



Onondaga County Health Department

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Well Water Information

Proper well location, construction, maintenance, wellhead protection, and water quality testing are important to the safety of your water supply.

Well location

- Adequate access to well for inspection, maintenance, repair, renovation, treatment and testing
- Not subject to flooding or surface water contamination
- Upgradient of any potential or known source of contamination with minimum separation distances
- Graded properly to divert surface water away from the well.

Well construction

A drilled well, located and constructed in accordance with Appendix 5-B “Standards for Water Wells” is the preferred private water supply option.

- Well casing extends to minimum of 19 ft. below grade and a minimum of 1 ft. above grade
- Annular space between the well casing and borehole sealed with grout
- Well cap with watertight vermin proof sanitary seal
- Cap should have a downward facing screened vent

Please note that dug wells, springs, well points, and shore wells are considered to be susceptible to contamination. If you have a susceptible source and are concerned, the Onondaga County Health Department may be able to offer advice on how to reduce the susceptibility.

Well maintenance

Regular maintenance is very important. Do not wait until problems reach crisis levels. Consult an expert.

Wellhead protection

Protecting your well is very important. Be careful about storage and disposal of household and lawn care chemicals and wastes. Minimize the use of fertilizers and pesticides. Take steps to reduce erosion and prevent surface water runoff. Regularly check storage tanks that hold home heating oil, diesel, or gasoline. Make sure your well is protected from the wastes of livestock, pets, and wildlife.

Regular water quality testing

Please note that even a properly located and constructed well can be susceptible to contamination. Subsurface geology can contribute to the groundwater’s susceptibility to contamination. For example, unlike multiple or mixed layers of sand, silt, gravel, and/or clay, fractured shale provides minimal or no filtration of groundwater. Contaminants may travel through fractured shale long distances in a short period of time. The subsurface geology in an area with agricultural activity, septic systems, etc. may be particularly problematic.

The Onondaga County Health Department recommends that residents on private well water test their water regularly at a minimum of once a year for Total Coliform and Nitrate. Approved laboratories for drinking water bacteriology and nitrates in Onondaga County, Cortland County, and Cayuga County are:

Life Science Laboratories, Inc.
 5854 Butternut Drive
 East Syracuse, NY 13057
 (315)445-1105

Certified Environmental Services
 7280 Caswell Street
 North Syracuse, NY 13212
 (315)478-2374

Microbac New York – Cortland
 3821 Buck Drive
 Cortland, NY 13045
 (607)753-3403

Panek Laboratory LLC DBA JLI Environmental
 42 Washington Street
 Auburn, NY 13021
 (315)253-4433

For a complete list of other ELAP Certified Commercial Labs in New York State:

<http://www.wadsworth.org/labcert/elap/comm.html>

The Onondaga County Health Department does not regulate private wells; however, our engineering staff can provide you with information concerning your well water. Please contact the Onondaga County Health Department at 435-6600.

Contaminant	Maximum Contaminant Level	Sources in Drinking Water	Health Effects Language
Total Coliform Bacteria	Any positive sample	Naturally present in the environment.	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
<i>E. Coli</i>	Any positive sample	Human and animal fecal waste.	<i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.
Nitrate	10 mg/L	Runoff from fertilizer use; Leaching from septic tanks, sewage; Erosion of natural deposits.	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Whenever Total Coliform bacteria are detected in a sample, follow-up testing is required to determine if other bacteria of greater concern, such as *E. coli*, are present. The lab will automatically conduct *E. Coli* testing when a positive Total Coliform result is indicated.

Harmful microbes in drinking water can cause diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, some elderly, and people with severely compromised immune systems. The symptoms above are not just caused by organisms in drinking water. If you experience any of these symptoms and they persist, you may want to seek medical advice. People at increased risk should seek advice about drinking water from their health care providers.

Links:

<http://water.epa.gov/drink/info/well/index.cfm>

<http://www.cdc.gov/healthywater/drinking/private/wells/>

http://www.health.ny.gov/environmental/water/drinking/coliform_bacteria.htm

http://www.health.ny.gov/environmental/water/drinking/regulations/fact_sheets/fs3_water_quality.htm

http://www.health.ny.gov/environmental/water/drinking/regulations/fact_sheets/fs5_susceptible_water_sources.htm