

## Frequently Asked Questions

### **Q: What are blue-green algae?**

**A:** Algae are naturally occurring organisms usually present in low numbers in freshwater lakes, ponds, and streams throughout the world. Algae are a natural component of our waterways.

Conditions such as high nutrient levels and sunlight levels, combined with surface waters that are warm and undisturbed, can cause these organisms to reproduce rapidly, forming visible colonies, referred to as algal blooms.

Blue-green algae are technically known as cyanobacteria and are able to photosynthesize, creating a green, yellow, blue-green, or brownish color. Some algal blooms may look like blue-bright green paint floating on the surface of the water, or may form mats, foam, and/or scum on the surface. As the algae die, a foul, musty-smelling odor is released.

### **Q: Are blue-green algae blooms harmful?**

**A:** Many species of algae exist, and most do not produce toxins. Nearly all species of blue-green algae (cyanobacteria) produce dermatotoxins that under certain conditions can cause skin irritation, rashes, and/or gastrointestinal distress; sensitivity to these toxins varies widely from one individual to another.

A few species of cyanobacteria can produce more harmful toxins, and ingestion of large quantities of these toxins can occasionally cause more serious health effects.

It is important to exercise caution by avoiding contact with any visible algal mats or scum. In particular, keep children and pets away from affected waters to prevent exposure and/or ingestion.

### **Q: What are the potential health effects to me from coming in contact with water containing blue-green algae?**

**A:** People whose skin comes in contact with blue-green algal toxins through swimming or other water-related activities may experience itching, rash, irritated eyes, sore throat, or hay fever-like symptoms. These effects may be caused by a person's sensitivity (allergy) to the components of algae rather than the toxin.

If you accidentally swallow water from a bloom and develop symptoms of illness, you should consult your physician. Symptoms, such as nausea, vomiting, and diarrhea, are typical of many common diseases, and it may not be possible to determine whether a given illness is caused by blue-green algae exposure.

Little information is available about the potential health effects of long-term exposure to low levels of blue-green algal toxins.

### **Q: Have there been any illnesses associated with algae in Lake County?**

**A:** There have been no medically confirmed cases of illness associated with blue-green algae exposure in Lake County.

If you believe you are experiencing illness related to an exposure, you should see a physician.

Doctors and health facilities are required by law to notify Public Health authorities when they observe unusual outbreaks or patterns of illness among their patients.

### **Q: How do I know whether my drinking water is safe?**

**A:** Today, there are no statewide drinking-water requirements to test for blue-green algae or toxins produced by algae. If you get your drinking water from a State-regulated drinking water purveyor (systems of 15 hookups or more are regulated by the California Department of Public Health, Drinking Water Program), contact your water purveyor to find out what treatment methods are being used.

While certain common water-treatment methods, such as activated charcoal and ozone treatment, may remove toxins associated with blue-green algae, it is important to know that boiling the water will not remove the toxins.

### **Q: Can algae be harmful to my pet?**

**A:** Yes. Pets should be prevented from wading in, swimming in, or ingesting water where algae blooms are visible.

### **Q: Do any water bodies in Lake County contain blue-green algae?**

**A:** Algae occur naturally on most freshwater lakes, ponds, and streams around the world. In Lake County, algal blooms are generally seasonal in nature (brought on during summer's high temperatures and dissipating with rain and/or fall's cooler weather).

Algal blooms are usually limited to shallow areas with calm waters, such as small ponds, and the sheltered coves and leeward bays of larger lakes.

## Do's and Don'ts

It is recommended that recreational lake users exercise caution by following these common-sense do's and don'ts.

- Do avoid contact with water where algae mats or floating scum are visible or where surface water is discolored.
- Do rinse off (yourself, children, and pets) after swimming in any lake, pond, or stream, regardless of the presence of visible algae.
- Do obey posted signs for beach closures.
- Do report any large algal blooms by calling the Water Resources Division of the Department of Public Works at (707) 263-2341.
- Don't drink untreated surface water, regardless of whether visible blooms are present, as it may contain harmful bacteria and parasites. **IMPORTANT: Boiling the water will not remove algal toxins.**
- Don't wakeboard, water-ski, or jet-ski over algal mats.
- Don't allow children or pets to wade in, swim in, or drink water where algae or algal mats are visible.
- Don't use algaecides or disinfectants to kill the cyanobacteria – when the cells die, the toxins are directly released into the water.
- Don't irrigate crops, lawns, or golf courses with water that looks or smells bad.



### FOR MORE INFORMATION

Contact Lake County Environmental Health at (707) 263-1164.

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# Blue-Green Algae

## An Informational Bulletin



*A blue-green algal mat floating on the water's surface.*

Algae are a natural component of freshwater lakes, ponds, and streams around the world.

This brochure is designed to provide information and guidance for recreational lake users to address concerns regarding exposure to blue-green algae and its toxins.

Produced by the County of Lake through a collaborative effort of Public Health, Environmental Health, and Water Resources.