



BEACH CLOSURES FACT SHEET

Key Issues

- Routine Florida Department of Health (FDOH) testing of beach sites across Miami-Dade County has found high levels of fecal indicator bacteria at four sites on the island of Key Biscayne: Crandon North, Crandon South, Key Biscayne Beach this summer.
- FDOH tests for levels of *enterococcus*, a bacteria usually found in close association with sewage. When *enterococcus* levels exceed the acceptable threshold after two rounds of testing, FDOH issues a swimming advisory urging people not to swim at effected beaches.
- Testing and an investigation is required to get to the bottom of the current source of current high bacteria levels, is as of yet unknown and can be difficult to determine.
- You have a right to clean water that is safe for swimming, drinking, and fishing, Miami Waterkeeper works to protect that right. We are a community-based organization and we cannot do it without you, and we invite you to take part. (www.miamiwaterkeeper.org)

Key Causes

High fecal indicator bacteria counts may be a result of industrial, commercial, and residential stormwater runoff, illegal (and legal) pollutant discharges, and recurring leaks from Miami's decaying wastewater infrastructure.

Some species of *enterococcus* are found in decaying plant matters or from other non-animal sources, and therefore high levels of these kinds of bacteria may not indicate a public health problem. The bacterial testing methods currently being used to assess coastal waters are not able to distinguish fecal indicator *enterococcus* from other types.

Further DNA analysis of the bacteria present ("source tracking") should provide clues about where this bacteria is coming from. While this testing is expensive and may not explain all of the bacteria present, it can give strong indications of the source of the bacteria problems.

To our knowledge, neither FDOH nor Miami-Dade County has conducted microbial source tracking to investigate possible bacterial sources related to this summer's beach closures. We also do not know of any FDOH or Miami-Dade County investigations into these high bacteria levels, although the County reports that no illicit spills or leaks have occurred during this time.

Testing Timeline

FDOH began testing Miami-Dade County sites weekly for *enterococcus* in 2002. In 2016, the acceptable level of *enterococci* leading to swimming advisories was reduced, leading to more beach closures. This year, FDOH began issuing no-swim advisories at the beginning of July, and have continued on an off all summer. This culminated in seven beaches remain closed based on prior testing in the second week of September.

Enterococcus levels tend to increase during the summer due to more rain and increase runoff from the streets (“stormwater”), more sewage leaks, and more septic overflows. The bacteria levels at two of the Key Biscayne sites (Crandon North and Crandon South) have surpassed the danger threshold more often than last year.

We have requested detailed quantitative data from the FDOH for the last 5 years and we are now undertaking an analysis to compare the recent years’ results.

About Miami Waterkeeper:

You have a right to clean water.

Miami Waterkeeper employs a powerful combination of educational outreach, scientific research, advocacy, and when necessary, legal action to ensure South Florida’s water is safe to swim, drink, and fish.

You can visit us at www.miamiwaterkeeper.org to join our fight for clean water. Learn how to report pollution, become a member, download our Swim Guide app, attend an event, donate.