MARYLAND DEPARTMENT OF THE ENVIRONMENT

Maryland Healthy Beaches

2023 Progress Report

Maryland's monitored beaches met water quality requirements and were open for swimming more than 98 percent of the time in the summer of 2022. These results show that Marylanders continue to enjoy healthy beaches in their neighborhoods, along the Chesapeake Bay, and in Ocean City.

This success was obtained through partnerships between the Maryland Department of the Environment (MDE or the Department) and local jurisdictions that ensure waters are regularly sampled for monitoring and that pollution sources are identified and mitigated or eliminated. Maryland has many programs in place to reduce pollution and protect water quality. Information on beach conditions is available and easily accessible.

Maryland's beach monitoring program supports Maryland tourism and its recreation industry while protecting public health. The beauty of Maryland's coastline and beach recreation areas attract many local citizens, as well as out-of-state visitors.

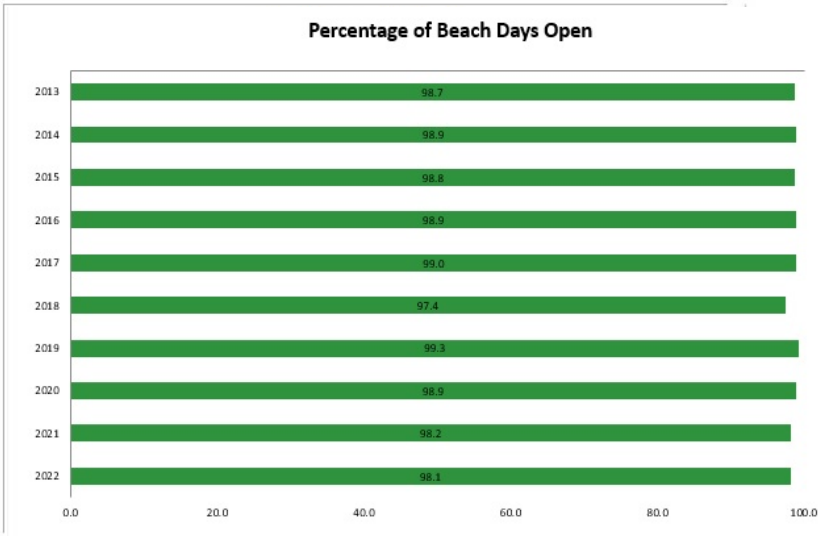
Your local health departments determine where, when, and how often your beach is sampled. During the season, local health departments will continue to collect water samples consistently to ensure safety for public health. Collected samples are sent to the Maryland Department of Health laboratory for analysis. When fecal bacteria standards are exceeded, the results are reported to local health departments so beach managers can issue an advisory.

Maryland Beaches Notification Update											
Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Total # of Beaches	203	194	185	186	185	181	182	184	182	185	184
Total # of Beach Days	19,894	19,012	18,130	19,530	18,130	17,738	17,836	18,032	16,680	18,130	18,032
Beach Days-w/Notification	213	256	196	229	197	180	463	125	191	326	336
% of Days Open	98.9	98.7	98.9	98.9	98.9	99.0	97.4	99.3	98.9	98.2	98.1
Beach Days = (number of beaches) x (number of days in beach season)											

MDE tracks the number of days in which a beach is either closed or the subject of a health-based advisory. In 2022, there were a total of 336 days either closed or subject to a health-based advisory at Maryland's 184 monitored beaches. Beach days are calculated by multiplying the number of monitored beaches by the number of days they were open during the summer. These numbers show that, in 2022, beaches were open with no advisories or closures **98.1 percent** of beach days. This marked the 18th consecutive year that the rate was 96 percent or greater. The beaches at Ocean City have never been under closure or advisory since the current monitoring program began in 2000.

Working Together for Safe Swimming

In October 2000, Congress passed the Beaches Environmental Assessment and Coastal Health (BEACH) Act and provided funding to the U.S. Environmental Protection Agency to improve beach monitoring in coastal states. Maryland's Beaches Program provides local health departments this funding to protect public health using water quality monitoring information and public notification of beach conditions. When water quality thresholds are exceeded, local health departments will issue an advisory as there is a potential elevated health risk to swimmers. If there is a known health risk to swimmers (such as from a sewage spill), local health departments can close the beach.



Water quality is important for the safety and health of swimmers and can deteriorate due to pollution caused by stormwater runoff, animal waste, boat discharges, trash, debris, failing septic systems, and sewage discharges. —Sewage sources include bypasses from sewage pumping stations and sewage spills.

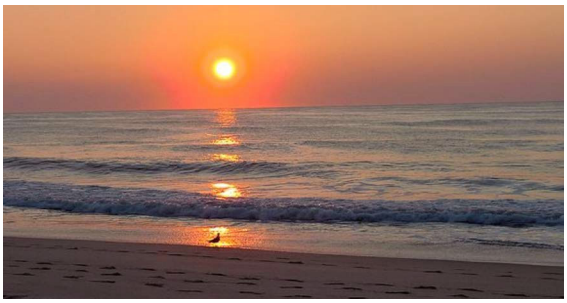
Maryland has policies in place and regulatory guidelines for wastewater systems to minimize pollution sources and reduce the risk to swimmers. In addition, Maryland requires timely reporting to local health departments and MDE any time there is a sewage spill. This includes a follow-up status report on the problem and corrective actions taken within five days of the spill. MDE prioritizes septic system funding to upgrade systems posing the greatest threat to clean waterways and drinking water. The Department also has programs in place to reduce the effects of polluted storm water runoff.

Learning More

Vibrio are bacteria that occur naturally in brackish water, such as the Chesapeake Bay and its tributaries, and in salt water, especially during the warmer summer months. Though *Vibrio* infections are rare in Maryland and nationwide, when the bacteria meet an open wound, they could potentially cause serious infections. *Vibrio* infections can be particularly dangerous for people with liver disease or weakened immune systems. Information is available on the Department's website at marylandhealthybeaches.com under the Vibrio tab.

Scientists with the National Oceanic & Atmospheric Administration continue to develop models that can predict the likelihood of *Vibrio* the Chesapeake Bay. Although the models cannot determine individual risk for *Vibrio*-related illness and should not be used to guide decisions about recreating in the Chesapeake Bay, the models do illustrate how widespread vibrio bacteria are in Maryland waters during the summer and how their distribution is influenced by seasonal changes. Their abundance is related to elevated water temperatures (>60°F), and their distribution is controlled somewhat by salinity (optimal salinity being 12 ppt). Due to the complexity between exposure, dose, and an individual's vulnerability for infections, there is no known threshold or standard that determines risk of infection from *Vibrios*. If you develop a wound with unusual redness, swelling, or drainage, seek medical attention immediately and tell your healthcare provider if you encountered brackish or salt water.

People can take precautions to avoid or reduce the risk of infection by covering wounds with waterproof bandages; having hand sanitizer or access to soap and water to cleanse wounds that occur while swimming, fishing, or crabbing; and showering following swimming in natural waters and washing hands before eating. Maryland is proactively working with NOAA on this issue using the best available science and technology.



Know Before You Go, Safe Swimming Practices

Maryland and its local jurisdictions continue to make information on beach conditions readily available. Beach advisories and closures are shared with the public through vehicles that include signs, county websites, and the Maryland Healthy Beaches (MarylandHealthyBeaches.com) website. The website provides color-coded status reports on beaches throughout the state and daily updates on rainfall. This information is important as it allows the Department to track runoff and water quality.

Swimmers can also receive information on the status of Maryland beaches through the Maryland Healthy Beaches website: https://bit.ly/MDEHealthyBeaches. Tips for healthy swimming practices are also available, and include the following:

- Avoid swimming within 48 hours of a heavy rain event.
- Try not to swallow beach water.
- Pick up waste left by your pets and dispose of it in the trash.
- Pick up your trash.
- When boating, use an approved marina pump-out station for waste disposal.
- Remember not to feed seagulls or other wildlife.
- Avoid swimming if you feel ill or have open cuts or sores. If water contact can't be avoided, cover your open cut or sore with waterproof bandages.