## **STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION**





August 4, 2021

## Guidance for Beach Managers and Municipalities Testing for Bacteria at Freshwater Swim Beaches

Maine has established recreational water quality criteria for E. coli bacteria as part of its water quality standards for freshwater bodies. The criteria are based on repeated sampling of a waterbody and establish either a geometric mean of sampling results, or a statistical threshold value (STV), which should not be exceeded in more than 10% of individual samples taken. In lakes, the E. coli criteria are a geometric mean of 29 Colony Forming Units (CFUs) per 100 milliliters (ml) of water or a STV of 194 CFUs/100 ml (equivalent to units of MPN/100 ml). There are additional criteria for streams and rivers depending on the assigned class. While these criteria provide some assurance that human health will be protected when water contact recreation, such as swimming or wading, occurs they have not been established as a threshold for recommending further testing, or for posting an advisory or closure of a beach. Such a threshold, referred to as a Beach Action Value (BAV), has been established in Maine for Enterococcus bacteria in coastal waters.

While the Maine Department of Environmental Protection has not formally established a BAV for E. coli in freshwater, we encourage beach managers for lakes, streams, and rivers to follow the U.S. Environmental Protection Agency's recommended freshwater BAV of 190 CFUs/100 ml (based on an illness rate of 32/1000 primary contact recreators). DEP recommends that any single sample above that BAV trigger a second sample be taken within a day. DEP also recommends that a notification be posted after the first exceedance and remain in effect until a subsequent sample falls below the BAV. If sample results are below EPA's BAV but sampling occurred during dry weather (e.g., not immediately after a rain event), beach managers may want to also consider a general precautionary advisory to the public that there may be risk for primary contact recreation immediately after a rain event due to the possibility of stormwater runoff carrying bacteria from the landscape into the water.

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