

EPA's BEACH Report:New York 2010 Swimming Season

May 2011

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 New York for the 2010 swimming season.

Each summer, New York monitors bacteriological indicator levels at bathing beaches along Lake Erie, Lake Ontario, Long Island Sound, and the Atlantic Ocean as part of EPA's BEACH Act grant program. Indicator bacteria are used to detect pollution sources, such as sewage or stormwater runoff that could affect water quality at a beach. The New York State Department of Health contracts with local health departments, the New York City Department of Health and Mental Hygiene, and the New York State Office of Parks, Recreation, and Historic Preservation to provide up-to-date information regarding beach water quality conditions to the public.

In 2010, beach water samples were collected from the State's 346 monitored coastal beaches and analyzed for *E. coli* (freshwater beaches) or enterococcus (marine beaches). Sample analysis and local predictive models resulted in 449 instances of beach closures or advisory postings to protect the public from swimming in potentially contaminated water. Public notification occurs if a sample exceeds the threshold of 235 *E. coli* colonies per 100mL or 104 enterococcus colonies per 100mL of water. New York's beach water quality is generally excellent; in 2010 the State's coastal beaches were open 97% of the time.

Figure 1. New York coastal counties.



Table 1. Breakdown of monitored and unmonitored beaches by county for 2010.

County	Total Beaches	Monitored	Not Monitored
BRONX	10	10	0
CAYUGA	1	1	0
CHAUTAUQUA	9	9	0
ERIE	8	8	0
JEFFERSON	2	2	0
KINGS	11	11	0
MONROE	4	4	0
NASSAU	69	69	0
NIAGARA	2	2	0
OSWEGO	6	6	0
QUEENS	12	12	0
RICHMOND	3	3	0
SUFFOLK	183	183	0
WAYNE	3	3	0
WESTCHESTER	23	23	0
TOTALS	346	346	0

2010 Summary Results

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

When water quality standards are exceeded at a particular beach, New York issues a beach advisory that warns people to avoid contact with the ocean water. A total of 132 monitored beaches had at least one advisory issued during the 2010 swimming season. About 86 percent of New York's 449 notification actions lasted two days or less. Figure 2 presents a full breakdown of notification action durations.

What percentage of days were beaches under a notification action?

For New York's 2010 swimming season, actions were reported about 3 percent of the time (Figure 3).

How do 2010 results compare to previous years?

Table 2 compares 2010 notification action data with monitored beach data from previous years. In 2010, there were fewer beaches affected by advisories or closings, and fewer beach days affected by notification actions than in 2008 and 2009.

What pollution sources possibly affect investigated monitored beaches?

Figure 4 displays the percentage of New York's monitored beaches possibly affected by various pollution sources. In 2010, 55 percent of the beaches included storm-related runoff as a known potential source. No pollution sources were found at 42 percent of the beaches.

For More Information

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

For information about Suffolk County beaches:

www.co.suffolk.ny.us/Home/departments/healthservices/environmentalquality/ecology/marinereources/bureauofmarinreources.aspx

For information about New York City beaches:

www.nyc.gov/html/doh/html/beach/beach.shtml

Figure 2: Beach notification actions by duration.

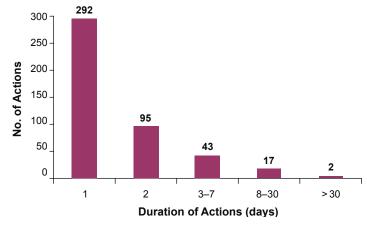


Figure 3: Beach days with and without notification actions.

Beach days with no action: 35,274 (97.1%)

1,056 (2.9%)

Table 2. Beach notification actions, 2008–2010.

	2008	2009	2010
Number of monitored beaches	353	346	346
Number of beaches affected by advisories or closings	138	156	132
Percentage of beaches affected by advisories or closings	39%	45%	38%
Percentage of beach days affected by notification actions	4%	5%	3%

Figure 4: Percent of investigated monitored beaches affected by possible pollution sources (343 beaches).

