



EPA's BEACH Report: 2005 Swimming Season

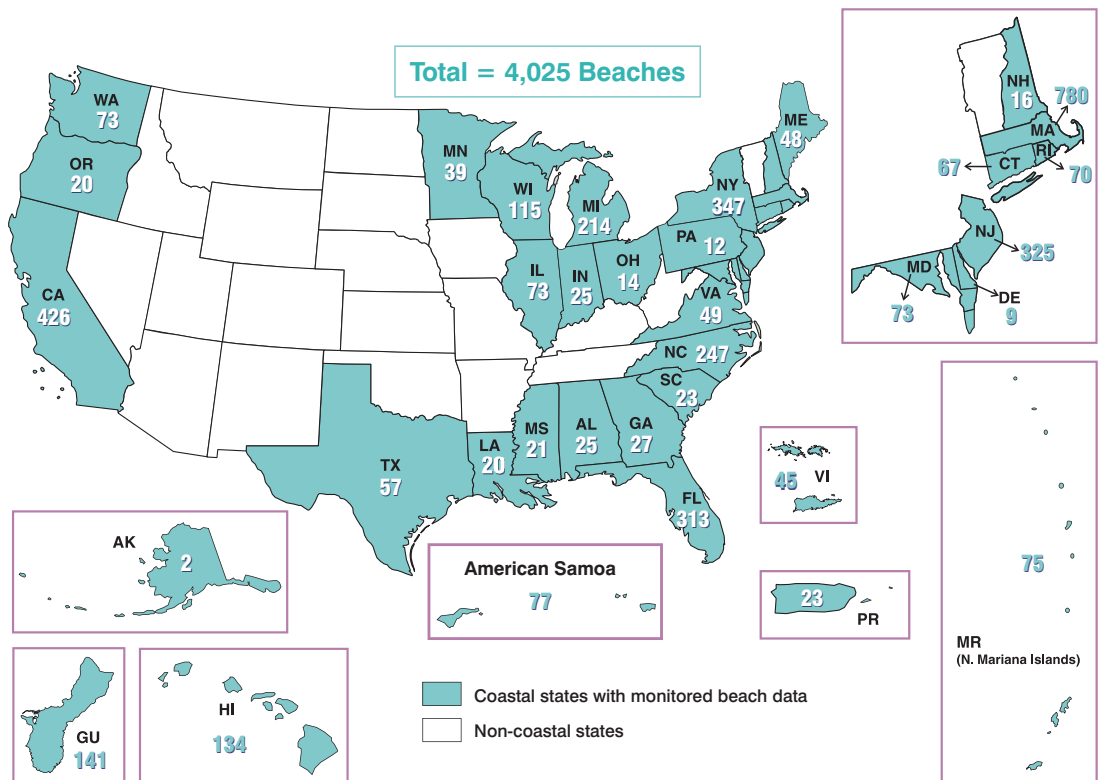
EPA 823-F-06-010
June 2006

Introduction

To further its commitment to reducing the risk of exposure to disease-causing bacteria at recreational beaches, EPA is posting its latest data about beach closings and advisories for the 2005 swimming season. Congress passed the BEACH Act of 2000 (BEACH Act), requiring that coastal and Great Lakes states and territories report to EPA on beach monitoring and notification data for their coastal recreation waters. To help protect the public, the BEACH Act also requires EPA to maintain an electronic monitoring and notification database of that data.

The BEACH Act defines coastal recreation waters as the Great Lakes and coastal waters (including coastal estuaries) that states, territories, and authorized tribes officially recognize or designate for swimming, bathing, surfing, or similar activities in the water.

Figure 1. Coastal states with 2005 monitored beach data.



Advisories and Closings

When monitoring of water at swimming beaches shows that levels of certain bacteria exceed standards, states or local agencies notify the public of potential health risks. This public notification may be either a beach advisory, warning people of possible risks of swimming, or closing a beach to the public.

For the 2005 swimming season, all of the thirty coastal states and five territories reported public notification actions to EPA. The data show that only four percent of beach days were lost due to advisory or closures triggered by monitoring. Even then, most actions were of relatively short duration (see Figure 2). Of the 4,025 beaches that were monitored in 2005, 1,109 or 28 percent had at least one advisory or closing during the 2005 season (Figure 3). A total of 5,540 beach notification actions were reported.

EPA calculates beach days to get a better sense of the extent of beach advisory and closure information. We do this by multiplying the number of beaches by the number of days in the swimming season. For the 2005 swimming season, EPA determined there were a total of 743,036 beach days for all of the 4,025 monitored beaches. Of those, actions were reported on 27,177 days (Figure 4), meaning that beaches were closed only about 4% of the time.

The data consist primarily of advisories issued as a result of local monitoring and localized precautionary advisories. Certain preemptive advisories that apply to large areas are not included in these counts.

Figure 2: Beach notification actions by duration.

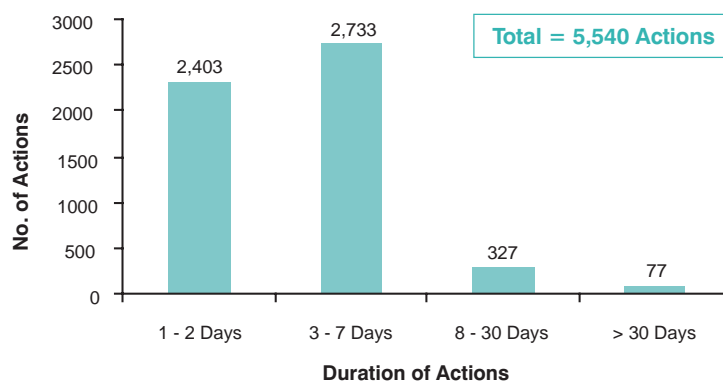


Figure 3: Beach notification actions in 2005.

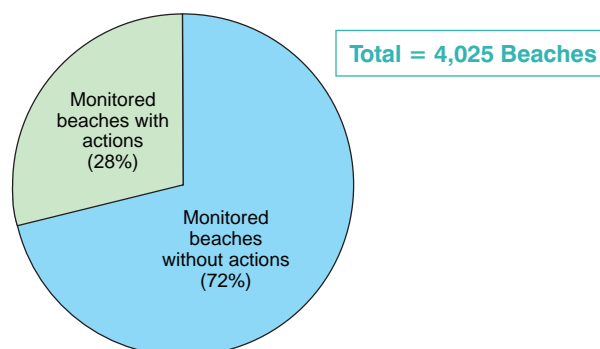
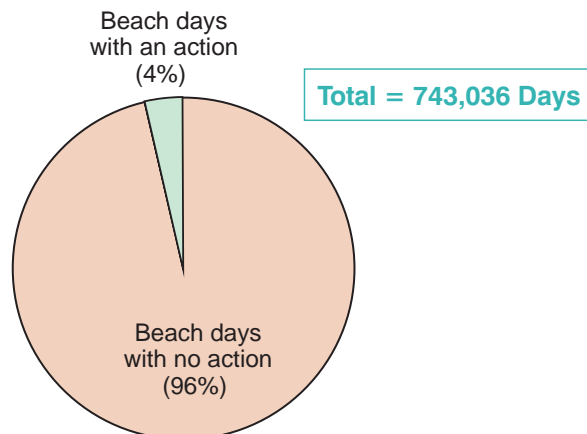


Figure 4: Beach days by notification actions.



State Reporting Data

Data trends are difficult to establish due to the new reporting requirements that began in 2003. The data from 2003 to 2005 cannot easily be compared to data gathered from 1997 to 2002. From 1997-2002 beach monitoring data was collected and submitted to EPA on a voluntary basis and included coastal, Great Lakes, and some inland waters. Beginning with the 2003 season, states are required to submit data to EPA under the BEACH Act for beaches which are in coastal and Great Lakes waters (Table 1). EPA is working to complete the data sets.

Table 1. Data collected on beaches, advisories, and closings.

	Voluntary Survey						Required Reporting		
	1997	1998	1999	2000	2001	2002	2003	2004	2005
Number of monitored beaches	1,021	1,403	1,891	2,354	2,445	2,823	1,857*	3,574**	4,025
Number of beaches affected by advisories or closings	230	353	459	633	672	709	395*	942**	1,109
Percentage of beaches affected by advisories or closings	23	25	24	27	27	25	21*	26**	28

*Incomplete data from 11 states.

**Incomplete data from 4 territories.

Uniform Water Quality Standards

The BEACH Act of 2000 required coastal states and states bordering the Great Lakes to adopt EPA's most current recommended bacteria criteria to better protect beach bathers from harmful pathogens. On November 8, 2004, EPA finalized more protective bacteria standards for *E. coli* and enterococci for coastal and Great Lakes recreational waters for those states that had not yet complied with the BEACH Act of 2000. Twenty-one states and territories were affected by this rule; the other 14 had standards in place that were as protective of human health as EPA's most current bacteria criteria.

Funding to State Programs

For the past six years, EPA has provided nearly \$52 million in grants to 35 coastal and Great Lakes states and territories. The funds are designed to help improve water monitoring and public information programs to alert beachgoers about the health of their beaches.

The grants are designed to support water monitoring, which helps to ensure that the public receives information on how to protect their health when visiting beaches. Beach water monitoring results are used to issue warnings and closures if bacteria levels are at unsafe levels and to help identify actions needed to reduce pollution.

Planned Improvements

EPA is working proactively to improve the delivery of its beach advisory information to the public. BEACON (BEach Advisory and Closing Online Notification system) is part of EPA's overall "eBeaches" effort to provide the public with monitoring and notification information by electronic means. EPA is working to improve eBeaches to enable faster, easier, and more secure transmittal of information about beach water quality. This includes improved public access to information about beach conditions and the health risks associated with swimming in polluted water. EPA's goal is to make the 2006 swimming season data available sooner and to improve the beach mapping functions by incorporating beach lengths. EPA consults regularly with its state counterparts and provides technical assistance to make these improvements.

For More Information

For general information about beaches visit:

<http://www.epa.gov/beaches/>

For information about a specific beach:

<http://www.epa.gov/waterscience/beacon/>