

## Where Have Algal Blooms Been Seen?

Though blue-green algal blooms may occur statewide, the following water bodies have had recent blooms:

Siskiyou County

- Klamath River

Humboldt County

- Big Lagoon and Eel River

Lake County

- Clear Lake

Santa Cruz County

- Pinto Lake

San Joaquin County

- San Francisco Bay Delta
- Stockton Channel

Kern County

- Lake Isabella

Mono County

- Crowley Lake

Riverside County

- Lake Elsinore



Example advisory sign from North Coast Regional Water Quality Control Board.

## Emergency Response

If you think you or someone else is displaying symptoms of blue-green algae poisoning, call your physician or the California Poison Center Help Hotline at 1-800-222-1222.

## More Information

For more information on blue-green algae and the toxins they produce, consult the following web links:

### California Department of Public Health:

<http://www.cdph.ca.gov/HealthInfo/enviro/health/water/Pages/Bluegreenalgae.aspx>

### California State Water Resources Control Board:

[http://www.waterboards.ca.gov/water\\_issues/programs/bluegreen\\_algae/index.shtml](http://www.waterboards.ca.gov/water_issues/programs/bluegreen_algae/index.shtml)

### Centers for Disease Control and Prevention:

<http://www.cdc.gov/hab/cyanobacteria/facts.htm>

### World Health Organization:

[http://www.who.int/water\\_sanitation\\_health/resourcesquality/toxicyanbact/en/](http://www.who.int/water_sanitation_health/resourcesquality/toxicyanbact/en/)

## INFORMATION FOR PHYSICIANS:

### Centers for Disease Control and Prevention:

<http://www.cdc.gov/hab/cyanobacteria/about.htm>

# HARMFUL BLUE-GREEN ALGAE BLOOMS



Photo: John Burns

*In warm stagnant conditions blue-green algae can form "blooms" of high concentration.*

Blue-green algae, also known as cyanobacteria, are simple plants found naturally in water and wet environments. Blue-green algae prefer warm stagnant nutrient rich water and are found most often in ponds, lakes, and slow moving rivers.

Some species of blue-green algae produce toxins, so skin contact and ingestion can be dangerous. Children and pets are at the greatest risk of serious toxic effects from blue-green algae.



California Department of Public Health

## What is a Blue-Green Algae Bloom?

A bloom is a build-up of algae that creates a green, blue-green, white, or brown coloring on the surface of the water, sometimes occurring as mats or scum.

Although blooms can occur at any time of year, they occur most often in the warmer months between June and September.

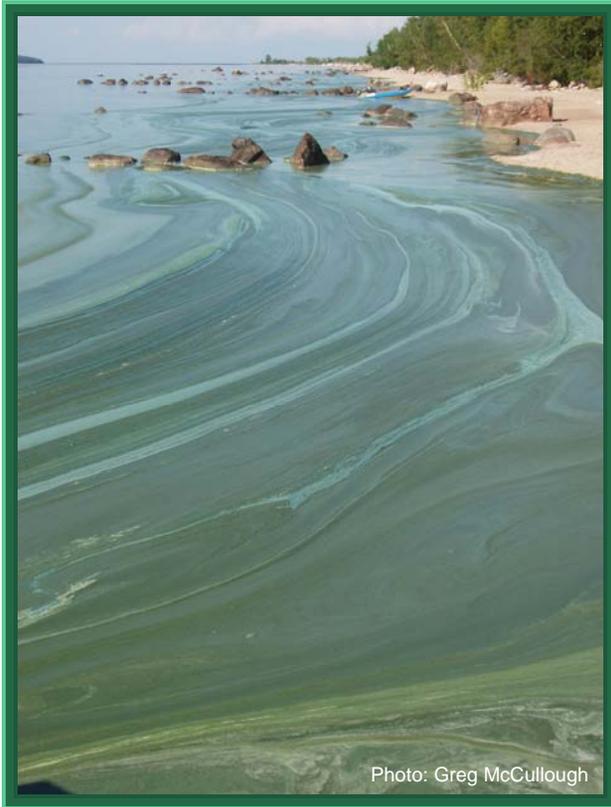


Photo: Greg McCullough

*Blue-green algae can form scums and mats and may look like a floating layer of paint.*

## How Do I Know if a Bloom is Toxic?

Only a few kinds of blue-green algae contain toxins. Most algal blooms in California are composed of harmless green algae. Unfortunately, many areas in California lack the resources to regularly perform laboratory tests for algal blooms.

To stay safe, always assume that a blue-green algal bloom has the potential to be toxic.

## Human Health Effects

Exposure to water containing toxic blue-green algae, for example by direct body contact or ingestion, can result in a number of symptoms including the following:

- rashes
- eye, nose, mouth, or throat irritation
- allergic reactions
- headache
- gastrointestinal upset including abdominal pain, nausea, vomiting, and diarrhea
- malaise

## Other Concerns

Pets and livestock are at risk when drinking contaminated water or self-cleaning algae from fur. Symptoms of dogs that have died from blue-green algae ingestion include vomiting, diarrhea, and seizures within minutes to hours of swimming. If you believe your pet has been exposed, consult your veterinarian immediately.

## How to Avoid Toxic Exposure

Use common sense to protect yourself and those around you:

- Always assume that a blue-green algal bloom is toxic.
- Do not swim in water with scum layers or blooms.
- Do not allow children or pets to swim in water with scum layers or blooms.
- Avoid jet-skiing, windsurfing, or water-skiing over scum or blooms.
- Do not use untreated water for drinking, cleaning food, or washing camping gear.
- Do not boil water to remove blue-green algae; this will not remove algal toxins.
- If you come into contact with a bloom, wash your skin and hair thoroughly. If wearing a swimsuit, pay careful attention to skin under the swimsuit.
- If your pet comes into contact with a bloom, wash it thoroughly with clean water to prevent blue-green algae ingestion while your pet cleans itself.
- Do not eat fish or shellfish caught or harvested in a bloom area.
- Respect any water body closures by public health authorities.