

Do you know the quality of the water at your favorite swimming area?

Rivers, ponds, lakes and streams may contain disease-causing microorganisms. Swimming in these waters may result in health effects such as minor skin rashes, sore throats, diarrhea or more serious problems.

Children tend to spend more time in the water than adults. They are also more likely to accidentally swallow water when swimming and, for this reason, they are more likely than adults to get sick. However, infants, the elderly, and people with weakened immune systems are most at risk of becoming seriously ill.

What is swimming water tested for?

Water in ponds, lakes and rivers is tested for *Escherichia coli*, commonly known as *E. coli*, to determine whether it is suitable for swimming. *E. coli* is a bacterium that comes from human or animal wastes. Its presence in water means that other disease-causing microorganisms may be present as well.

When should water samples be taken?

Water samples should be taken at the peak times and at the most popular locations for swimming – in other words, where and when the people are. Once the sample is taken, deliver or mail it to the laboratory as soon as possible. Testing should be done within 30 hours after the sample is collected, so if you mail the sample, use first class or overnight delivery. Because conditions can change quickly, testing early in the week leaves time to take follow-up samples in the same week if first results show high levels of bacteria not suitable for swimming.



The Vermont Department of Health Laboratory swimming water test kit is called 'Kit SW' and costs \$15. This includes bottle, instructions, paperwork, insulated container and the cost of analysis. Samples are accepted Monday through Friday, 7:45 a.m. to 4:00 p.m.

Test results for samples submitted to the Health Department Laboratory on a Friday will normally not be available until the following Monday, unless special arrangements are made.

Where should samples be taken?

Water samples should be taken in an area where the water is at least three feet deep. The sample should be taken one foot below the water surface. Detailed sampling instructions are included with the test kit.

How often should water be tested?

The Health Department recommends that swimming water at town beaches and other public recreational areas be tested at least once a week from Memorial Day to Labor Day. Additional testing may be warranted after periods of heavy rain when swimming areas are more likely to be flooded by runoff. People who have a pond or private swimming area on their own property should test for water quality periodically throughout the summer months.

What does the *E. Coli* test result mean?

E. coli in water is measured as the number of bacteria found in 100 milliliters (mls) of water. In Vermont, when the test result at a public swimming area is 235 *E. coli*/100mls or less, it means that the water is considered suitable for swimming. A result greater than 235 *E. coli*/100 mls means that the water is not considered suitable for swimming.

When should the swimming area be closed?

If the test result is greater than 235 *E. coli* /100 mls (unsuitable), the Health Department recommends that the swimming area be closed and posted immediately. The beach area should stay closed, and not re-open until a follow-up test result confirms that the *E. coli* level has decreased to 235 *E. coli*/100mls or below (suitable).

Follow-up samples should be taken at the same location as the original sample.

How can I order test kits?

To order a 'Kit SW' from the Vermont Department of Health Laboratory, call 1-800-660-9997 (within Vermont) or (802) 863-7335. Payments can be made using a credit card or a check. Order forms can be requested from the Laboratory or found online:

http://healthvermont.gov/enviro/ph_lab/documents/watertestform.pdf

Where can I get more information?

For your town:

Contact your town health officer with questions about your town's public swimming area testing protocols or results. You can ask your town clerk for your town health officer's contact information, or use the town health officer search tool at the Health Department's website:

http://healthvermont.gov/local/tho/tho_list.aspx

About recreational water quality:

Vermont Department of Health

<http://healthvermont.gov/enviro/water/recwater.aspx>

Environmental Protection Agency

<http://www.epa.gov/waterscience/beaches/>