



EPA's BEACH Report: Maryland 2009 Swimming Season

May 2010

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 2009 swimming season.

Maryland Department of the Environment (MDE) works with local health departments and the 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 the 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 2009, MDE updated its website, MarylandHealthyBeaches.com, to provide location and notification information for each beach. This website also provides information to beachgoers about Maryland's Beaches Program and environmentally healthy practices at Maryland's beaches.

Figure 1. Maryland coastal counties.



Table 1. Breakdown of monitored and unmonitored coastal beaches by county for 2009.

County	Total Beaches	Monitored	Not Monitored
ANNE ARUNDEL	29	29	0
BALTIMORE	4	4	0
CALVERT	9	9	0
CECIL	5	5	0
KENT	7	7	0
QUEEN ANNE'S	1	1	0
SOMERSET	2	2	0
ST. MARY'S	3	3	0
WORCESTER	10	10	0
TOTALS	70	70	0

2009 Summary Results

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

When water quality standards are exceeded at a particular beach, Maryland's approach is to issue a beach advisory that warns people to avoid contact with the beach water. A total of 9 monitored beaches had at least one advisory issued during the 2009 swimming season. Many of the notifications were issued in error. In many cases, the length of the advisory was a reflection of the timing between sampling events rather than a risk to swimmers. And in some cases, the advisory was not lifted as early as it should have been according to state regulations. Figure 2 presents a full breakdown of notification action durations.

What percentage of days were beaches under a notification action?

For Maryland's 2009 swimming season, there were notifications reported about 2 percent of the time (Figure 3).

How do 2009 results compare to previous years?

Table 2 compares 2009 notification action data with monitored beach data from previous years.

What pollution sources possibly affect investigated monitored beaches?

Figure 4 displays the percentage of Maryland's investigated monitored beaches possibly affected by various pollution sources. In 2009, 67 percent of the beaches had unidentified sources.

For More Information

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

For information about beaches in Maryland:
MarylandHealthyBeaches.com

Figure 2: Beach notification actions by duration.

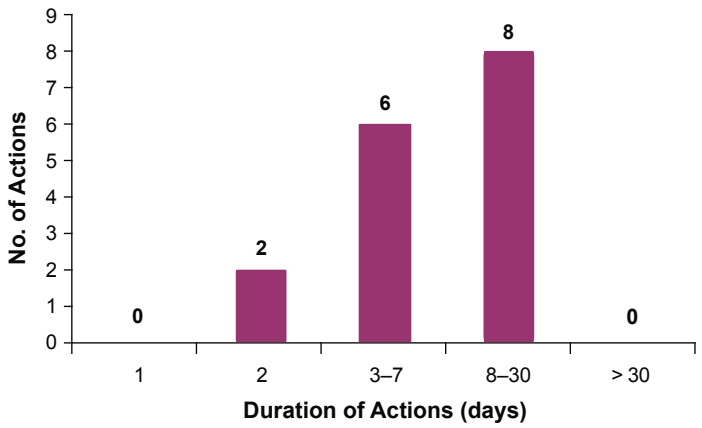


Figure 3: Beach days with and without notification actions.

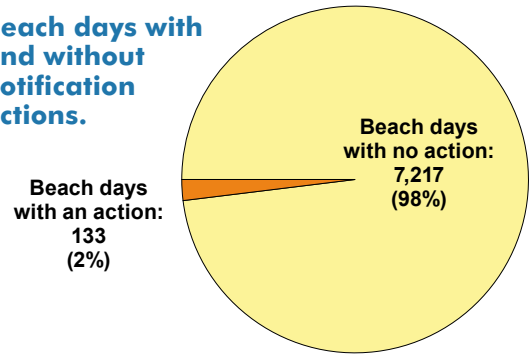


Table 2. Beach notification actions, 2007-2009.

	2007	2008	2009
Number of monitored beaches	68	71	70
Number of beaches affected by notification actions	20	10	9
Percentage of beaches affected by notification actions	29%	14%	13%
Percentage of beach days affected by notification actions	4%	1%	2%

Figure 4: Percent of investigated monitored beaches affected by possible pollution sources (70 beaches).

