

EPA's BEACH Report: 2010 Swimming Season

May 2011

EPA 802-F-11-008

Introduction

The Beaches Environmental Assessment and Coastal Health (BEACH) Act of 2000 authorizes EPA to provide grants to coastal and Great Lakes states, territories, and eligible tribes to monitor their coastal beaches 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 BEACH Act requires that recipients of those grants report their coastal beach monitoring and notification data to EPA, and that EPA maintain an electronic database of that data, accessible to the public, so that they can make informed choices about where to swim. To support reducing the risk of exposure to disease-causing pathogens at recreational beaches, EPA is posting the latest data submitted to EPA about beach closings and advisories for the 2010 swimming season. This fact sheet also highlights recent developments in EPA's beach program.

Figure 1. Coastal states with 2010 monitored beach data.

2010 Swimming Season Results

When monitoring results at swimming beaches show that levels of specific indicator bacteria in the water exceed standards, states, territories, and tribes issue a beach advisory, warning people of possible risks of swimming, or close the beach to public swimming until further monitoring finds that water quality complies with applicable standards. Some states and local agencies, in addition to water sampling, use models or other predictive tools as a basis for issuing notification actions at beaches.

How many beaches had notification actions?

For the 2010 swimming season, all thirty coastal states, five territories, and two tribes reported their beach monitoring and notification data to EPA (Figure 1). In 2010, of the 3,654 coastal beaches that were monitored, 1,362 (37 percent) had at least one advisory or closure (Figure 2). The primary reason for the decrease in the number of beaches with notification actions from 2009 to 2010 was that Hawaii did not issue any islandwide rainfall-based advisories in 2010. As a result, only 20 Hawaiian beaches had actions, compared to 245 beaches in 2009.

What percentage of days were beaches under a notification action?

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, we sum the length of each state's and territory's beach season multiplied by the number of beaches in the state or territory. For 2010, EPA determined there were a total of 705,335 beach days associated with the swimming seasons of 3,654 monitored beaches. Notification actions were reported on 32,834 days, meaning that beaches were under an advisory or closed about 5 percent of the time, the same as the last six years. (Table 1)

Protecting your local beaches

Beach advisories and closings can be the result of several different factors: overflows from sewer systems, either by design or due to blockages; treatment plant malfunctions; stormwater runoff after rainfall; waste from boats; leaking septic

Figure 2: No. of beaches with notification actions from 2008 to 2010.

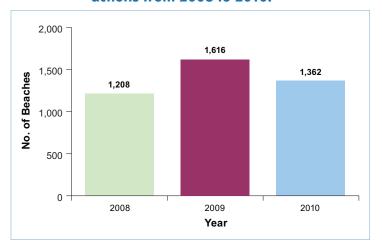
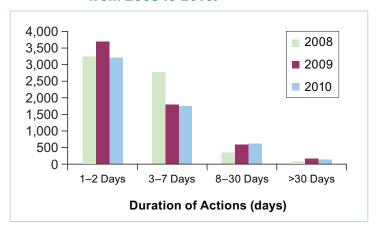


Figure 3: Duration of beach notification actions from 2008 to 2010.



Beach notifications issued because of the oil spill that resulted from the April 20, 2010 explosion on the BP-leased Deepwater Horizon offshore drilling platform are not included in the summary statistics in this report. Persistent existence of oil and the presence of cleanup crews resulted in extended closures during the swimming season at 45 Alabama, Mississippi, Florida, and Louisiana beaches. Together these actions totaled 3,957 lost beach days. Environmental data and links to current state-specific information about Gulf Coast beaches can be found on EPA's BP Spill Response site at: www.epa.gov/bpspill/water.html.

Table 1. Data collected on beaches, advisories, and closings.				
	2007	2008	2009	2010
Number of monitored beaches	3,647	3,786	3,782	3,654
Number of beaches affected by advisories or closings	1,184	1,208	1,616	1,362
Percentage of beaches affected by advisories or closings	32%	32%	43%	37%
Percentage of beach days affected by advisories or closings	5%	5%	5%	5%

systems; or pet and wildlife waste. To help minimize the risk to beachgoers, EPA is helping communities build and properly operate sewage treatment plants, working to control overflows to reduce them as much as possible, and working with the U.S. Coast Guard to reduce discharges from boats and larger ships. To find out more about what you can do to help, visit: http://water.epa.gov/type/oceb/beaches/dosdonts.cfm#protect. To find out more about sources of beach pollution in your area, contact your local beach program: http://water.epa.gov/type/oceb/beaches/whereyoulive_state.cfm.

Recent Developments in EPA's Beach Program

Great Lakes Restoration Initiative

Last year, the President's Great Lakes Restoration Initiative awarded \$13.4 million in grants that focused on beach-related activities. These included projects for identification and reduction of beach water contamination sources, improved beach water quality monitoring methods, near real-time beach water quality notifications, more accurate forecasts, and improved communication of beach health information to the public. This year the beach program focus is on *Project Implementation to Make Beaches Safer*. EPA expects to provide \$8,000,000 for projects to implement actions to reduce or eliminate sources of contamination that have been identified through, or are consistent with, sanitary surveys (a method of investigating the sources of fecal contamination to a water body) at Great Lakes beaches.

Development of New or Revised Water Quality Criteria for Recreational Waters

As required by the BEACH Act of 2000, EPA has been conducting critical science and research, and will publish new or revised recreational water quality criteria by October 2012. The new or revised criteria recommendations EPA develops will replace the criteria recommendations issued in 1986 and will be used by states, tribes and territories in their adoption of new water quality standards to protect people from illness associated with fecal contamination in recreational water. Last summer EPA completed data analysis for two beach epidemiological studies, one in tropical waters and the other in marine waters impacted by urban runoff. EPA also researched improved monitoring techniques such

as rapid testing methods, compiled available predictive models, and investigated effective uses of sanitary surveys to diagnose and improve the health of beaches. In accordance with a Consent Decree and Settlement Agreement, EPA completed its research by December 15, 2010. EPA is currently synthesizing the research and it will be peer reviewed in 2011. EPA held a multi-stakeholder meeting in October 2010 to provide an update on the Agency's work toward the development of new or revised recreational water quality criteria and will hold another multi-stakeholder meeting June 14–15, 2011, in New Orleans, Louisiana. To find updates on the development of the new or revised criteria visit: http://water.epa.gov/scitech/swguidance/standards/criteria/health/recreation/index.cfm.

National Beach Conference

EPA's Beach Program strives to ensure public health protection at beaches and to improve the accuracy and timeliness of notification actions. To support this goal, EPA sponsored the recent National Beach Conference held in Miami, Florida, on March 15–17, 2011. This biennial conference brings together researchers, practitioners, and policymakers from around the world to discuss water quality at beaches. Conference proceedings are available on our website, http://water.epa.gov/type/oceb/beaches/meeting2011_index.cfm.

Funding to State Programs

Since 2001, EPA has made available more than \$100 million in grants to 37 coastal and Great Lakes states, territories and tribes. The funds help improve water quality monitoring and public information programs to alert beachgoers about the health of their beaches. Beach water quality monitoring helps to ensure that the public receives information on how to protect their health when visiting beaches. Results are used to issue warnings and closures if bacterial indicator levels suggest an unsafe risk and to help identify actions needed to reduce pollution.

For More Information

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

For information about a specific beach: http://iaspub.epa.gov/waters10/beacon_national_page.main.