

## **FLORIDA HEALTHY BEACHES TESTING PROGRAM**

In 1998, five of Florida's coastal counties began monitoring for enterococci bacteria under a grant-funded pilot program. By the beginning of 2000, 11 Florida counties were participating in the program which continued through July 2000. To review the sampling history for those counties who participated in the original program, [click here](#).

In August 2000, the beach water sampling program was extended to 34 of Florida's coastal counties through state legislation (Senate Bill 1412 and House Bill 2145) and funding. In addition, sampling under the new program now includes fecal coliform as well as enterococci bacteria. The rationale for selecting these two bacteria for analysis and implications of the sampling results are described below. In August 2002, the beach water sampling program began collecting water samples on a weekly basis with additional funding from U.S. EPA.

**Health Implications** Fecal coliform and enterococci are both enteric bacteria that normally inhabit the intestinal tract of humans and animals. The presence of enteric bacteria is an indication of fecal pollution, which may come from stormwater runoff, pets and wildlife, and human sewage. If they are present in high concentrations in recreational waters and are ingested while swimming or enter the skin through a cut or sore, they may cause human disease, infections or rashes.

(A) Fecal Coliform: Fecal coliform, which is used by the Florida Department of Environmental Protection (DEP) to determine water quality in fresh, brackish and marine water environments, has long been Florida's preferred indicator organism in both fresh and saltwater. **Under the new Department of Health testing program, if a fecal coliform result is observed to exceed 399 colony forming units per 100 milliliters of beach water sampled and a resampling result also exceeds this value, then a health "Warning" would be issued for the sampling site.** (100 milliliters is about 7 tablespoons of water).

Florida Healthy Beaches Program Categories as of 8/2002:

Good = 0-199 fecal coliform per 100 milliliters of marine water

Moderate = 200-399 fecal coliform per 100 milliliters of marine water

Poor = 400 or greater fecal coliform per 100 milliliters of marine water

Sampling events resulting in a "poor" classification will normally require resampling.

(B) Enterococci The statewide testing program will also include testing for enterococci, which the United States Environmental Protection Agency (EPA) has recommended states adopt as a saltwater quality indicator. According to studies conducted by the EPA, enterococci have a greater correlation with swimming-associated gastrointestinal illness in both marine and fresh waters than other bacterial indicator organisms, and are less likely to "die off" in saltwater. **If an enterococci result were observed to exceed 103 colony forming units per 100 milliliters of beach water sampled and a resampling result also exceeds this value, then an "Advisory" would be issued for the sampling site.** With the collection of weekly samples, the program will also calculate the geometric mean for enterococci.

Florida Healthy Beaches Program Categories are:

Good = 0-35 Enterococci per 100 milliliters of marine water

Moderate = 36-104 Enterococci per 100 milliliters of marine water

Poor = 105 or greater Enterococci per 100 milliliters of marine water