

## **Algal Blooms - Frequently Asked Questions**

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### **What is an Algal Bloom?**

Thousands of species of algae naturally occur in rivers, lakes, streams, and salt water bodies. These bodies of water are known as "surface water." The algae form the base of the food web upon which almost all other surface water organisms depend. Algae can reproduce very quickly in warm, shallow, undisturbed-surface water that receives a lot of sunlight. When algae increase rapidly over a short period of time, it is called an algal bloom. Algal blooms can discolor the water and produce floating scum. These blooms are primarily seen during summer months along shorelines. If large enough, algal blooms can impact water quality and produce unpleasant odors. Most species of algae and their associated algal blooms are not harmful according to the Centers for Disease Control (CDC).

### **What is a Harmful Algal Bloom (HAB)?**

"Algal blooms can deplete the oxygen and block the sunlight that other organisms need to live, and some can produce toxins that are harmful to the health of the environment, plants, animals, and people," according to the CDC. When a bloom is toxic or harmful to the environment, it is referred to as a Harmful Algal Bloom (HAB).

Blue-green algae (also known as cyanobacteria) are microscopic organisms that naturally occur in lakes and streams. Most blue-green algal blooms are not harmful. Certain types of blue-green algae, however, are capable of producing toxins that pose a health risk to people and animals when exposed to large quantities. While other algae species are known to produce toxins, blue-green algae are the most common toxin producing algae.

### **How can toxin producing blue-green algal blooms or other HABs be harmful to my health?**

Potential illness from exposure depends on the type of algae, the level of toxin in the water, and the type of contact an individual has had with an algal toxin. Health effects can occur when surface scums or waters containing high levels of algal toxins are swallowed, come in contact with skin, or when airborne droplets containing toxins are inhaled.

Symptoms can include:

- Skin irritation
- Nausea
- Vomiting
- Throat irritation
- Allergic reactions
- Difficulty breathing

The liver and nervous system may also be impacted if water containing toxins is ingested in sufficient quantities.

### **How will I know if there is a HAB?**

There is no way to look at water impacted by an algal bloom and determine if the bloom is a HAB. Both HABs and non-HABs have different colors and appearances. Some 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 produce odors described as grassy, fishy, or a septic odor. Some of these odors can cause nausea.

### **What should I do if I suspect an algae bloom in a recreational area?**

Since it is impossible to tell if a bloom is or is not hazardous by simply looking at it, it is highly recommended that you avoid direct contact with all algal blooms. As a safeguard for your family and pets:

- Do not swim or wade through algal scums and avoid contact with the water that is discolored
- Do not boat, water ski, or jet ski through an algal bloom
- Do not fish from lakes, ponds, or rivers where algal scum is present
- Do not let your children or pets play in algal debris on the shore
- Always shower off with soap and water or rinse thoroughly with clean water after swimming
- Do not let pets lick algal material from their fur/skin or eat algal material
- Wash your pet off with clean water immediately if your pet swims or wades in water during an algal bloom

### **Are children more vulnerable than adults to algal toxins?**

Yes. Children may be more susceptible to the effects of algal toxins due to lower body weight and skin sensitivity. Children are also more likely to engage in activities that allow water to be swallowed or inhaled.

### **What should I do if I suspect I am having health issues associated with algal toxins?**

Contact your health care provider immediately if you or someone in your family becomes ill.

### **What should I do if my pet or livestock becomes ill after being in contact with a waterbody impacted by an algal bloom?**

Contact your veterinarian immediately if your pet or livestock becomes ill. Indicate that your animal was in water containing an algal bloom and was drinking the water, eating algae off the beach, licking algae off its fur/skin while grooming, etc.

### **What about fishing?**

While there have been no reports of people becoming sick from eating fish caught during an algal bloom, the health risk remains unknown. If you choose to eat fish caught during an algal bloom make sure they are rinsed well and the entrails are discarded.

If you see a fish kill, report it to the fish kill hotline at 1-888-481-0125.

### **How long do algal blooms last, and when is it safe to go back in the water?**

Caution is urged if the original signs of an algal bloom, such as large amounts of scum and odor, continue to persist. Algal blooms may last as short as a few days or continue for extended periods of time.

### **My drinking water does not come from a public water system but comes directly from a lake that may be affected by an algal bloom. Am I at risk?**

If you draw water directly from an impacted waterbody, you are advised to not drink the water if your intake is near an active algal bloom, even if you utilize a home treatment unit. It is recommended that you use an alternative water source not affected by the algal bloom.

If you receive your drinking water from a public water supply system being affected by a HAB, the supplier will test the drinking water and let you know if/when is okay to drink the water. If you get your drinking water from your own well, HAB problems are not likely.

### **Report an Algae Bloom**

If you suspect a Hazardous Algal Bloom (HAB), contact your local DHEC Office. To find a location near you, please visit [www.scdhec.gov/HomeAndEnvironment/DHECLocations](http://www.scdhec.gov/HomeAndEnvironment/DHECLocations).

Remember, not all algal blooms are harmful and algae are both naturally occurring and a very important part of the food chain.

For more information on HABs, go to <http://oceanservice.noaa.gov/hazards/hab/welcome.html> and <http://www.cdc.gov/healthcommunication/toolstemplates/entertainment/tips/algalblooms.html>.