ENVIRONMENTAL

Fact Sheet



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New Hampshire's Public Beach Inspection Program

Introduction

The New Hampshire Department of Environmental Services Public Beach Inspection Program monitors recreational waters in response to potential health threats associated with water-borne pathogens. These pathogens can be responsible for water-borne diseases such as gastroenteritis, giardiasis, cryptosporidiosis and cholera. The goal of the program is to protect public health by helping to inform of potential health risks associated with bacteria at public beaches.

Program Overview

From Memorial Day to Labor Day, the Beach Inspection Program will monitor public beaches throughout the State of New Hampshire. This routine monitoring includes an inspection of the swimming area and surrounding area, along with collecting two to five water samples from the swimming area to be tested for the presence of fecal bacteria. The number of samples collected is determined by the length of the beach.

All 16 coastal and estuarine beaches have been monitored since 2003 with funding assistance from the BEACHES Act (Amendment of the Clean Water Act). Based upon beach use and water quality history, a coastal beach may be sampled bi-weekly, weekly or semi- weekly. Due to the number of freshwater beaches in New Hampshire, only a subset of beaches are sampled and are typically sampled monthly. A priority is given to frequently visited State Parks that may be sampled semi-monthly.

Twenty-four hours after sampling, results are received from the Department of Health and Human Services Public Health Lab (DHHS PHL), the Beach Inspection Program is responsible for issuing advisories when state water quality standards are exceeded. When an advisory is issued, communication will be made to beach managers, health officers and local town officials, who are responsible for posting advisory signs at all public entrances of the beach. In addition, the online Healthy Swimming Mapper will be updated to reflect current conditions. Resampling occurs until bacteria levels are within acceptable limits and the advisory can be removed.

Bacteria

Freshwater beach samples are tested for the presence of the indicator bacteria *E. coli*, while all coastal beach samples are sampled for the presence of the indicator bacteria Enterococci. These bacteria are found in the intestines of warm-blooded animals, including humans. Since both bacteria are present in fecal material, and are easily cultured within 24 hours, they are

two of the best indicators of fecal contamination in surface waters. Their presence can therefore indicate the presence of other pathogenic organisms in surface waters.

Since NHDES is aware of the health risk to the public when recreating at public bathing beaches, it has adopted criteria recommended by the U.S. Environmental Protection Agency for bacteria in surface waters. The state standard for coastal beaches is 104 MPN/100 mL and for freshwater beaches is 88 MPN/100 mL. An advisory is issued if any one coastal sample exceeds 104 MPN/100 mL. An advisory is issued if any one sample exceeds 158 MPN/100 mL or if two samples from one sampling event exceed 88 MPN/100 mL. Statistically, as the level of indicator bacteria increases, the potential for the public to contract a water-borne disease increases.

Sources of Bacteria at Public Beaches

Common sources of bacterial loads to public beaches include waterfowl, domestic animals, agricultural practices, lack of or improperly functioning toilet facilities, faulty septic systems, non-point sources and humans. It is also common for bacterial levels to be elevated after rain events, where runoff from surrounding areas can quickly contaminate beaches.

When swimming at a beach, look for signs that may reflect poor water quality. Check water clarity and color, use your nose to determine foul or unusual odors, check any available records or history on the beach, look for signs of waterfowl such as geese and excrement, and check for floating substances in the water.

Additional Resources:

Program Details:



Healthy Swimming Mapper:



To <u>sign up</u> for weekly email updates: Go to the Healthy Swimming Mapper homepage, click "Subscribe to weekly Healthy Swimming Updates" under Helpful Links, then click "Healthy Swimming Updates."

Contact Information:

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