



EPA's BEACH Report:

Maryland 2006 Swimming Season

June 2007

Introduction

The BEACH Act of 2000 requires that coastal and Great Lakes states and territories report to EPA on beach monitoring and notification data for their coastal recreation waters. 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.

This fact sheet summarizes beach monitoring and notification data submitted to EPA by the State of Maryland for the 2006 swimming season.

Maryland Department of the Environment (MDE) works with local health departments to enhance beach water quality monitoring and improve the public notification process regarding beach water quality in Maryland.

Water quality assessment begins prior to beach season when local health departments collect water samples from beaches and perform shoreline surveys to ensure there are no nearby pollution sources that may adversely impact water quality. Results from beach samples collected before and during the beach season are sent to MDE who assembles the data and submits them to EPA. MDE also submits advisory information to EPA.

In 2006, the Maryland Beaches Program developed and piloted a technology based data collection system to conduct Beach Shoreline Surveys. This facilitates the collection of detailed geo-referenced information, and improves data management and analysis. This system will also provide key information for identifying and mitigating actual and potential pollution sources that may impact beach water quality. This data system has provided MDE with a unique view on how land based activities can impact water quality at beaches.

MDE, working with local, state, and federal agencies, is studying the relationship between physical, nutrient, meteorological, and bacterial concentration data at bathing beaches to determine if these data can be useful in developing a predictive model for Sandy Point State Park, a popular beach on the Chesapeake Bay. MDE hopes to determine if collecting these data would be useful at other beaches.

Figure 1. Maryland coastal counties with 2006 monitored beach data.



Table 1. Breakdown of monitored and unmonitored coastal beaches by county.

County	Total Beaches	Monitored	Not Monitored
ANNE ARUNDEL	27	27	0
BALTIMORE	4	4	0
CALVERT	10	10	0
CECIL	13	13	0
KENT	10	10	0
QUEEN ANNE'S	1	1	0
SOMERSET	1	1	0
ST. MARYS	3	3	0
WORCESTER	12	12	0
TOTALS	81	81	0

2006 Summary Results

How many beaches had notification actions?

When the results of water samples collected at a beach exceed Maryland's bacteria standards, the local health departments may collect additional water samples and will issue appropriate public advisories. Once follow-up tests indicate no exceedance of water quality standards, the advisories are lifted. Also, when a known public health hazard is reported, such as sewage spill, beach advisories and closures are issued promptly. Of the 81 coastal beaches that were monitored in 2006, 18, or 22 percent, had at least one advisory during the 2006 season (Figure 2).

How many notification actions were reported and how long were they?

A total of 31 beach notification actions were reported in the 2006 swimming season. Half of those actions lasted less than 8 days, while the rest lasted between 8 and 30 days. Figure 3 presents breakdowns of action durations.

What percentage of days were beaches under a notification action?

For Maryland's 2006 swimming season, EPA determined there were a total of 8,181 beach days associated with the 81 monitored beaches. Actions were reported on 317 of those days or about 4 percent of the time (Figure 4).

How do 2006 results compare to previous years?

Beginning in 2003, states are required to submit data to EPA under the BEACH Act for beaches which are in coastal and Great Lakes waters. Table 2 compares 2006 data with data reported in previous years.

For More Information

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

For information about beaches in Maryland:
www.mde.state.md.us/CitizensInfoCenter/Health/beaches.asp

Figure 2: Monitored Beaches with and without notification actions.

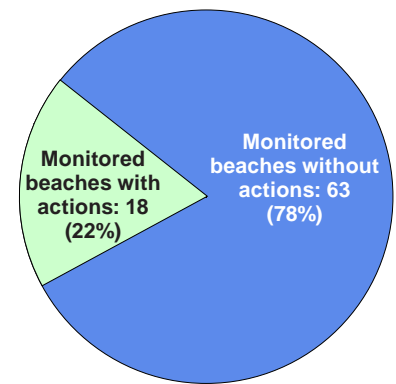


Figure 3: Beach notification actions by duration.

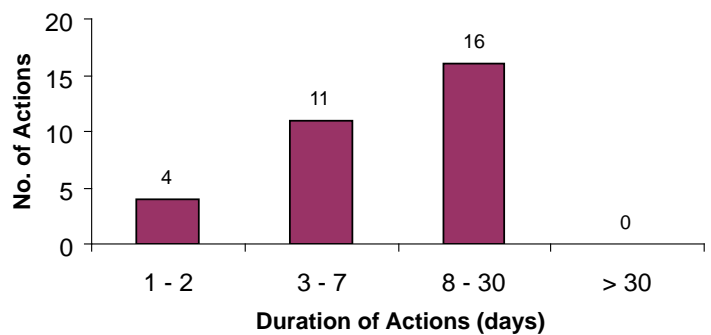


Figure 4: Beach days with and without notification actions.

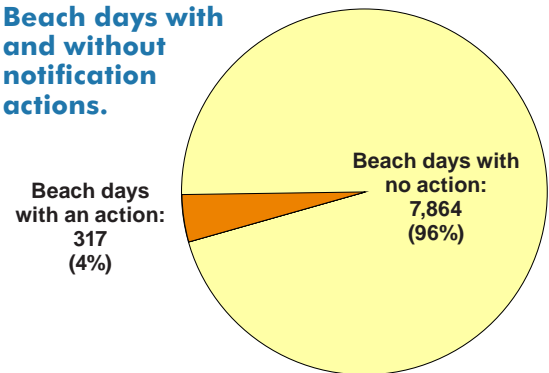


Table 2. Beach notification actions, 2004-2006.

	2004	2005	2006
Number of monitored beaches	76	73	81
Number of beaches affected by notification actions	14	3	18
Percentage of beaches affected by notification actions	18%	4%	22%