



# Frequently Asked Questions: Blue-Green Algal Blooms in Coastal Waters

The Mississippi-Alabama Sea Grant Consortium provides answers to the following frequently asked questions regarding blue-green algal blooms.

## **Where is the blue-green algal bloom?**

The blue-green algae bloom was first identified in Hancock County, Mississippi, which triggered beach closures beginning on June 22, 2019. Because blooms move, closures and openings can change. You can get the latest updates online at state agency websites.

## **How do I find out if beaches are closed?**

### **Mississippi**

Visit: <https://opcgis.deq.state.ms.us/beaches/> for the latest information on Mississippi beach closures.

You also can receive automatic beach advisory updates from the Mississippi Department of Environmental Quality (MDEQ) by email (register here: <http://opcgis.deq.state.ms.us/beaches/contact.html>) and by text message (text "MDEQbeach" to 95577).

MDEQ makes beach closure decisions regarding Harmful Algal Bloom (HAB) events. Twenty-one sites are monitored in Mississippi. Signs are placed on beaches when they are closed.

### **Alabama**

Visit: <http://www.adem.state.al.us/programs/coastal/beachMonitoring.cnt> for the latest information on Alabama beach advisories.

The Alabama Department of Environmental Management makes beach advisory decisions. If you are at the beach, look for signage indicating if the beach is closed. Twenty-six sites are monitored in Alabama.

### **Gulf Islands National Seashore**

Information about water conditions in the Gulf Islands National Seashore is posted on the National Park Service website at <https://www.nps.gov/guis/planyourvisit/conditions.htm>.

## **What is blue-green algae?**

Blue-green algae are actually phytobacteria, which are bacteria that get energy from the sun. Blue-green algae are sometimes referred to as cyanobacteria. There are many different species of blue-green algae, which are microscopic and primarily found in freshwater. Some species can produce toxins that can be harmful to animals, including humans.

## What is a blue-green algal bloom, and what causes it?

An algal bloom occurs when there is a rapid increase in the amount of algae in the water. Specific environmental conditions are needed to produce a blue-green algal bloom.

For example, blue-green algae need nutrients and sunlight and thrive when the water is warm and salinity is low. Blooms can last as long as the specific conditions for the blooming species remain. When a species that can produce a toxin blooms, it is known as a “harmful algal bloom” or HAB. It does not necessarily mean that toxins are being released into the water. Specific testing is required to look for toxins.

The Mississippi Sound has a typical salinity range of 15-25 PSU, which does not provide optimal growing conditions for blue-green algal blooms. This is one of the reasons we typically do not experience these types of blooms.

## What are the health concerns?

### For swimming

During a blue-green algae HAB, people and pets should avoid contact with the water (or wet sand) in case toxins are being released. Direct contact with toxins can cause rashes. If you or someone you know comes in contact with water or wet sand near the bloom, the exposed body part should be washed with soap and water immediately.

Swallowing water, even accidentally, can cause serious health conditions if toxins are present. People should not allow their pets or children to get near the water to prevent them from touching or swallowing the water.

### For eating fish and shellfish

You should not eat seafood harvested from **waters closed to fishing**. People can experience a wide range of symptoms from eating contaminated seafood. Symptoms depend on the amount and type of toxin(s) and can include abdominal pain, diarrhea, pneumonia, vomiting, fever, numbness and death.

The Mississippi Department of Marine Resources, the Alabama Department of Public Health’s Seafood Division and the Alabama Department of Conservation and Natural Resources’ Marine Resources Division are responsible for testing seafood and closing and opening waters to fishing in their state waters to protect consumers.

Seafood sold at markets and in restaurants are safe to eat during a HAB event because seafood must be harvested from waters open to fishing in order to be sold.

## Where can I get more information about blue-green algal blooms?

- U.S. Environmental Protection Agency’s Learn about Cyanobacteria and Cyanotoxins webpage: <https://www.epa.gov/cyanoHabs/learn-about-cyanobacteria-and-cyanotoxins>
- The U.S. Centers for Disease Control and Prevention’s Harmful Algal Bloom (HAB)-Associated Illness: General Information webpage: <https://www.cdc.gov/habs/general.html>

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