

Town of Sandwich Swimming Beaches – Water Quality Monitoring & Sampling

The town of Sandwich swimming beach sampling and monitoring system is a vital part of helping to protect the public health of all of our beach patrons. Please know your health and safety remain a top priority and we will continue to work to ensure this.

What the town of Sandwich is doing and when:

- The Sandwich Health Department samples the 7 Public Swimming beaches - First Beach, Town Neck Beach, Mill Creek Beach, East Sandwich II, Wakeby Pond at Ryder Conservation, Snake Pond, and Peter's Pond at Oak Crest Cove **weekly**. The water samples are tested for two different types of indicator bacteria; Enterococcus in marine water (bay beaches), and E. coli in fresh water (ponds).
- The Health Department, Recreation Department and Department of Natural Resources have a coordinated onsite approach to cyanobacteria monitoring and advisories at our 3 freshwater public Swimming areas- Wakeby Pond at Ryder Conservation, Snake Pond, and Peter's Pond at Oak Crest Cove **daily**.
- ***Please note: these monitoring and sampling processes only takes place during our regular beach season***

What we looking for and why:

- The weekly water samples taken at our Swimming beaches are tested for two different types of indicator bacteria; Enterococcus in salt water, and E. coli in fresh water. These two bacteria are considered indicator organisms, which are used to “indicate” the presence of conditions that have the potential to cause illness. The presence of this bacteria in recreational waters suggests that other harmful organisms or viruses may be present. If these pathogens are ingested while swimming, they may cause a variety of diseases, the most common of which is a mild gastroenteritis with flu-like symptoms
- The daily monitoring protocols at our freshwater beaches are put into place to identify Cyanobacteria. Cyanobacteria also known as Blue Green Algae, which can occur as water temperatures warm. Cyanobacteria are commonly found in the phytoplankton community of aquatic ecosystems. They form the base of the food web of freshwater ponds and streams that flow into coastal estuaries and the ocean. The presence of Cyanobacteria is natural and important!! However, overabundant cyanobacterial growth (called a “bloom”) and their release of excessive cyanotoxins can be harmful. Beach goers and pet owners should be aware that exposure to cyanotoxins can have serious health implications.

Why are we seeing an increase in warnings and advisories being issued?

- *Early seasonal conditions –warmer temperatures early in the summer season and recent heavy rainfall causing run off all contribute to increased occurrences of higher levels and possible blooms of the cyanobacteria and elevated indicators bacteria levels.*
- Other possible causes of contamination of recreation waters are animal wastes from pets and wild animals. Common waste on beaches can be from dogs, water fowl, seals and fox.

When and how closures and advisories are posted:

Bacteria:

- Once a week our Health Department collects water samples from our 7 public swimming beaches and submit them to an independent lab for testing. It is important to note: there is a 24-hour incubation period for all water samples and laboratory analysis does not provide instantaneous results.
- In order for a beach to be posted due to high bacteria levels, the beach must have two consecutive bacterial exceedances on two consecutive days and/or consistently elevated bacteria levels over a period of time. When this happens, re-testing takes place until bacteria levels are shown to be below the Massachusetts standard for bacteria in swimming water (at which point the town's Director of Public Health notifies the recreation department and the beach can be reopened).
- In the event a beach sample re-test exceeds the limit for bacteria in swimming water, the health agent has 24 hours to ensure that the beach is closed to swimming. When the second re-test results show acceptable bacteria levels, the beach may be re-opened to swimming. It is important to remember that a beach posted closed to swimming does not mean you cannot still enjoy walking on the beach and other on the sand activities.
- When a beach is posted due to high levels of bacteria a county issued sign will be posted on the beach parking attendant guard shack. The gate attendants will also inform all patrons upon arrival of the beach lot.

Cyanobacteria:

- The aquatic staff walk the freshwater beaches and scan the water for physical signs of cyanobacteria. Please note: that our lifeguards continuously monitor the swim area throughout their shifts.
- If it is visible to the staff, even if it is not in a swim zone, it is logged in the daily log, the gate attendant is notified and all patrons visiting the beach are notified that cyanobacterial bloom was observed. Lifeguards, and DNR Staff advise patrons of the beach when they arrive at the beach.
- When cyanobacteria is observed in swim areas, the Recreation Director informs the Health Director and physical Advisory Notice is posted at the guard shack and in the swim area. Swimming lessons, or camp swimming is cancelled, and all patrons are personally informed of the Advisory. The dated Advisory remains posted and is only replaced when a subsequent Advisory is needed. Each Advisory lists all prior observations for the season.

Where can you get more information?

Barnstable County Website: <https://www.capecod.gov/departments/health-environment/programs-services/water-and-wastewater/Swimming-beach-water-quality/>

Massachusetts Dept. of Health Swimming Beach Standards: <https://www.mass.gov/beach-water-quality>

How can you help?

Please read advisories when posted and sharing this information with your neighbors.

The town will continue to modify its practices as feasible in response to community concerns please follow the town website for more information. We thank you for your patience.