

The Department of Children and Families Child Care Licensing Regulations include a potable (drinking) water testing requirement for licensed and registered child cares. The Health Department is providing this fact sheet to better inform child care providers about testing private drinking water supplies.

Child Cares with Private Drinking Water

The homeowner or child care provider is responsible for testing private drinking water. The Health Department recommends the following testing schedule to ensure that your drinking water is safe:

- Total coliform bacterial test every year
- Inorganic chemical test every five years
- Gross alpha radiation screen every five years

Sources of Private Drinking Water

- Drilled wells and dug wells
- Lakes and rivers
- Springs

Coliform Bacteria and *E.coli*

Coliform bacteria are a large group of bacteria common in soils, plants and animals that indicate potential well contamination and may cause health problems.

The laboratory test for bacteria has two steps: The first step is the analysis for total coliform, which determines if any coliform bacteria are present.

If total coliform bacteria are found, the laboratory then checks the same water sample for *E.coli* bacteria to determine if bacteria in the water is from human or animal waste. *Escherichia coli*, known as *E.coli*, is a specific type of fecal coliform, the coliform group that lives in the intestines and waste of humans and other warm-blooded animals.

The presence of any *E.coli* in drinking water means human or animal waste has been or is

present. Water should be treated immediately if *E.coli* is present because many diseases can be spread through human or animal waste.

Health Concerns

Coliform or other bacteria in drinking water will not always cause illness; however, since these bacteria are present, it may indicate that other disease-causing organisms may also be present.

If *E.coli* are present, parasites including giardia and cryptosporidium may also be present. Giardia and cryptosporidium can cause severe intestinal illness, especially in young children. Children under 5 years of age are also more vulnerable to developing a serious kidney condition caused by some *E. coli*, known as hemolytic uremic syndrome. To learn more about identifying symptoms of illness caused by bacteria found in drinking water, visit the health department diseases and prevention page: <http://healthvermont.gov/prevent/>

The bacterial tests performed at the Vermont Department of Health Laboratory do not detect giardia or cryptosporidium, or specify which strains of *E.coli* are present, so it is important to treat your water if *any* coliform bacteria are present.

Sources of Bacterial Contamination

Groundwater in a properly constructed well or spring should be free of coliform bacteria.

If coliform bacteria are found in a well or spring, it generally means that surface water has somehow leaked into the drinking water supply. Coliform bacteria may enter the

drinking water supply if rain runoff or snowmelt enter the well or spring through cracks in ledge outcroppings, gravelly soil, sandy soil, or if the well or spring cover is not airtight. Bacteria can also enter your drinking water due to poor construction or cracks in the well or spring casing or if the pipe leading to the house is not properly inserted and welded or grouted into the well or spring.

In addition, insects, snakes, mice or other creatures getting into the well or spring can cause contamination.

Improperly maintained treatment devices also can be a source of contamination. Home water filters and other water treatment devices should be changed and maintained by following the manufacturer's recommendations.

Results and Treatment

If you have presence of coliform bacteria in your drinking water, it should not be used for drinking, cooking, ice cubes, baby formula, reconstituted juices, produce washing, or teeth brushing. According to Child Care Licensing Regulations, bottled water is required until the water is treated and follow-up testing shows absence of bacterial contamination.

Let dishes dry thoroughly before use. Bathing should pose little risk, although reasonable care should be taken to ensure that children do not swallow water by sucking on washcloths or sponges.

To disinfect your well, refer to the disinfection fact sheet provided with your results letter or go to:
<http://healthvermont.gov/enviro/water/disinfect.aspx>

If your water has an unusual smell, taste, color or sheen -

Switch to another safe water source until test results are known. Call the Health Department at (800) 439-8550 or (802) 863-7220.

If the drinking water tastes or smells unusual or is of unknown quality, follow the steps in "Results and Treatment" section.

For more information

For water testing or treatment questions, call the Health Department:
(800) 439-8550 or (802) 863-7220

For licensing and regulation questions, call the Department of Children and Families:
(800) 649-2642 option 3