

UPDATE ON RESIDENT BEACH CLOSURE

July 29, 2019

Beaches are an important natural resource and good water quality is essential to having a safe and enjoyable beach visit. Local Boards of Health have an important role in ensuring that required water testing and notification are conducted. The MA Department of Public Health (DPH) and local boards of health (BOHs) regulate Duxbury Beach with respect to public health concerns pursuant to 105 CMR 445.000. To minimize the risk of illness from contaminated water, beaches are required to be tested for “indicator” bacteria — bacteria that indicate the presence of fecal contamination. Marine water must be tested for Enterococci bacteria, while freshwater can be tested for Enterococci or E. coli. The Duxbury Board of Health oversees all water testing within its jurisdiction at approved sampling locations.

SAMPLE COLLECTION & ANALYSIS

Water samples are taken within the area of greatest usage, sampled from the same location each week and are collected pursuant to the Department of Public Health requirements. Those samples are then taken to a laboratory certified by the MA Department of Environmental Protection to conduct the analysis.

WATER QUALITY STANDARDS

There are two types of water quality standards: single sample and geometric mean (geomean).

The geomean is calculated using the five most recent samples and is intended to reflect typical conditions.

In the case of the posting that occurred on Friday, July 26, 2019, the test results from Duxbury Beach indicated that the geomean number was too high (169) at the Resident Beach even though it had been tested twice to ensure accuracy of the test results. Testing was again performed on Monday, July 29, 2019, and the Town is awaiting those lab results. If the results come back indicating that the water conditions no longer exceed the geomean maximum of 35, the posting limitations regarding access to the water will be lifted. If the geomean is exceeded, the posting will remain in effect until such time that the geomean figure is no longer exceeded.

PUBLIC NOTIFICATION

Signs warning of high bacteria levels are required when:

- Two samples collected on consecutive days both exceed the single sample water quality standard, or one sample exceeds it and a re-test is not collected the following day.
- One sample exceeds the water quality standard at beaches where, in two or more of the last four full seasons, samples collected on consecutive days exceeded the water quality standard.
- The geomean standard is exceeded.

REASONS FOR POSTING A BEACH

Preemptive: Assumption of bacterial exceedance after rainfall/storm event based on historical data.

Physical quality: Presence of solid refuse, floating waste solids, oils, grease, scum, or hazardous materials.

Safety hazards: Presence of dangerous conditions, including fast currents, sharp drop-offs, water clarity/visibility issues, or sharks.

For additional information or any questions, please contact the Duxbury Board of Health at 781-934-1100.