Maine Healthy Beaches (MHB) Program Advisory Fact Sheet



The MHB Program supports monitoring of coastal, marine swim beach water quality during the summer months and provides communities with tools to monitor water quality, assess the risk of pollution, and notify the public of the potential risk of contracting illness from the water.

What is an advisory?

An advisory posted on an MHB Program beach sign or on the mainehealthybeaches.org website is a recommendation to the public to avoid water contact activities. Contamination advisories are posted for areas where fecal indicator bacteria results exceed Maine's safety standard for recreational water contact. Moderate to heavy rainfall often leads to increased bacterial contamination at the beach. Rainfall advisories may be issued as a pre-emptive precaution

What are Maine's safety standards for recreational water contact?

Maine's safety standard for a single marine water quality sample is **104** most probable number (MPN) of *Enterococci* per 100 milliliters of sample water, with retesting at high-risk beaches at 70 MPN (the beach action value (BAV) for recreational water contact recommended by the U.S. Environmental Protection Agency, US EPA). Maine has retained the 1986 beach notification threshold (104 MPN/100 mL) and increased retesting efforts following exceedances when feasible (US EPA approved approach). Bacterial standards for recreational water quality are based on epidemiological studies that show an increased probability of contracting illness from contact with contaminated water. These studies established a strong relationship between *Enterococci* bacteria and gastrointestinal illness.

What causes an exceedance of Maine's safety standards for recreational water quality?

Sources of fecal contamination may include malfunctioning septic systems, sewage treatment plant or collection system malfunctions, agricultural runoff, pet or wildlife waste, boating waste, and poor sanitary practices at the beach. Contaminated water runoff may enter the beach area via rivers, streams and storm drains, especially during wet weather conditions.

How current are the posted bacteria results?

The US EPA-approved method of analyzing recreational water quality provides results approximately 28-32 hours after the sample is collected. The dynamic nature of the coastal environment means that water quality conditions have the potential to change throughout the day; therefore, the posted beach status may not reflect current water quality conditions or the risk of contracting a recreational water-borne illness (RWI). Avoiding swimming following significant rainfall and washing hands/showering following water contact may reduce this risk.

Can I swim or wade if there is an advisory?

It is recommended to avoid all water contact activities when an advisory is in place. Risk of illness can result from contacting the water, including ingestion of water while swimming, getting



What are fecal indicator bacteria? Fecal indicator bacteria are used to indicate the possible presence of pathogenic (disease causing) organisms likely present in the same environment as the indicator. The actual pathogenic organisms are too many and too difficult/costly to measure. The US EPA recommended fecal indicator bacteria for marine recreational waters is Enterococci.

water in the nose, eyes, or ears, or entry through an open wound. Avoid water contact during, and at least 24 to 48 hours following, a significant rain event. The impact of rainfall will vary depending on the beach area.

Will I get sick if I go into the water when the beach is posted?

There is *always* a potential risk of contracting an RWI when the water is contaminated; however, individuals have varying tolerances/immunity levels. When bacteria levels exceed established criteria or conditions at the beach increase pollution levels, there is an *increased* probability of contracting an illness. Full head immersion and open wounds may increase this risk.

What are the symptoms of a Recreational Water Borne Illness (RWI)?

RWI symptoms may include: nausea, diarrhea, stomach cramps, chills and fever. Skin rashes and infections of the eyes, ears, nose and throat may also occur. If you experience any of these symptoms, contact your physician and report any recreational water derived illnesses to the Maine Center for Disease Control and Prevention Hotline (24/7): 1-800-821-5821.

How long does an advisory last?

A beach advisory lasts until monitoring results are below US EPA's safety standards for recreational water contact, or when conditions at the beach no longer pose a health risk. Once the initial sample results are recorded into the Maine Healthy Beaches database, an alert is sent to the local Beach Manager and a resample is scheduled. When necessary, the monitoring frequency is increased until the results are "clean," prompting the removal of an advisory. Check with the local Beach Manager for the most current conditions and beach status.

Can I still use a beach that is under advisory?

A beach advisory still allows the public to recreate at the beach but advises them to avoid water contact due to the possibility of contracting illness.

Is an advisory posted for the entire beach?

Advisories are posted for an entire beach or separate beach management areas when monitoring indicates elevated levels of *Enterococci* bacteria. A **beach management area** is defined either as an entire beach or a segment of a beach that is managed independently from other segments. Each beach management area has its own beach sign(s) and is listed separately on the MHB website (www.mainehealthybeaches.org).



What is a <u>closure</u>?

A closure, more severe than an advisory, can be based on chronic bacteria results or when conditions greatly increase pollution levels. While it is rare in Maine to have closures, they are generally linked to known safety hazards (e.g. sewage treatment plant malfunctions, severe flooding, rip currents, sharks, hazardous surf conditions, and other safety hazards).

For more information visit our website: www.MaineHealthyBeaches.org

To contact the Maine Healthy Beaches Program: Meagan Sims (Program Coordinator) Maine Department of Environmental Protection meagan.sims@maine.gov; 207.530.2518