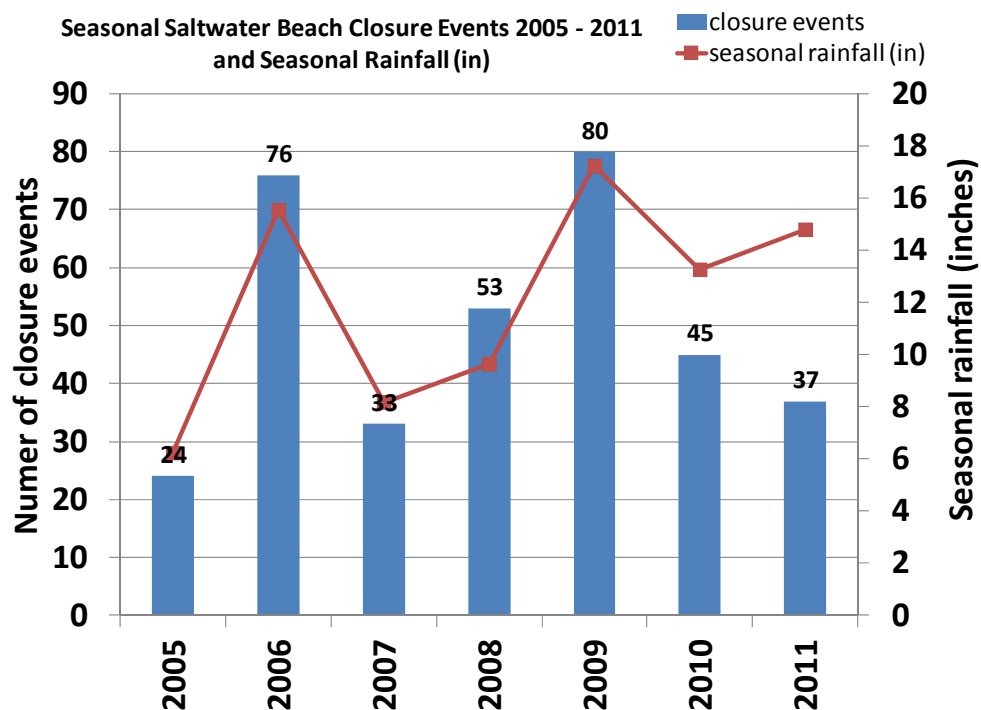


Seasonal Saltwater Beach Closures

Definitions:

- Saltwater beaches are sampled regularly for the bacteria *Enterococcus*, an indicator of the presence of disease-causing organisms. The RI standard for *Enterococci* is 104 per 100ml of saltwater. Any sample that is above the state standard is considered unsafe for swimming. Once a beach violates state criteria, referred to here as a *closure event*, it remains closed until new samples indicate that conditions have improved. Although a beach closure event is prompted by a violation of the state standard, the number of days a beach remains closed is dependent on not only water quality, but also on the availability of other resources. The data presented here was collected at regularly monitored saltwater beaches in Rhode Island between Memorial Day and Labor Day. There are no saltwater beaches in the Massachusetts portion of the Narragansett Bay watershed. Closure events are strongly influenced by the duration and intensity of precipitation events.

Significance¹: *Enterococci* are bacteria that come from the intestines of all warm-blooded animals. When sewage is present in the water, *enterococci* will also be present. In addition to *enterococci*, many other water-borne pathogens may also be present in untreated sewage. Sources of bacteria include discharges of raw sewage from combined sewer overflows (CSOs), failing septic systems, cesspools, and wild and domestic animals. These pathogens can cause a wide range of health problems including ear, nose, and throat problems, gastroenteritis, dysentery, hepatitis, and respiratory illness. Because there are so many other potential pathogens and testing for all of them is not feasible, *enterococci* is used as an indicator of the potential presence of these pathogens. *Enterococcus* is a better indicator of the risk of illness than fecal coliform, which has been used in the past.



Source: Rhode Island Department of Health, Beach Monitoring Program

¹ From RI Dept. of Health <http://www.ribeaches.org/fecal.cfm>

² From "Currents of Change", 2009, http://nbep.org/currents_change/impervious_surface.html

Saltwater Beach Closure Events, Memorial Day to Labor Day, 2011

CITY/TOWN	Beach Name	Tier*	# Closure Events	# Days Closed	# Samples Analyzed	% Exceeding Standard
Barrington	Barrington Town Beach	1	1	1	92	5%
Bristol	Bristol Town Beach	1	1	4	58	10%
	Camp St. Dorothy	2	-	-	7	-
Charlestown	Blue Shutters Beach	2	-	-	10	-
	Charlestown Breachway	3	-	-	8	-
	Charlestown Town Beach	2	-	-	9	-
	East Beach	3	-	-	11	-
Jamestown	Mackerel Cove Beach	2	1	1	13	8%**
Little Compton	Briggs Beach	2	-	-	8	-
	Goosewing Beach	2	-	-	8	-
	South Shore Beach	2	-	-	8	-
	Warrens Point Beach Club	2	-	-	5	-
Middletown	Atlantic Beach Club	1	4	8	36	14%
	Peabody's Beach	2	1	3	27	4%**
	Sachuest Beach	2	-	-	31	-
	Third Beach	1	4	8	74	12%
Narragansett	Bonnet Shores Beach Club	2	-	-	27	-
	Capt. Roger Wheeler	2	-	-	52	-
	Dunes Club	2	-	-	24	-
	Galilee Beach Club	2	-	-	4	-
	Narragansett Town Beach	2	-	-	25	-
	Salty Brine Beach	3	-	-	3	-
	Scarborough State Beach N	1	1	2	90	10%
Scarborough State Beach S	1	1	2	60	3%	
New Shoreham	Fred Benson Town Beach	3	-	-	9	-
Newport	Easton's Beach	1	2	2	107	12%
	Fort Adams State Park	1	1	1	39	3%
	Gooseberry Beach	2	-	-	11	-
	Hazard's Beach	2	-	-	10	-
	King Park Main	1	1	1	41	10%
	Spouting Rock Beach Assn.	2	-	-	15	-
North Kingstown	Camp Grosvenor	1	2	4	31	6%
	North Kingstown Town Beach	2	-	-	27	-
	Plum Beach Club	2	-	-	10	-
	Saunderstown Yacht Club	1	-	-	9	-
Portsmouth	Sandy Point Beach	2	1	1	18	11%
South Kingstown	Camp Fuller – YMCA Beach	2	1	2	9	11%
	East Matunuck State Beach	3	-	-	9	-
	Greenhill Beach	3	-	-	5	-
	Matunuck Town Beach	2	-	-	18	-
	Roy Carpenter's Beach	2	-	-	6	-
	Willow Dell Beach Club	2	-	-	13	-

CITY/TOWN	Beach Name	Tier*	# Closure Events**	# Days Closed	# Samples Analyzed	% Exceeding Standard
Tiverton	Fogland Beach	2	-	-	27	-
	Grinells Beach	2	-	-	18	-
Warren	Warren Town Beach	1	1	1	29	3%**
Warwick	City Park Beach	1	-	-	26	-
	Conimicut Point Beach	1	6	13	57	23%
	Goddard Memorial State Park	1	4	6	135	16%
	Oakland Beach	1	4	14	84	17%
Westerly	Alfies	2	-	-	5	-
	Andrea Hotel	2	-	-	5	-
	Atlantic Beach Casino Resort	2	-	-	5	-
	Atlantic Beach Park	2	-	-	5	-
	Atlantic Pizza and Grill	2	-	-	5	-
	Breezeway Beach	2	-	-	3	-
	Dunes Park	2	-	-	6	-
	Jim's Trailer Park	2	-	-	5	-
	Misquamicut Club	2	-	-	9	-
	Misquamicut Fire Dist Beach	2	-	-	15	-
	Misquamicut State Beach	2	-	-	21	-
	Ocean House	3	-	-	6	-
	Paddy's Beach	2	-	-	6	-
	Pleasant View Inn	2	-	-	5	-
	Sam's Beach	2	-	-	5	-
	Sandy Shore Motel	2	-	-	5	-
	Seaside Beach Club	2	-	-	4	-
	Watch Hill Carousel Beach	2	-	-	5	-
	Weekapaug Fire District	2	-	-	20	-
	Westerly Town Beach – New	2	-	-	5	-
Westerly Town Beach – Old	2	-	-	10	-	
NB Watershed						
Total			37	74	1608	5%

Source: Rhode Island Department of Health, Beach Monitoring Program

* Tiers refer to risk and the associated frequency of sampling: Tier 1 beaches (high risk) are sampled at least weekly, Tier 2 beaches (moderate risk) are sampled at least monthly, and Tier3 beaches (low risk) are sampled at least twice per season. Risk is based on the level of usage, the presence of known pollution sources, and any past history of closures because of poor water quality.

** In addition to exceeding the enterococci standard, several other factors contribute to the decision to close a beach: weather, time since sample collection, tides and surf, presence of seaweed, and any history of closures. Also, a beach may be partially closed in the affected area, but remain open in the unaffected area, which would not result in a closure event.