

Ocean Water Monitoring Program



FREQUENTLY ASKED QUESTIONS

Introduction...

Santa Barbara County Environmental Health Services began regular ocean water monitoring in September of 1996. The ocean water monitoring program was established in response to public concerns of the deteriorating ocean water quality, and the need to protect the public's health.



THE NEW POSTING REGULATIONS...

With the implementation of Assembly Bill 411 in July of 1999, Santa Barbara County is required to sample public beaches, post warning signs when the standards are exceeded, and close the beach when a sewage spill occurs. California state regulations mandate that total coliform, fecal coliform and enterococcus are to be used as indicator bacteria for monitoring marine recreational water quality.

When is a beach placed on **WARNING** status?

If a water sample fails to meet one of the three standards for indicator bacteria, a **WARNING** status for the beach will be issued.

The standards are exceeded when:

- Total coliform exceeds 10,000 MPN*
- Fecal coliform exceeds 400 MPN
- Enterococcus exceeds 104 MPN
- Fecal coliform/total coliform exceeds 0.1, and when total coliform count exceeds 1,000 MPN

*MPN= Most Probable Number, a bacterial count per 100 ml of water

When a beach is placed on warning status, yellow "**WARNING**" signs will be posted. Due to the increased health risk, avoid contact with ocean water at a minimum of 50 yards away from both sides of a creek mouth or storm drain.

When is a beach **CLOSED**?

A beach will be closed only in the case of a sewage spill or at the discretion of the County Health Officer. Red "**KEEP OUT**" signs will be posted.

How does the County of Santa Barbara monitor ocean water quality?

Currently, sixteen beaches between Carpinteria State Beach and Guadalupe Dunes are monitored weekly for three indicator bacteria. Samples are collected 25 yards down current from the creek mouth, in ankle-to-knee-deep surf zone water.

Sampling is performed usually on Mondays, with the results available 24 to 36 hours later. Re-samples of beaches that did not meet state bacteriological standards are taken usually on Wednesdays.

How can I find out about the weekly sampling results?

The ocean water quality results are available to the public in the following ways:

- Local newspapers such as the News-Press and the Independent
- Santa Barbara County web site
- Ocean Water Hotline: (805-681-4949).

ABOUT BACTERIA...



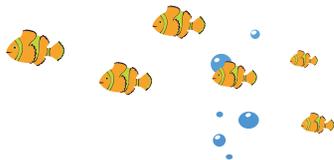
Microorganisms are a natural component of the environment, and they also inhabit the intestinal tracts of birds and mammals. When these bacteria are released into the environment, there is a chance that they may cause illnesses in people who come in contact with contaminated water.

What are indicator bacteria?

Indicator bacteria are selected groups of microorganisms which are found to indicate the likelihood of the presence of disease-causing pathogens. It is difficult to detect every pathogenic organism in water due to the wide array of the disease-causing microorganisms in the natural environment. As a solution, indicator organisms are used because they are easy to detect. It is important to realize that indicator bacteria only suggest the presence of disease-causing organisms and generally, are not pathogenic themselves.

What exactly are total coliforms, fecal coliforms, and enterococcus?

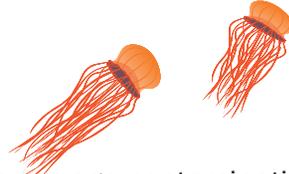
Total coliforms consist of a large group of bacteria that may inhabit the intestinal tracts of both humans and animals. They may also be found in water as well as occurring naturally on leaves and in the soil.



Fecal coliforms are a subgroup of total coliform bacteria. Their presence is highly correlated with fecal contamination from warm-blooded animals.

Enterococcus, sometimes referred to as fecal streptococcus, is also an intestinal bacterium used to indicate fecal contamination from mammals and birds.

HEALTH RISK...



Swimming in water with sewage contamination or elevated bacterial levels may increase the risk of contracting illnesses such as skin rashes, diarrhea, and ear infections.

Does the health risk to swimmers increase as indicator bacterial levels increase above the standards?

Past studies show that as the indicator bacteria levels increase, the swimming-associated illness rate increases. Several studies have established a statistically significant relationship between increasing bacterial levels and increasing rates of illness.



How do I protect myself from illness-causing bacteria in the ocean?

When a beach is listed under warning status, beachgoers can still enjoy the beach. However, avoid contact with ocean water at a minimum of 50 yards away from both sides of a creek mouth or storm drain.

When a beach is listed under closed status, stay at least 1/4 of a mile away from both sides of the creek mouth. Also, remember to do the following at all times:

- Watch for posted signs
- Swim in areas up-current of the creek mouth
- Do not wade in the creeks or swallow creek or ocean water
- Rinse off thoroughly (especially mouth, nose, ears, eyes and cuts) as soon as possible after swimming in the ocean
- Do not swim in the ocean within 72 hours after a rainfall
- Stay out of muddy water or water that does not look clean

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