



EPA's BEACH Report:

Maryland 2007 Swimming Season

July 2008

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 2007 swimming season.

Maryland Department of the Environment (MDE) works with local health departments and Maryland Department of Health and Mental Hygiene (DHMH) Laboratory to enhance beach water quality monitoring and improve the public notification process for beach water quality in Maryland.

Water quality assessment begins prior to beach season when local health departments collect water samples from beaches and perform beach Pollution Source Surveys to ensure that there are no nearby pollution sources that may adversely impact water quality. MDE has been working with local health departments to utilize a recently developed technology-based data collection system to conduct beach Pollution Source Surveys. This system facilitates the collection of detailed geo-referenced information, and improves data management and analysis. This data system has provided MDE and local health departments with a unique view on how land based activities can impact water quality at beaches and provides the information needed to quickly correct or mitigate problems identified.

Local health departments collect water quality samples from beaches before and during the beach season. These samples are sent to the DHMH Laboratory for analysis. Water quality results that exceed the criteria are immediately reported to local health departments so that beach managers can issue a notification if needed. MDE assembles and submits the monitoring and notification data to EPA.

In 2007, MDE launched a study to address questions about indicator bacteria and pathogens found in beach sand and water. This study is being conducted at selected sites in Maryland and Delaware.

Figure 1. Maryland coastal counties.



Table 1. Breakdown of monitored and unmonitored coastal beaches by county for 2007.

County	Total Beaches	Monitored	Not Monitored
ANNE ARUNDEL	27	27	0
BALTIMORE	3	3	0
CALVERT	9	9	0
CECIL	6	6	0
KENT	8	8	0
QUEEN ANNE'S	1	1	0
SOMERSET	2	2	0
ST. MARY'S	2	2	0
WORCESTER	10	10	0
TOTALS	68	68	0

2007 Summary Results

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

Maryland's approach is to issue a beach advisory when water quality standards are exceeded at a particular beach that warns people to avoid contact with the ocean water. A total of 20 monitored beaches had at least one advisory issued during the 2007 swimming season. The majority of the notification action durations that are 3 to 7 days or 8 to 30 days, shown in Figure 2, reflect the timing between sampling events rather than risk to swimmers or pollution. Figure 2 presents a full breakdown of notification action durations.

What percentage of days were beaches under a notification action?

For Maryland's 2007 swimming season, actions were reported about 4 percent of the time (Figure 3).

How do 2007 results compare to previous years?

Table 2 compares 2007 notification action data with monitored beach data from previous years.

What pollution sources impact monitored beaches?

There were no obvious pollution sources at any Maryland beaches in 2007.

For More Information

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

For information about beaches in Maryland:
www.beaches911.org

Figure 2: Beach notification actions by duration.

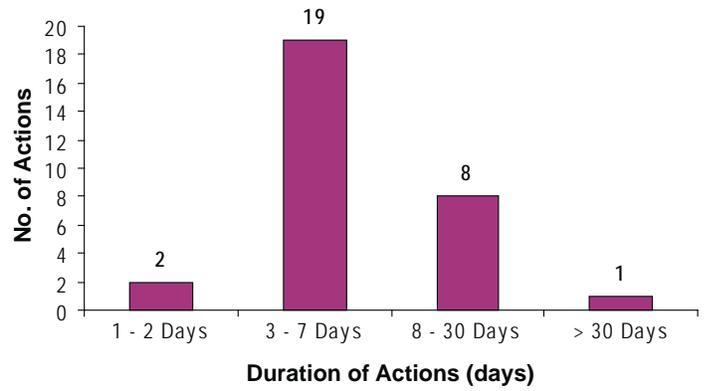


Figure 3: Beach days with and without notification actions.

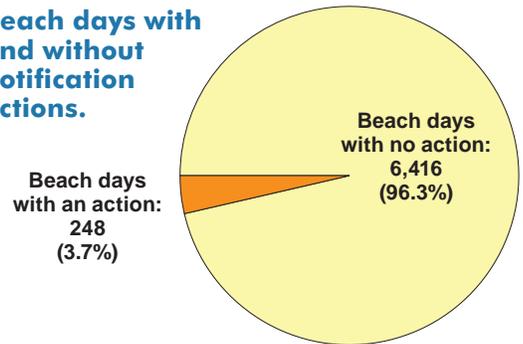


Table 2. Beach notification actions, 2005–2007.

	2005	2006	2007
Number of monitored beaches	73	81	68
Number of beaches affected by notification actions	3	18	20
Percentage of beaches affected by notification actions	4%	22%	29%
Percentage of beach days affected by notification actions	2%	4%	4%

Figure 4: Percent of monitored beaches potentially impacted by pollution sources (68 beaches).

