



Common Questions about the Alaska BEACH Program

What is the BEACH Program?

In 2002, in response to the authorization of The BEACH Act by Congress, Alaska's BEACH Program was established. Alaska's BEACH Program provides support for communities to begin monitoring marine water quality at high-priority beaches. The program provides grants to local communities, tribal governments, and watershed councils to sample beach water for organisms (fecal coliforms and enterococci bacteria) that indicate the presence of fecal contamination. By notifying the public in the event that a sample exceeds the allowable levels, the program helps to prevent illnesses that could result from exposure to contaminated beach water.

Sources of Pollution

Organisms on Alaska's beaches? What does that mean?

When we say "organisms" we are talking about bacteria. Bacteria occur almost everywhere on Earth. Bacteria are almost always microscopic (invisible to the naked eye) so it requires taking a water sample to the lab to test for them. Many types of bacteria can cause people to get sick. Populations of bacteria can change quickly depending on the environmental conditions present.

Some sources of harmful bacteria include: urban runoff, bird colonies, broken or unmaintained septic systems, boat waste holding tanks, and dog waste. Essentially, there are many types of bacteria that live in beach water- some of which have the potential to make you sick.

How do you monitor for harmful bacteria?

The DEC looks for enterococci and fecal coliform as bacteria indicators in the marine environment. Water quality monitoring and laboratory tests look for the presence of these bacteria. Studies have shown that enterococci survive longer in salt water (0-45 days) than other fecal indicator bacteria. Enterococci has been shown to be the bacteria most strongly correlated to gastro-intestinal illness.

How do I know if I should be concerned?

Alaska has water quality standards that are used to compare lab data to.

Indicator Criteria for Bacteria¹

Enterococci

Statistical threshold value	Not more than one sample, or more than 10% of the samples if there are more than 10 samples, may exceed a statistical threshold value of 130 enterococci (cfu/100 mL)
Geometric mean	In a 30-day period, the geometric mean of samples may not exceed 35 enterococci (cfu/100 mL)

It is not unusual to find fecal coliform or enterococci numbers ranging from 0-80 on any of Alaska's beaches due to the amount of wildlife present.

What happens when bacteria is found in beach water above water quality standards?

DEC works to re-sample within 96 hours of the original event to be sure that elevated levels of bacteria are still present. If the levels are still high, the BEACH program has a set list of protocols for issuing a BEACH Advisory and press release. Signs and fact sheets are also developed and placed at key public access locations. Signage will stay up until a sample below standards is received.

Staying Safe

What could happen to me?

Exposure to bacteria can occur during swimming or ingesting contaminated water. The two most common illnesses contracted from contact with polluted ocean water are stomach flu & upper respiratory infections. Additional problems can include skin rashes and ear, nose and throat infections.

Just walking on a beach doesn't mean that you are being exposed-it's really about physical contact or swallowing contaminated water can cause illness.

How can I best avoid becoming sick?

- Avoid swimming within 100 yards from where a storm drain enters the beach.
- Shallow puddles of water on the sand between a storm drain and the surf can also hold bacteria that can cause illness, so avoid these areas.

¹ 40 CFR Part 131, Water Quality Standards for Coastal and Great Lakes Recreation Waters; Final Rule (<http://www.epa.gov/fedrgstr/EPA-WATER/2004/November/Day-16/w25303.pdf>)

- Thoroughly wash your hands and any other body parts that may have had contact with the beach water.
- If you are fishing, be sure to thoroughly rinse your catch in clean water and cook before eating.
- Avoid swimming or wading where large concentrations of birds or other wildlife are present.

Best Management Practices

Anything I can do to help keep Alaska's beaches safe?

Yes! You can help by:

- Maintaining your septic system (including having it pumped on a regular basis).
- Picking up your pet's waste and disposing of it in the appropriate location.
- Not feeding the birds or other wildlife.
- Using a harbor pump-out station rather than purging your boat's holding tank near recreational areas or areas.
- Disposing your fish waste in an appropriate container or location.
- Encouraging others to do the same. Clean water is everyone's concern!

Who do I contact to learn more?

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