

Maine Healthy Beaches (MHB) Program Advisory Fact Sheet



The MHB Program supports monitoring of coastal, marine swim beach water quality during the summer months (generally Memorial Day to Labor Day) 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. Local beach managers use MHB data to make informed management decisions in support of protecting public health, including issuing public notifications of advisories and closures at participating beaches.

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. Elevated Bacteria advisories are issued for beaches where fecal indicator bacteria results exceed Maine's safety threshold for recreational water contact. Precautionary Rainfall advisories may be issued pre-emptively because moderate to heavy rainfall often causes elevated levels of bacteria at the beach.

What is Maine's safety threshold for recreational water contact?

Maine's beach action value (BAV) or safety threshold for a single marine water quality sample is **104** most probable number of *Enterococci* per 100 milliliters of sample water (MPN/100ml). Maine's use of this BAV has been approved by the U.S. Environmental Protection Agency. MHB recommends resampling at high-risk beaches when a sample exceeds 70 MPN (the EPA recommended BAV in the 2012 Recreational Water Quality Criteria). Bacterial thresholds for recreational water quality are based on epidemiological studies that show an increased probability of contracting illness from contact with water with elevated bacteria. These studies established a strong relationship between *Enterococci* bacteria and gastrointestinal illness.

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

Sources of elevated fecal bacteria 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. Water runoff with elevated bacteria 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 may change throughout the day; therefore, the most recent water quality results available may not reflect current water quality conditions or the risk of contracting a recreational water-borne illness (RWI). Regardless of recent results, it is recommended to avoid swimming following significant rainfall events.



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*.

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 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 bacteria levels are elevated?

There is *always* a potential risk of contracting an RWI when bacteria levels are elevated; however, individuals have varying tolerances/immunity levels. When bacteria levels exceed established thresholds 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. Washing hands/showering following water contact may reduce 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 Elevated Bacteria advisory last?

Following an elevated bacteria result, the monitoring frequency at that beach is increased, when feasible, until sample results are below Maine's safety threshold. MHB recommends that Elevated Bacteria advisories remain posted until monitoring results are below the safety threshold, or until conditions at the beach no longer pose a health risk. Check with the local Beach Manager for the most current conditions and beach status.

Can I still use a beach that is under an 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 beach management areas when monitoring indicates levels of *Enterococci* bacteria at or above Maine's safety threshold. 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 closure?

Closures are more severe than Elevated Bacteria advisories and can be based on chronic bacteria results or when conditions greatly increase pollution levels. Closures are rare in Maine and are generally linked to known safety hazards (e.g. sewage treatment plant malfunctions, severe flooding, rip currents, sharks, hazardous surf conditions). During a beach closure, the beach is not considered open for recreation.



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

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