County of San Diego Beach Water Quality

DEPARTMENT OF ENVIRONMENTAL HEALTH

Land and Water Quality Division
Beach and Bay Monitoring Program

For the current status on coastal water quality in San Diego County, visit **www.sdbeachinfo.com** or call **(619) 338-2073**.

DEFINITIONS:

GENERAL (RAIN) ADVISORY FOR ALL COASTAL WATERS:

A General Advisory is issued after 0.2 inch or more rain is received to alert the public of potential ocean and bay water contamination by urban runoff. Bacterial levels can increase significantly during and after rainstorms in ocean and bay waters, especially near storm drain, river, and lagoon outlets. **The Department of Environmental Health advises beach users to avoid contact with ocean and bay waters for at least 3 days (72 hours) after rainfall ends.** While many coastal outlets (storm drains, rivers, and lagoons) within San Diego County are permanently posted with white metal warning signs, additional temporary warning signs are not posted for General Advisories.

CLOSURES:

A water contact Closure is issued anytime a reported sewage spill impacts or may impact ocean or bay recreational waters. Closures are also issued whenever the Tijuana River discharges to the ocean as the Tijuana River is known to be impacted with sewage. Sewage contaminated water may contain human pathogens that can cause illnesses. **The Department of Environmental Health advises beach users to avoid contact with ocean and bay waters in the closure area and where closure signs are posted.**

ADVISORIES / WARNINGS:

A water contact advisory/warning is issued when monitoring reveals ocean or bay water quality does not meet State standards due to high bacterial levels, or during the excavation of a coastal outlet (river or lagoon) when potentially contaminated water is released to the ocean. Beach water quality monitoring uses bacterial indicators to test for the presence of possible pathogens. The bacterial indicators are not specific to humans, and may be from other sources including wildlife, pets, soil, and rotting vegetation such as kelp. However, ocean or bay waters with elevated bacterial levels may contain human pathogens that can cause illnesses. **The Department of Environmental Health advises beach users to avoid contact with ocean and bay waters where advisory/warning signs are posted.** Signs are typically posted 50 yards (150 feet) either side of a sampling location where water quality does not meet State standards.

BEACHES WITH URBAN RUNOFF FLOWS DURING DRY WEATHER:

As a precaution, avoid contact with runoff and recreational waters within at least 75 feet from where runoff enters ocean or bay waters during dry weather.

TO REPORT ILLEGAL DISCHARGES TO STORM DRAINS: call **(888) 846-0800**

www.sdbeachinfo.com

Recreational Water Monitoring Program

Where is it safe to swim? Southern California beaches are generally clean and safe for recreation as indicated by water quality monitoring. Storm water runoff can make beaches unsuitable for swimming or surfing for at least 72 hours after a rainstorm. Beaches impacted by urban runoff from storm drains, streams and rivers should be avoided. Signs are posted warning not to swim at locations where water does not meet standards or sewage contamination has occurred.

What do we test for? Total Coliform, Fecal Coliform and Enterococcus bacteria.

What are they? Indicators of possible disease producing bacteria/viruses/protozoa (also known as pathogens)

Where do they come from?

Environment-soils, decaying vegetation
Storm water/urban runoff - sources vary
Animal wastes-birds, dogs, cats, seals
Humans-sewage, kids with diapers, shedding from body

What are the standards?

- Single Sample standards:
  - Total Coliforms: 10,000 organisms per 100 ml. sample
  - Fecal Coliforms: 400 organisms per 100-ml. sample
  - Enteroccoci: 104 organisms per 100 ml. sample
  - Fecal/Total ratio: If total coliforms >1,000 & ratio > 0.1
- 30-day geomean standards: (5 or more samples in 30 days)
  - Total Coliforms: 1,000 organisms per 100 ml. sample
  - Fecal Coliforms: 200 organisms per 100-ml. sample
  - Enterococci: 35 organisms per 100-ml. sample

What pathogens may be found in swimming waters contaminated with sewage and possibly in runoff?

Pathogenic Agent	Disease	Pathogenic Agent	Disease
Bacteria		**Viruses**	
E. Coli	Gastroenteritis	Rotavirus	Gastroenteritis
Salmonella typhi	Typhoid fever	Norwalk virus	Gastroenteritis
Other Salmonella Species	Various enteric fevers (also called paratyphoid), gastroenteritis, septicemia (generalized infections in the bloodstream)	Coxsackie virus (some strains)	Various including sever respiratory disease, fever, rashes, paralysis, meningitis
Shigella dysenteriae and other species	Bacterial dysentery	Adenovirus	Respiratory and gastrointestinal infections
Vibrio cholera	Cholera	Echovirus	Various, similar to coxsackie virus (evidence only in experimental animals)
Protozoa (Intestinal Parasites)		Polio Virus	Poliomyelitis
Cryptosporidium	Diarrhea- Crytosporidiosis	Hepatitis A	Infectious hepatitis (liver malfunction), also may affect kidneys and spleen
Giardia lamblia	Diarrhea- Giardiasis		

What happens to bacteria/viruses/protozoa in swimming waters?
Die-off due to sun (ultraviolet light), salt water exposure (osmotic forces), age, dilution, predation by other organisms

What is the recent water quality trend at each location based upon the monitoring data?
Visit the Heal the Bay web page at www.healthebay.org and select the *Beach Report Card*.

What beaches are currently posted?
Visit San Diego County's Mobile Web App (website) at www.sdbeachinfo.com or call the San Diego County Beach and Bay Status Hotline for an update of current water quality status at (619) 338-2073. For more information, go to www.sdbeachinfo.com on your computer, tablet or smart phone.