

EPA's Beach Report: 2023 Swimming Season

Introduction

This report summarizes information that states, territories, and Tribes with coastal and Great Lakes beaches submitted to the EPA on beach closings and advisories for the 2023 swimming season. The information in this report covers January 1 through December 31, 2023, and includes data submitted to the EPA as of June 26, 2024. Two territories and two states¹ had not submitted complete data sets when this report was created; the jurisdictions without complete data sets comprise about four percent of the universe of U.S. beaches. A version of this report incorporating any data submitted after June 26, 2024 can be generated at <https://ofmpub.epa.gov/apex/beam2/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. The EPA awarded approximately \$10.1 million in grants in 2022 for the 2023 season; more information can be found at <https://www.epa.gov/beaches/beach-grants>. The BEACH Act requires grant recipients to report their monitoring and notifications data for coastal recreational waters to the EPA and the EPA to 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://www.epa.gov/beaches/find-information-about-particular-us-beach#find2>.

2023 Swimming Season Results

Based on available monitoring data, beaches on U.S. coasts and along the Great Lakes were open and safe for swimming 91 percent of the time in 2023. This means that for most of the swimming season, beaches were open for recreation and local businesses could benefit from associated tourism. The 2023 swimming season results are consistent with monitoring results collected between 2019 and 2022.

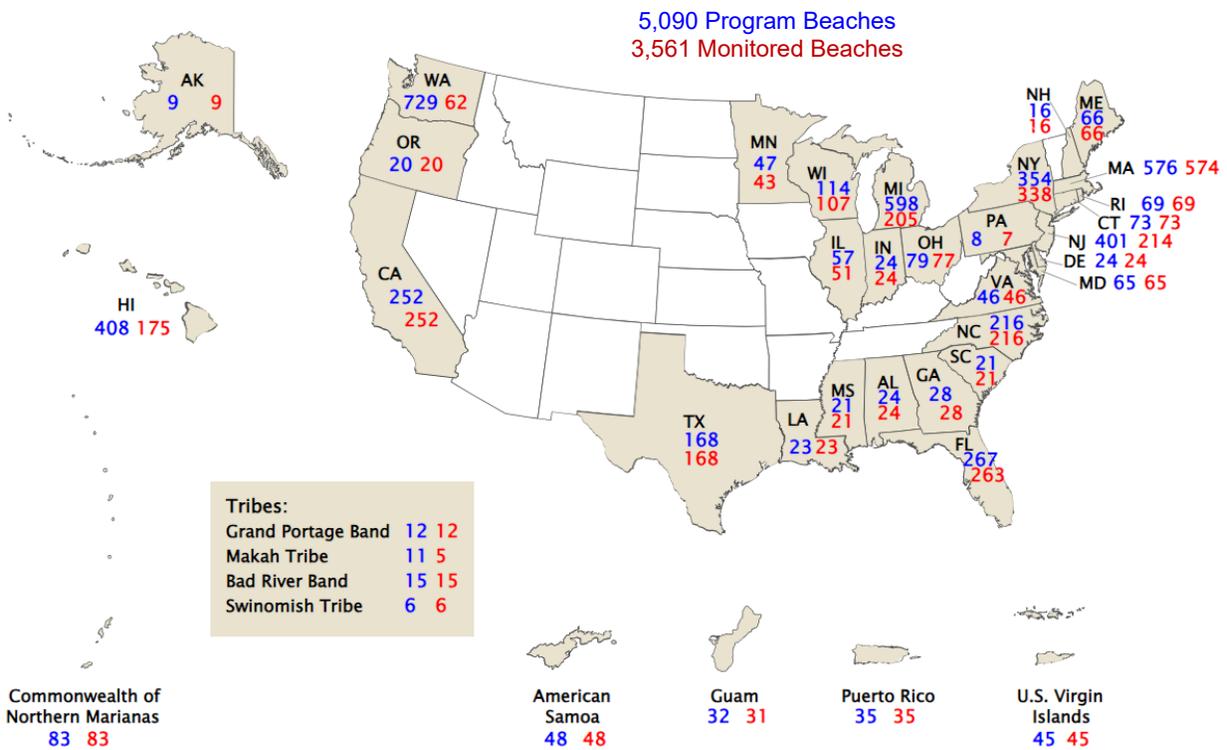
States, territories, and Tribes take water samples to monitor the water at swimming beaches to see if levels of specific indicator bacteria (for example, enterococci) exceed the water quality standards or beach advisory thresholds that apply to that water. "Program beaches" have, at minimum, a program 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 6,415 coastal and Great

¹ U.S. Virgin Islands, Northern Mariana Islands, Illinois, and Texas

Lakes beaches in the United States, and 5,090 (79%) of those are “program beaches.” In 2023, 3,561 (70%) 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 2023.

When monitoring results show exceedances for bacteria, states, territories, and Tribes issue either 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. The advisories or closings 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 (A text version of this chart is available on the next page.)

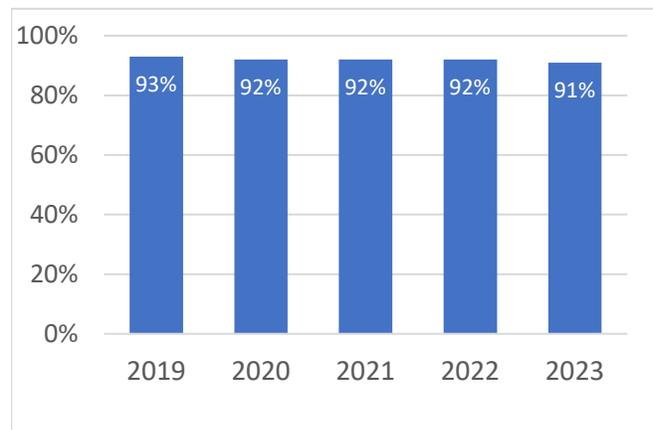


State/Territory/Tribe	Program Beaches	Monitored Beaches
AK	9	9
AL	24	24
American Samoa	48	48
Bad River Band	15	15
CA	252	252
Commonwealth of Northern Marianas	83	83
CT	73	73
DE	24	24
FL	267	263
GA	28	28
Grand Portage Band	12	12
Guam	32	31
HI	408	175
IL	57	51
IN	24	24
LA	23	23
MA	576	574
Makah Tribe	11	5
MD	65	65
ME	66	66
MI	598	205
MN	47	43
MS	21	21
NC	216	216
NH	16	16
NJ	401	214
NY	354	338
OH	79	77
OR	20	20
PA	8	7
Puerto Rico	35	35
RI	69	69
SC	21	21
Swinomish Tribe	6	6
TX	168	168
U.S. Virgin Islands	45	45
VA	46	46
WA	729	62
WI	114	107

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 91 percent of the time in 2023. Chart 2 shows the percentage of beach days that the nation’s program beaches were open and without any advisories in years 2019 through 2023. The 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, the EPA adds the length of the beach season (in days) for every program beach in each state, territory, and Tribe.

Chart 2: Percent of days the nation’s program beaches were open and safe for swimming

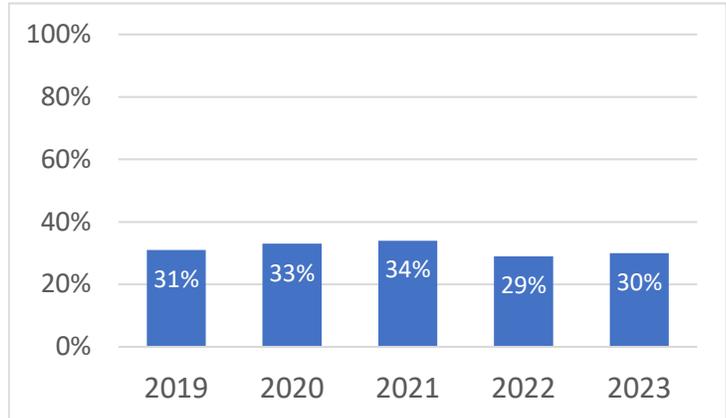


For 2023, the EPA determined that 697,737 beach days were associated with the swimming seasons of the 5,090 beaches with monitoring and/or notification programs. Notification actions were reported on 62,131 days out of those 697,737 beach days (9%).

How many beaches had notification actions?

In 2023, 30 percent of the nation’s program beaches (1,541 out of 5,090) had at least one notification action, which is either an advisory or a closing. Chart 3 shows the percent of program beaches with one or more advisories or closings in years 2019 through 2023.

Chart 3: Percent of nation’s program beaches with one or more notification action



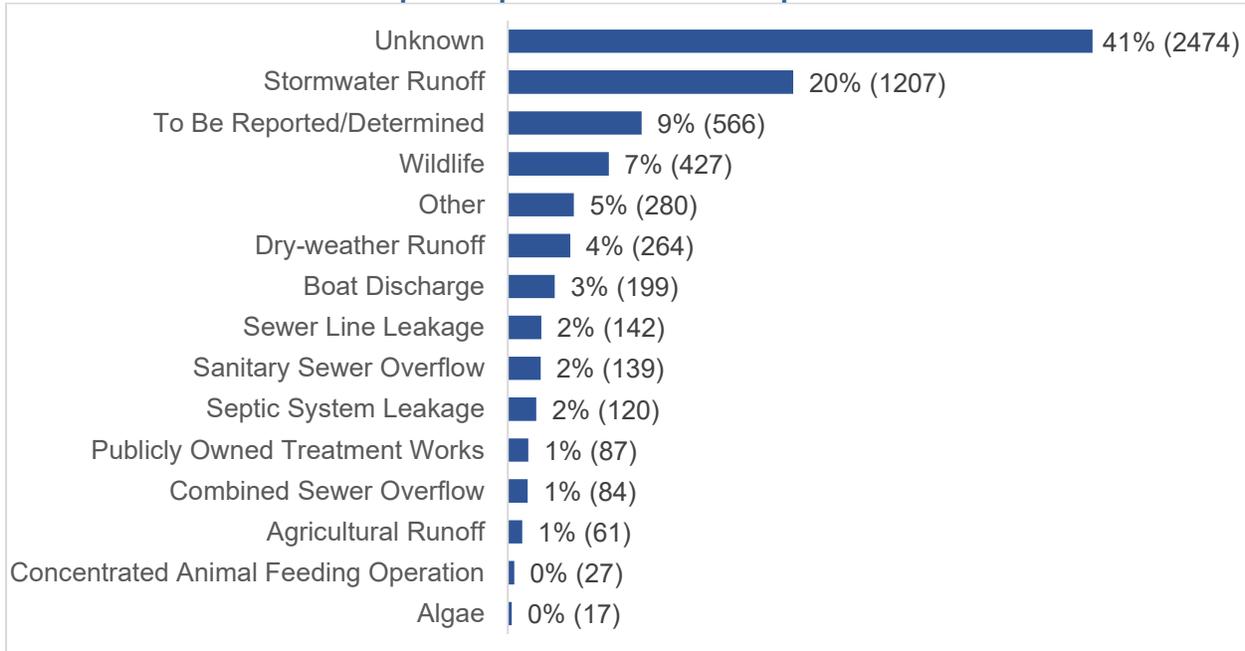
What are the possible pollution sources causing notification actions?

Beach advisories and closings can result from a variety of known pollution sources: stormwater runoff after rainfall; pet and wildlife waste; waste from boat discharge; leaking sewer lines and septic systems; malfunctions at wastewater treatment plants; combined sewer overflows; or harmful algal blooms.

Several ways the EPA is helping to minimize the risk to beachgoers is by: partnering with communities to reduce combined sewer overflows through green infrastructure and gray infrastructure solutions; providing Clean Water Act Section 319 grants to reduce nonpoint sources of contamination; investing billions of dollars through the Bipartisan Infrastructure Law and the Water Infrastructure Finance and Innovation Act to upgrade our nation's wastewater and stormwater systems.

States, territories, and Tribes reported the possible sources of pollution shown in Chart 4 that resulted in beach advisories or closings or were identified in beach surveys at program beaches in 2023. Stormwater runoff was the known source reported most often. More than a third (41%) of the sources were reported as unknown.

Chart 4: Reported possible sources of pollution in 2023

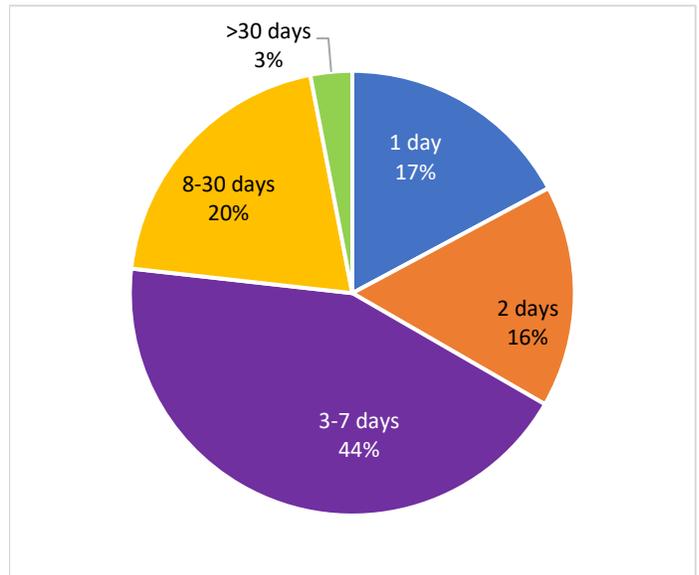


(Note: The percentages shown on the chart do not total 100 because they are rounded to the nearest whole number. The numbers in parentheses are the reported number of sources associated with advisories and closings.)

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

Among the 1,541 program beaches with notification actions, states, territories, and Tribes issued 8,088 advisories or closings during the 2023 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 2023, 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 5). In 2023, 17 percent of the notification actions lasted only one day, and 16 percent ended between one and two days.

Chart 5: Duration of beach notification actions in 2023



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 the EPA, visit <http://watersgeo.epa.gov/beacon2>.

To find out more about combined sewer overflow solutions, visit <https://www.epa.gov/npdes/combined-sewer-overflow-solutions-management-approaches>.

To find out more about reducing nonpoint source pollution, visit <https://www.epa.gov/nps>.

To find out more about infrastructure investments in the Bipartisan Infrastructure Law and the Water Infrastructure Finance and Innovation Act, visit <https://www.epa.gov/infrastructure> and <https://www.epa.gov/wifia>.