

## FREQUENTLY ASKED QUESTIONS

## WATER QUALITY FACT SHEET

## THE BEACHES OF FORT MYERS & SANIBEL

The Lee County Visitor & Convention Bureau (VCB) is providing the following answers to frequently asked questions about water quality conditions in our area. They may be useful to your front-line employees in responding to guests when various kinds of algae outbreaks are present in our waters.

The VCB also has created a supply of consumer fact sheets about red tide, red drift algae and blue-green algae that you can distribute to guests to help answer their questions. For a free supply of any three of these fact sheets, contact VCB Deputy Director and Beach and Shoreline Project Manager Tamara Pigott at [tpigott@leegov.com](mailto:tpigott@leegov.com) or (239) 338-3500.

Guests who seek additional information can visit [www.floridamarine.org](http://www.floridamarine.org), the Web site of the Florida Fish & Wildlife Research Institute, which conducts research and provides information to better manage our marine resources. Other resources include a Red Tide Health Hotline that is free and staffed 24/7 by medical professionals at (888) 232-8635 and the following Web sites:

- [www.RedTideOnline.com](http://www.RedTideOnline.com)
- [www.MyFWC.com](http://www.MyFWC.com)
- [www.MOTE.org](http://www.MOTE.org)
- [www.START1.com](http://www.START1.com)
- [www.DOH.state.fl.us](http://www.DOH.state.fl.us)
- [www.CDC.gov](http://www.CDC.gov)

### WHAT IS THE STUFF ON THE BEACHES (OR IN THE WATER)?

#### RED TIDE ANSWER:

Red tide is a higher-than-normal concentration of a microscopic algae, which are plant-like organisms. In Florida, the species that causes most red tides is *Karenia brevis* (*K. brevis*). This organism produces a toxin that can affect the central nervous system of fish, birds, mammals and other animals. At high concentrations called a bloom, the organisms may discolor the water – sometimes red, light or dark

green, or brown. Red tide is most often found in salt water on the beaches and back bays.

#### RED DRIFT ALGAE ANSWER:

Red drift alga or *Ceramium* is a feathery red algae -- or plant-like organism -- that breaks off rocks and other hard-bottom structures in the Gulf and washes ashore. In the surf, it becomes surrounded by bacteria and turns the nearshore area a muddy brown. On the beach, it decays with a bad odor. Usually it is found on the beaches.

#### BLUE-GREEN ALGAE ANSWER:

Blue-green algae -- also known as cyanobacteria -- are microscopic organisms more closely related to bacteria than algae. *Microcystis*, a genus of the cyanobacteria, is a toxic algae that has been identified at times in the waterways of The Beaches of Fort Myers & Sanibel. *Microcystis* occurs naturally at low concentrations in freshwater systems, but occasionally forms at high concentrations called blooms. These blooms resemble bright green paint that has spilled in the water, and they are found primarily in fresh water such as the Caloosahatchee River.

### WHAT'S THAT SMELL?

#### RED TIDE ANSWER:

Red tide produces toxins in the air that have a bad odor. It also can cause fish kills because it lowers the level of oxygen in the water, which can add to the odor.

#### RED DRIFT ALGAE ANSWER:

When red drift algae washes ashore and decays in our hot sun, it produces a bad odor.

#### BLUE-GREEN ALGAE ANSWER:

The decomposition that's associated with the overgrowth of blue-green algae is foul-smelling. It also can lower the dissolved oxygen levels in the water enough to cause a fish kill, which adds to the foul smell.

**WILL IT MAKE ME SICK OR HURT MY KIDS?****RED TIDE ANSWER:**

It may. People can experience respiratory irritation such as coughing, sneezing and teary eyes, when the red tide organism (*K. brevis*) is present and winds blow the toxins it releases onshore. People with severe or chronic respiratory conditions such as emphysema, asthma or bronchitis are advised to avoid red tide areas. Generally, symptoms are temporary and disappear within hours once exposure is discontinued. Using over-the-counter antihistamines may decrease symptoms. Check the marine forecast. Fewer toxins are in the air when the wind is blowing offshore.

**RED DRIFT ALGAE ANSWER:**

No. But, if large quantities of it are on shore and decay in our hot sun, it can produce a strong odor that can irritate anyone with respiratory conditions like asthma or bronchitis.

**BLUE-GREEN ALGAE ANSWER:**

It may. Some, but not all, species of blue-green algae can produce toxins that can impact your health. However, those species that do produce toxins don't always do so. Information about these toxins is very limited, but they can be a threat to fish, animals and humans if ingested or inhaled. Those who have allergies or asthma may be at an increased risk for irritation of the eyes and airways and possibly an asthma attack. Contact with it can cause minor skin irritation; and ingestion can cause gastrointestinal discomfort (i.e. nausea, vomiting, abdominal pain, diarrhea) and, in rare but severe cases, acute liver failure in humans. It's best to use caution and avoid contact with it.

**IS IT SAFE TO BE ON THE BEACH WITH IT?****RED TIDE ANSWER:**

Yes, it is safe to be on the beach when there's a red tide, unless it's producing toxins that create a foul odor and can cause respiratory problems.

**RED DRIFT ALGAE ANSWER:**

Yes, it is safe to be on the beach with it, but we do advise people to avoid contact with it, particularly if it has an odor that indicates it's decaying.

**BLUE-GREEN ALGA ANSWER:**

Since blue-green algae is a fresh water organism, you most likely will find it along the banks of the Caloosahatchee River. It can be safe to be on the banks with it, provided it's not producing a foul odor that can indicate it's releasing airborne toxins. Some strains are toxic, so we advise people to avoid contact with it.

**CAN I TOUCH IT?**

It's best to leave any form of algae on the beach alone. It could be decaying or it could be a toxic strain that might be harmful.

**IS IT SAFE TO SWIM IN IT?****RED TIDE ANSWER:**

Yes, for most people. However, in some people, red tide can cause skin irritation and burning eyes. Use common sense -- if you are particularly susceptible to irritation from plant products, avoid red tide water. If you experience irritation, get out of the water and thoroughly wash off. Do not swim among dead fish because they can be associated with harmful bacteria. *(If appropriate, suggest they use your property's pool.)*

**RED DRIFT ALGAE ANSWER:**

Yes. But, as with any water condition, use caution. If the algae appears to be decaying either in the water or on land, it's best to leave it alone.

**BLUE-GREEN ALGAE ANSWER:**

Do not swim in it. Although not all blue-green algae is harmful, people whose skin comes into contact with the toxic form may experience itching, rash, irritated eyes and ears, a sore throat or other hay fever-like symptoms.

**IS IT SAFE TO SWIM IN IT? (CONT'D)**

Also, people who swallow water contaminated with a toxic strain of blue-green algae may experience nausea, vomiting, abdominal pain, diarrhea, liver problems or muscle weakness. The more blue-green algae a person drinks, the sicker he or she may become. *(If appropriate, suggest they use your property's pool.)*

**HOW LONG WILL IT LAST?  
OR WHEN WILL IT GO AWAY?**

It's impossible to predict. A bloom is a naturally occurring event. It can last days, weeks or months; and it can change daily due to wind conditions. The blooms will run their course and dissipate naturally. They normally occur only when our waters are warm, so it isn't a year-round condition.

**HOW OFTEN DOES THIS OCCUR ON YOUR  
BEACHES? IS IT COMMON?**

This type of algae bloom occurs only when the conditions are ripe for it. Although no one factor causes it, it generally occurs when our waters are warm and/or there's a high concentration of nutrients in the water. It's not a year-round occurrence.

**WHEN ARE YOU GOING TO CLEAN IT UP?**

We clean the beaches when needed. But, we also are dedicated to making our beaches as natural as possible, so we try to let mother nature run her course whenever possible. Sometimes that means letting the tides wash the algae back out to sea.

**IS IT SAFE TO EAT SEAFOOD IN  
RESTAURANTS DURING THIS OUTBREAK?**

Yes. Commercial seafood from local restaurants and grocery and seafood stores must be harvested from red-tide free waters. This includes shellfish.

**CAN I FISH FOR SEAFOOD DURING  
THIS OUTBREAK?**

Yes. There have been no reports of human illness from eating filleted fish caught during a red tide. Shrimp and crabs also are safe to catch and eat. However, avoid shellfish like clams, oysters and coquinas, which are not safe during the shellfish harvesting ban that's in effect during red tide.

**WHAT ELSE CAN I DO WITH MY FAMILY  
WHILE IT'S IMPACTING THE BEACHES?**

There are plenty of activities in our area that would be fun for your family. Besides the amenities of our property, such as *(list your offerings such as pool, spa, golf, etc.)*, we have a number of major attractions that might interest you. These include: *(list nearby attractions such as J.N. "Ding" Darling National Wildlife Refuge, the Edison & Ford Winter Estates, numerous museums, shopping options, etc.)*

*the beaches of*  
**FORT MYERS**  **SANIBEL**