppm	N/A	2020	N/A	N/A	Erosion of natural deposits; used in water treatment
UNREGULATED CONTAMINANTS***							
HAA5[1] 1 set of samples were collected in 2020	N/A	24.58 ppb avg.	12.9 – 32.9 ppb	2020	N/A	N/A	By-product of drinking water chlorination
HAA6Br[1] 1 set of samples were collected in 2020	N/A	2.83 ppb avg.	2.0 – 3.9 ppb	2020	N/A	N/A	By-product of drinking water chlorination
HAA9[1] 1 set of samples were collected in 2020	N/A	27.4 ppb avg.	14.9 – 36.8 ppb	2020	N/A	N/A	By-product of drinking water chlorination
Anatoxin[1] 8 sets of samples were collected in 2020	N/A	0.01 ppb avg.	0 – 0.61 ppb	2020	N/A	N/A	Naturally present in the environment

[1] Sampling performed by the Water and Wastewater Authority of Wilson County.

* **Turbidity:** We monitor turbidity, which is a measure of the cloudiness of water, because it is a good indicator that our filtration system is functioning properly. We met the treatment technique for turbidity with 100% of monthly samples below the turbidity of 0.3 NTU.

** **TOC:** We meet the Treatment Technique required for Total Organic Carbon in 2020.

*** Unregulated contaminants are those for which EPA has not established drinking water standards. The purpose of unregulated contaminant monitoring is to assist EPA in determining the occurrence of unregulated contaminants in drinking water and whether future regulation is warranted. For additional information call the Safe Drinking Water Hotline at (800) 426-4791.

Cryptosporidium is a microbial parasite found in surface water throughout the U.S. Although filtration removes *Cryptosporidium*, the most commonly used filtration methods cannot guarantee 100-percent removal. Symptoms of infection include nausea, diarrhea, and abdominal cramps. Most healthy individuals can overcome the disease within a few weeks. Monitoring of source water and finished water indicates the presence of these organisms. The Lebanon Water System, our water supplier, conducted EPA Long Term 2 *Cryptosporidium* testing from October 2016 to September 2018. During this testing, the source water showed the presence of *Cryptosporidium* on two occasions. Both of these occurrences took place during heavy rain or flooding events, which indicates the source of the contamination was excessive runoff from farmland. The concentration of *Cryptosporidium* in the source water was very low and did not show up in the filtered water that is sent to the public. Due to the low level of *Cryptosporidium* present, there is not currently any need or requirement for the City of Lebanon to provide any further treatment to its source water. If you have any questions or concerns about *Cryptosporidium*, please contact Jeremiah York at (615) 444-0485.

About the data: Most of the data presented in this table is from testing done between Jan. 1 and Dec. 31, 2020. We monitor for some contaminants less than once per year, and for those contaminants, the date of the last sample is shown in the table.