United States Environmental Protection Agency

Office of Water
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August 2021

EPA's Beach Report: 2020 Swimming Season

Introduction

This report summarizes information that states, territories, and tribes with coastal and Great Lakes beaches submitted to EPA reporting beach closings and advisories for the 2020 swimming season. The information in this report covers January 1 through December 31, 2020 and includes data submitted to EPA as of July 20, 2021. Two territories, American Samoa and U.S. Virgin Islands, submitted partial data sets before this report was created. A version of this report incorporating any updated data since this report was released can be generated at https://ofmpub.epa.gov/apex/beacon2/f?p=BEACON2:DNR.

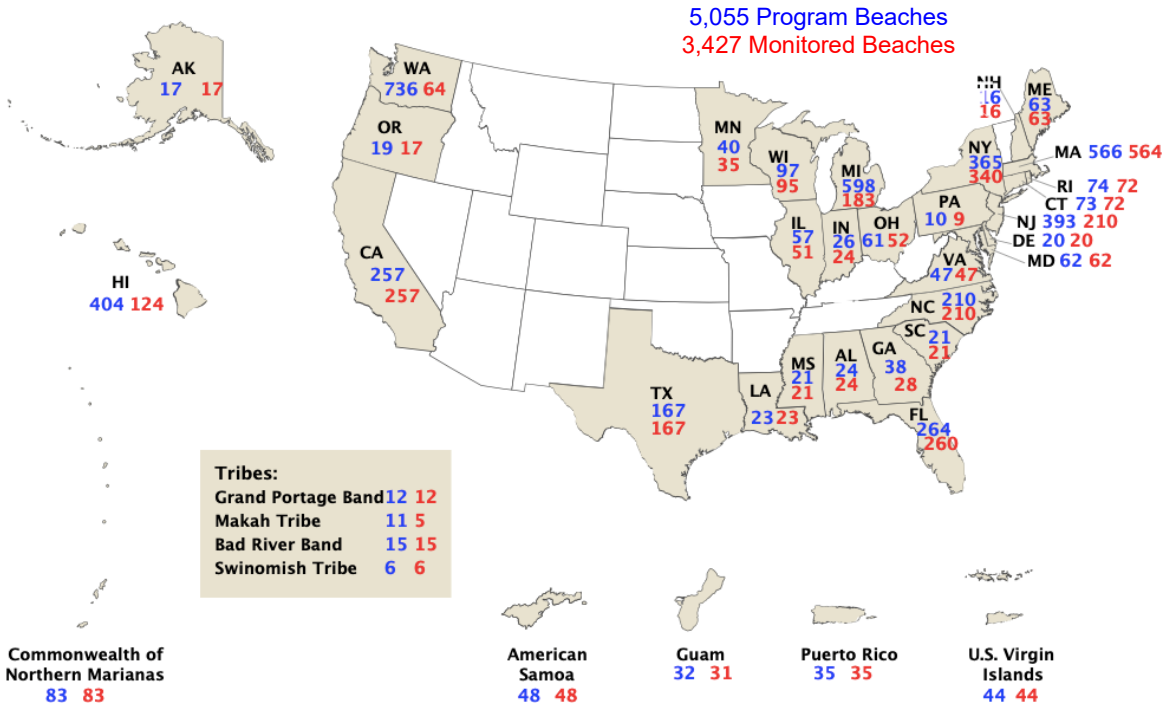
The Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000 authorizes EPA to provide grants to eligible states, territories, and tribes to monitor their coastal recreational waters for bacteria that indicate the possible presence of disease-causing pathogens and to notify the public when there is a potential risk to public health. EPA awarded approximately $9.2 million in grants in 2019 for the 2020 season. The BEACH Act requires that grant recipients report their monitoring and notifications data for coastal recreational waters to EPA and that EPA maintain an electronic database of that data, accessible to the public. This report is based on that data. Information on grouped or individual jurisdictions or beaches can be found at https://watersgeo.epa.gov/BEACON2/about.html.

2020 Swimming Season Results

States, territories, and tribes take water samples to monitor the water at swimming beaches to see if levels of specific indicator bacteria (for example, enterococci) exceed the water quality standards or beach advisory thresholds that apply to that water. "Program beaches" have, at minimum, a program to notify the public if swimming in the coastal water is unsafe, and most also have a program to routinely monitor the water quality. There are 6,349 coastal and Great Lakes beaches in the United States, and 5,055 (80%) of those are "program beaches." In 2020, 68 percent of the program beaches were monitored for bacteria. Chart 1 shows the number of beaches that were monitored and the total number of program beaches in each state, territory, and tribe in 2020. For information on how COVID-19 impacted the number of monitored beaches, see "What impact did COVID-19 have on the nation's beaches?"

When monitoring results show exceedances for bacteria, states, territories, and tribes either issue a beach advisory that warns people of possible risks of swimming or a beach closing that closes the beach to public swimming. The states and local agencies that do not routinely monitor water quality at program beaches use models or policies (for example, issue an advisory after a certain amount of rainfall) as a basis for issuing notification actions at beaches. These advisories or closures typically stay in effect until monitoring shows that levels of bacteria comply with applicable water quality standards or beach advisory thresholds.

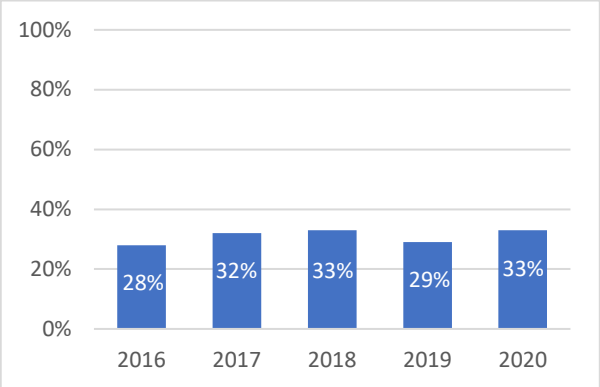
Chart 1: Number of total and monitored coastal and Great Lake program beaches by state/territory/tribe



How many beaches had notification actions?

In 2020, 33 percent of the nation's program beaches (1,658 out of 5,055) had at least one notification action, which is either an advisory or a closing. Chart 2 shows the percent of program beaches with one or more advisories or closings in years 2016 through 2020. Beaches that had notifications resulting from COVID-19 policies are included in these totals. For information on how COVID-19 impacted the number of beaches with notifications, see "What impact did COVID-19 have on the nation's beaches?"

Chart 2: Percent of nation's program beaches with one or more notification actions



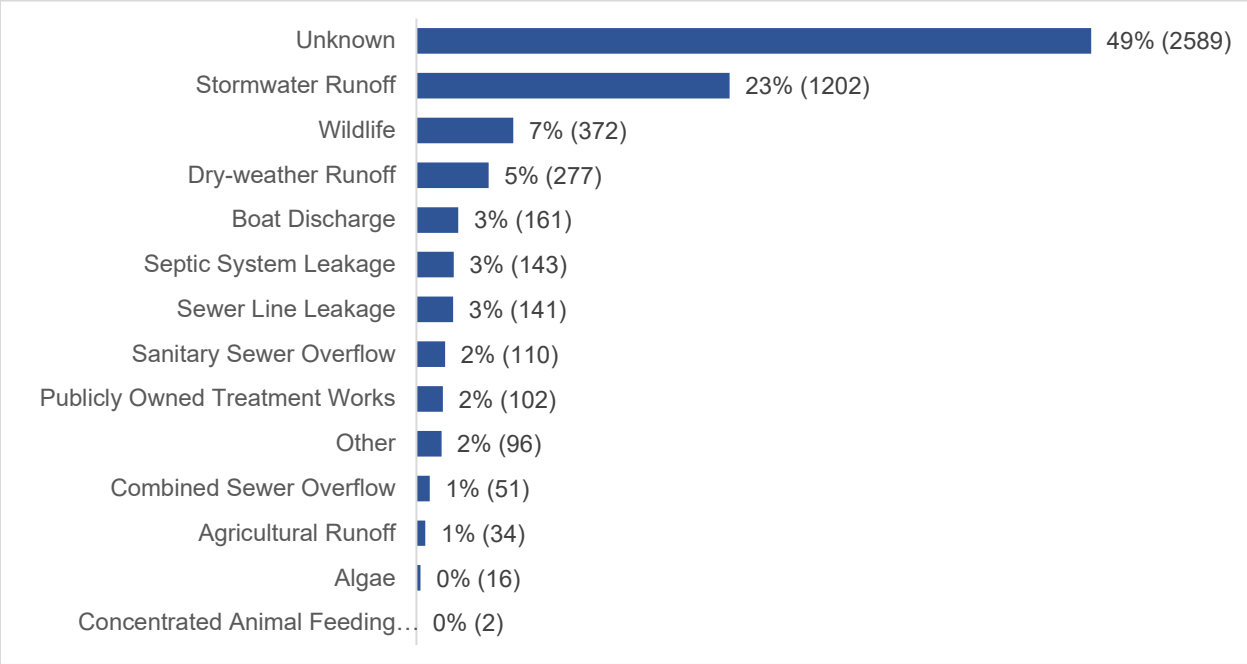
What are the possible pollution sources causing notification actions?

Beach advisories and closings can result from a variety of pollution sources: stormwater runoff after rainfall; pet and wildlife waste; waste from boats; leaking septic systems; malfunctions at wastewater treatment plants or broken sewer lines; overflows from sewer systems; or harmful algal blooms. To help minimize the risk to beachgoers, EPA is, for example, helping communities improve sewage treatment plants and reduce adverse impacts from rainfall as much as possible by providing water infrastructure investment loans.

States, territories, and tribes reported the possible sources of pollution shown in Chart 3 that resulted in beach advisories or closings or were identified in beach surveys at program beaches

in 2020. Stormwater runoff was the known source reported most often. Almost half (49%) of the sources were reported as unknown.

Chart 3: Reported possible sources of pollution in 2020

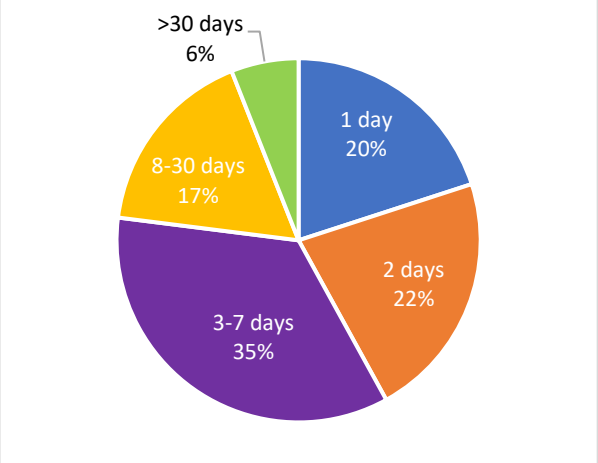


(Note: The percentages shown on the chart do not total 100 because only whole numbers are being shown. The numbers in parentheses are the reported number of sources associated with advisories and closures.)

How many notification actions were issued and how long did they last?

States, territories, and tribes issued 7,562 beach notification actions (i.e., advisories or closings) during the 2020 swimming season. An advisory or closing is typically removed when follow-up water quality monitoring shows that bacteria levels comply with applicable water quality standards or beach advisory thresholds. For 77 percent of the notification actions in 2020, bacteria levels in coastal recreational waters no longer exceeded applicable water quality standards or beach advisory thresholds and beaches were deemed safe for swimming within a week (Chart 4). In 2020, 20 percent of the notification actions lasted only one day, and 22 percent ended between one and two days. For information on how COVID-19 impacted the duration of beach notifications, see "What impact did COVID-19 have on the nation's beaches?"

Chart 4: Duration of beach notification actions in 2020

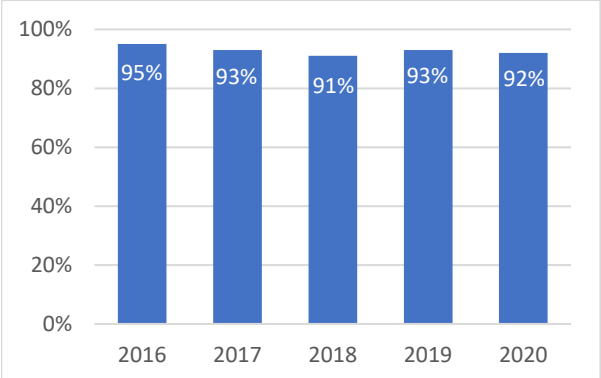


What percentage of days were beaches open and safe for swimming?

Program beaches on U.S. coasts and along the Great Lakes were open and safe for swimming 92 percent of the time in 2020. Chart 5 shows the percentage of beach days that the nation's program beaches were open and without any advisories in years 2016 through 2020. EPA

calculates the total available beach days and the number of beach days with advisories or closings to better track trends over time. To calculate total available beach days, EPA adds the length of the beach season (in days) for every program beach in each state, territory, and tribe. For 2020, EPA determined that 726,175 beach days were associated with the swimming seasons of the 5,055 beaches with monitoring and/or notification programs. Notification actions were reported on 60,115 days out of those 726,175 beach days (8%). For information on how COVID-19 impacted the number of days beaches were open and safe for swimming, see "What impact did COVID-19 have on the nation's beaches?"

Chart 5: Percent of days the nation's program beaches were open and safe for swimming



What impact did COVID-19 have on the nation's beaches?

Based on additional, optional reporting information from eight states, territories, and tribes, representing 1,607 program beaches (916 anticipated to be monitored in 2020):

- 20 (2.2%) of the beaches anticipated to be monitored were not monitored and 165 (18%) were monitored less frequently or for a shorter season compared to 2019 due to COVID-19.
- 242 (~15%) of the program beaches had advisories or closings in 2020 resulting from COVID-19 policies. The advisories and closures were not due to concern that anyone would catch COVID-19 from contact with the water but instead were to slow the spread of COVID-19 from congregating in crowds.
- The duration of COVID-19 related actions for these 1,607 program beaches ranged from 1 to 291 days based on jurisdiction policy.
- 2.5% of the 8% of days reported with notifications or closures nationwide were due to COVID-19 policies.
- 17,912 days were under COVID-19-related advisories and closures (15,717 advisory days, with an additional 2,195 days of closings due to jurisdictions' COVID-19 policies).

No COVID-19 illnesses due to exposure to coastal recreational waters in 2020 have been reported to EPA.

Where Can I Find More Information?

To find out more about what you can do to help protect beaches, visit https://www.epa.gov/beaches/act-beach.

To find out more about what affects beach health, visit https://www.epa.gov/beaches/learn-what-affects-beach-health.

For general information about beaches, visit https://www.epa.gov/beaches.

For current information about a specific beach, visit https://www.epa.gov/beaches/state-territorial-tribal-and-epa-beach-program-contacts.

For beach information that states, territories, and tribes have reported to EPA, visit http://watersgeo.epa.gov/beacon2.