

Consumer Confidence Report

Hanover Water Department (Public Water Supply ID: 1071010)

2018 Report (2017 Data)

NOW IT COMES WITH A LIST OF INGREDIENTS.



What is a Consumer Confidence Report?

The Consumer Confidence Report (CCR) details the quality of your drinking water, where it comes from, and where you can get more information. This annual report documents all detected primary and secondary drinking water parameters, and compares them to their respective standards known as Maximum Contaminant Levels (MCLs).

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 include:

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 storm water 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 storm water 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 prescribes regulations, which limit the amount of certain contaminants in water provided by public water systems. The US Food and Drug Administration (FDA) regulations establish limits for contaminants in bottled water, which must provide the same protection for public health.

What is the source of my drinking water?

The sources of water for Hanover are three reservoirs located in two watersheds. The Fletcher and Parker Reservoirs are located in the Camp Brook watershed located near Grasse Road. The Jack Nelson Reservoir collects water from a portion of the Mink Brook watershed and is located in Hanover Center.

The water is treated for removal of color, taste, and odor causing contaminants such as iron, manganese, and algae. In addition, the water is treated with sodium hypochlorite to inactivate bacteria and viruses. Sodium Bi-Carbonate and poly-ortho phosphate are added to the water as a corrosion inhibitor to prevent the leaching of lead and copper from home plumbing. Fluoride is added as an aid for dental health.

Why are 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 at 1-800-426-4791.

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 drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at 1-800-426-4791.

How can I get involved?

For more information about your drinking water, please call Todd Cartier, Water Department Superintendent at 640-3236, todd.cartier@hanovernh.org, or Mr. Peter Kulbacki, P.E., Director of Public Works, peter.kulbacki@hanovernh.org, 634-3327. If you have questions or concerns regarding your water bill or consumption or wish to make an appointment for service please contact the Water Department Administrative Assistant at 643-3327 or dpw@hanovernh.org.

Although we do not have specific dates for public participation events or meetings, feel free to contact us with any questions you may have.

Violations and Other information: See violation list in table below.

Fluoridation

Your public water supply is fluoridated. According to the Centers for Disease Control and Prevention, if your child under the age of 6 months is exclusively consuming infant formula reconstituted with fluoridated water, there may be an increased chance of dental fluorosis. Consult your child's health care provider for more information.

Definitions

Maximum Contaminant Level or **MCL:** 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.

Maximum Contaminant Level Goal or **MCLG:** 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.

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 control of microbial contaminants.

Treatment Technique or **TT:** A required process intended to reduce the level of a contaminant in drinking water.

Turbidity: A measure of the cloudiness of the water. It is monitored by surface water systems because it is a good indicator of water quality and thus helps measure the effectiveness of the treatment process. High turbidity can hinder the effectiveness of disinfectants.

Abbreviations

BDL: Below Detection Limit

NA: Not Applicable

ND: Not Detectable at testing limits

NTU: Nephelometric Turbidity Unit

pCi/L: picoCurie per Liter

ppb: parts per billion

ppm: parts per million

RAA: Running Annual Average

TTHM: Total Trihalomethanes

UCMR: Unregulated Contaminant Monitoring Rule

ug/L: micrograms per Liter

ng/L: nanograms per Liter

mg/L: milligrams per Liter

Drinking Water Contaminants:

Lead: 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. This water system is responsible for high quality drinking water, but cannot control the variety of materials used in your plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing cold water from your tap for at least 30 seconds before using water for drinking or cooking. Do not use hot water for drinking and 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://water.epa.gov/drink/info/lead/index.cfm>

ADDITIONAL TESTING					
Additional Tests & Secondary MCLs (SMCL)	Results	Date	Treatment technique (if any)	AL (Action Level), SMCL or AGQS (Ambient groundwater quality standard)	Specific contaminant criteria and reason for monitoring
UCMR-Perfluorooctanoic acid (PFOA)	Average = 2 ng/L				While consumer products and food are a large source of exposure to PFOA for most people, drinking water can be an additional source in the small percentage of communities where PFOA has contaminated water supplies. Such contamination is typically localized and associated with a specific facility, for example, an industrial facility where these chemicals were produced or used to manufacture other products or an airfield at which they were used for firefighting. The Town is not required to sample for PFOA but tested voluntarily. No MCL or Action Level at this time.
Fluoride (ppm)	Range at entrance to distribution system = 0.42 – 1.99 ppm. Average = 0.68 ppm.		N/A	2	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or more may cause mottling of children’s teeth, usually in children less than nine years old. Mottling also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums. MCL is 4.0 mg/L.

LEAD AND COPPER							
Contaminant (Units)	Action Level	90 th percentile sample value *	Date	# of sites above AL	Violation Yes/No	Likely Source of Contamination	Health Effects of Contaminant
Copper (ppm)	1.3	0.33 ppm	2017	0	No	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson’s Disease should consult their personal doctor.
Lead (ppb)	15	4 ppb	2017	1	No	Corrosion of household plumbing systems, erosion of natural deposits	(15 ppb in more than 5%) 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 (800-426-4791). (above 15 ppb) Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

DETECTED WATER QUALITY RESULTS							
Contaminant (Units)	Level Detected*	MCL	MCLG	Violation YES/NO	Likely Source of Contamination	Health Effects of Contaminant	
Microbiological Contaminants							
Total Organic Carbon (ppm)	Finish water quarterly average = 2.6 ppm	TT	N/A	No	Naturally present in the environment	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection byproducts. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts in excess of the MCL may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.	
Turbidity (NTU)	Highest Average Monthly Value = 0.05. Highest Monthly Value = August & December, 0.09 Highest Single Value = 0.09. Lowest Monthly Percentage of Samples Meeting Turbidity Limit = 100	TT	N/A	No	Soil runoff	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.	

Inorganic Contaminants						
Antimony (ppb)	<1 ppb	6	6	No	Discharge from petroleum; fire retardants; ceramics; electronics; solder	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar
Arsenic (ppb)	<1 ppb	10	0	No	Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes	(5 ppb through 10 ppb) While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the costs of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems. (above 10 ppm) Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
Barium (ppm)	0.011 ppm	2	2	No	Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Beryllium (ppb)	<1 ppb	4	4	No	Discharge from metal refineries and coal-burning factories; discharge from electrical, aerospace, and defense industries	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.
Cadmium (ppb)	<1 ppb	5	5	No	Corrosion of galvanized pipes; erosion of natural deposits; discharge from metal refineries; runoff from waste batteries and paints	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
Chlorine (ppm)	Range at entrance to distribution system = 0.70 – 1.30 ppm. Average = 0.80 ppm.	MRDL = 4	MRDL G = 4	No	Water additive used to control microbes	Some people who use water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.
Chromium (ppb)	<1 ppb	100	100	No	Discharge from steel and pulp mills; erosion of natural deposits	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
Mercury (inorganic) (ppb)	<1 ppb	2	2	No	Erosion of natural deposits; discharge from refineries and factories; runoff from landfills; runoff from cropland	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
Volatile Organic Contaminants						
Haloacetic Acids (HAA) (ppb)	Range at entrance to distribution system = 18.4 – 52 ppb. Average of four quarters = 33.77 ppb	60	NA	No	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Total Trihalomethanes (TTHM) (Bromodichloro-methane Bromoform Dibromo-methane Chloroform) (ppb)	Range at entrance to distribution system = 22.3 – 71.2 ppb. Average of four quarters = 46.01 ppb.	100 /80	N/A	No	By-product of drinking water chlorination	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.