



## Frequently Asked Questions: *Cyanobacteria/Blue-Green Algae*

### **What are cyanobacteria/blue-green algae?**

Blue-green algae are a group of organisms that can live in freshwater, salt-water or in mixed "brackish" water. Most of us know them as "pond scum." They also have been found to share some characteristics with bacteria, which has led to them being referred to as "cyanobacteria."

### **What is a cyanobacterial bloom and how do they form?**

Cyanobacterial blooms occur when the algae that are normally present grow in numbers more than normal. Within a few days, a bloom can cause clear water to become cloudy. Winds tend to push some floating blooms to the shore where they are very noticeable. Cyanobacterial blooms can form in warm, slow-moving waters that are rich in nutrients. Blooms can occur at any time, but most often occur in late summer or early fall. They can occur in marine, estuarine and fresh waters, but blooms of greatest concern are those that occur in fresh water, such as drinking water reservoirs or recreational waters.

### **What do cyanobacterial blooms look like?**

Some cyanobacterial blooms can look like foam, scum, or mats on the surface of fresh water lakes and ponds. The blooms can be blue, bright green, brown, or red and may look like paint floating on the water. Some blooms may not affect the appearance of the water. As algae in a cyanobacterial bloom die, the water may smell bad.

### **What are some tips for avoiding cyanobacteria/blue-green algae?**

It is important that adults, children and pets avoid swimming in or drinking water containing blue-green algae. It is best not to come in to contact with water in areas where you see foam, scum, or mats of algae on the water. Since most blooms are patchy, there are usually other areas close by that are not affected by the blooms.

### **What should I do if I come in contact with cyanobacteria/blue-green algae?**

The most likely way people get exposed to the algae is from skin contact to the bloom. Some people may develop a rash. If you come into contact with an algae bloom, we recommend that you wash with soap and water right away.

Swallowing small amounts of raw surface water, even without algae, can cause abdominal cramps, nausea, diarrhea, and vomiting from the natural bacteria that are found in the water. When domestic animals drink raw surface water containing blue-green algae toxins, it can affect their liver, and nervous system.

If you experience an illness, please contact your healthcare provider immediately.

### **What about inhaling algae toxins?**

The algae toxins do not evaporate in to the air so breathing in the toxins is very unlikely. We do recommend that people should stay away from the blooms including not water skiing, jet skiing or other water activities that might produce spray that could be inhaled.

When large amounts of algae accumulate near the shoreline, they decompose and can produce hydrogen sulfide (H<sub>2</sub>S) that smells like rotten eggs. You might be familiar with this smell during low tides at the beach. This gas can be smelled at very low levels and some people are more sensitive and can get respiratory irritation and headaches. The Department recommends that people do not clean up the algae mats as this may produce more hydrogen sulfide when handling the rotting vegetation. These health effects are transient. If you experience respiratory irritation and/or headaches around algal blooms, you can find relief getting distance from the algal mats.

### **What agency should I contact to report fish kills or illness associated with blue-green algae?**

- Fish Kill Hotline (Florida Fish & Wildlife Conservation Commission) 1-800-636-0511

- Human Illness (Florida Poison Control Center) 1-800-222-1222

**Can I eat fish harvested from areas near or in algae blooms?**

No. Do not eat fish that are harvested from areas near or in blooms. Fillets from fish caught away from the blooms, behaving and appearing normal are safe to eat.

**Is it ok to use algae water for showering or irrigation?**

Untreated water from the bloom area should not be used for irrigation when people could come into contact with the spray. Do not use untreated water from the area with the bloom for showering or bathing.

**Does blue-green algae cause ALS or Alzheimer's?**

Some researchers have reported that the compound, Beta-N-Methylamino-L-alanine (BMAA) can be produced by most cyanobacteria (blue-green algae). BMAA has been found to be a neurotoxin in some laboratory animals. People have speculated that this might be associated with ALS or Alzheimer's illness.

BMAA is one of many possible environmental factors for neurological disease that is being investigated by researchers in Florida and elsewhere. However, no proven connection has been found between cyanobacteria and ALS/Alzheimer's illness.