WHY WAS THE BEACH CLOSED?

It was 30 degrees outside, plus humidity. It would be a great day to spend time at the beach playing in the water… but for some reason the beach was closed! How inconvenient! Why would they close the beach on a hot summer day? …and who are “they” anyway?

Water quality on the beach is as important as clean water out of your kitchen faucet. Polluted or contaminated water can cause a variety of health issues, ranging from skin irritation to serious illness or death.

The most common health concerns for beaches would be “bad” bacteria, such as *E. Coli* or Staph bacteria. This may come from natural sources (wildlife, bird feces) or man-made sources (untreated sewage). Health authorities monitor beach water carefully, submitting samples for testing for a variety of microbiological hazards.

In addition to microbiological concerns, there is also the issue of algae blooms and the toxins that can be produced by algae, particularly “blue/green algae”. Blue/green algae is also known as cyanobacteria. The algae itself is not a hazard, but can produce a variety of toxic substances including microcystin toxins. These toxins will cause liver damage in humans and other animals and are also suspected carcinogens. Ingestion can be fatal.

Microcystin concentrations are regulated by provincial regulation. Typically, levels higher than 1ug/L (1 part per billion) are cause for concern although exact regulatory levels will vary by region.

Bureau Veritas can screen for microcystin using Elisa technology. This technique uses specially coated antibody wells to capture, detect and quantify the amount of microcystin in water. The test is relatively inexpensive and can be done rapidly, making it an ideal tool for rapid determination of these toxins. Some jurisdictions will require confirmation testing at a provincial lab using an alternate technique. However, the initial testing or screening is always done using Elisa technology.

So “they” are government agencies and laboratories in partnership with private testing laboratories such Bureau Veritas. At Bureau Veritas we work to keep your beaches safe …and hopefully we can help to keep them open more often.