

Safety First!

Follow these simple Do's and Don'ts to stay safe when on or around a freshwater lake, pond, or stream.

DO

- Do avoid water that looks discolored, like spilled paint, or has a green/blue surface scum, mats or film, or is emitting a foul odor.
- Do wash hands and rinse with clean water (yourself, children, and pets) after touching or swimming in any lake, pond, or stream, regardless of its visual conditions or presence of a cyanobacteria bloom.
- Do be alert, look for and obey ALL posted signage.
- Do report any large algal blooms by calling the state Harmful Algal Boom (HAB) hotline at (844)729-6466 (toll free).

DON'T

- Don't ever drink lake water even if blooms are not visible, as toxins can still be present. **IMPORTANT: Boiling the water will not remove algal toxins.**
- Don't wakeboard, water-ski, or jet-ski over algal mats as toxins can become aerosolized.
- Don't allow children or pets to wade in, swim in, or drink water where a bloom is suspected or visible. Do not allow pets to lick fur after swimming in water with a potential bloom.
- Don't use fertilizers or detergents containing phosphates near the lake or stormdrains, as they increase cyanobacteria growth.

Current Toxin Levels

During the warm seasons, water quality testing is conducted about every two weeks at over 20 locations throughout Clear Lake. This testing is provided by the Big Valley Band of Pomo Indians and the Elem Indian Colony. To find out if a bloom is occurring, visit The Clear Lake Cyanotoxin page using this QR code or the link below:



www.bvrancheria.com/clearlakecyanotoxins

To report a bloom

If you see, or think you see, a cyanobacteria bloom, you can report it at the California Harmful Algal Bloom (HAB) Portal
1(844)729-6466

<https://mywaterquality.ca.gov/habs>

Or contact your local county departments:

Water Resources (707) 263-2344
water.resources@lakecountycyca.gov

Environmental Health (707) 263-1164

Public Health (707) 263-1090
PublicHealth@lakecountycyca.gov

For more information:
www.lakecountycyca.gov

Cyanobacteria

Blue-Green Algae

Green Slime

Harmful Algal Blooms

They have many names, but cyanobacteria can produce toxins that cause serious harm to humans and animals. Use this brochure to learn about the risks and how to avoid them when swimming, boating, fishing, and wading in freshwater.



This information is provided to you by a collaborative effort from the County of Lake Departments of Public Health, Environmental Health, & Water Resources, and partners Big Valley Band of Pomo Indians & Elem Indian Colony

What do YOU need to know about cyanobacteria?



What is cyanobacteria and is it the same thing as blue-green algae?

Cyanobacteria (also known as blue-green algae) are microscopic organisms that naturally occur in all freshwater and marine aquatic ecosystems. Usually, cyanotoxin concentrations are low, and not harmful to animals and humans. Sometimes, when conditions are favorable (i.e. high nutrients and warm weather) these organisms can grow rapidly, forming visible colonies or "blooms". Cyanobacteria, and even some algae, produce toxins that reach hazardous levels when blooms occur, these are called cyanotoxins and are classified as Harmful Algal Blooms (HABs).



Aerial image of a cyanobacteria bloom in Clear Lake.

Are cyanobacteria blooms harmful and have I been exposed ?



There are several ways that cyanobacteria can be harmful to humans or pets. Coming into contact with water through skin, by ingestion or swallowing, or even breathing in aerosolized water, such as from a sprinkler or spray from a boat motor, are all potential pathways to exposure.

People whose skin comes in contact with toxins from swimming or other water-related activities may experience itching, rash, blisters, irritated eyes, sore throat, or hay fever-like symptoms. These effects may be caused by a person's sensitivity (allergy) to the components of the cyanobacteria rather than the toxin. Some pre-existing health conditions can exasperate and enhance responses to toxins, so be extra vigilant before going in the water.

Ingestion of cyanobacteria/ cyanotoxin can cause nausea, vomiting, headache, fever, loss of appetite, and diarrhea, but these symptoms are typical of many common diseases, and it may not be possible to determine whether a given illness is caused by a cyanotoxin exposure.

It is important to exercise caution by avoiding contact with any visible blooms, algal mats or scum. In particular, keep children and pets away from affected waters to prevent exposure and/or ingestion. Wash or rinse with clean water after any contact with a lake or stream.

If, after coming in contact with a waterbody, you develop symptoms of illness, you should consult your physician and inform them of any previous water activities. It is recommended that doctors and health facilities notify Public Health authorities when they observe a cyanobacteria-related illness.



How do I know if it's safe to swim?

Sometimes a bloom is not always visible, but when they are, there will be a film or "scum" on the surface or just below the surface of the water.

Some 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.

Before going into any water make sure you check for posted signs (examples below) but also know that sometimes a bloom is present and signs have yet to be posted. It's a good idea to call the appropriate county office if you suspect a bloom is occurring.

Are cyanobacteria blooms harmful to pets and animals?



Yes. Pets, livestock, and other animals should be watched carefully and prevented from wading in, swimming in, or ingesting water where algae blooms are visible. If your animal(s) have been in water during an algae bloom, rinse them off with clean, non-lake water, and monitor them for signs of sickness. Call your vet if you suspect any cyanobacteria-related issues.

Are cyanobacteria present in Lake County waterbodies?



Algae and cyanobacteria occur naturally in all freshwater lakes, ponds, and streams. In Lake County, algal blooms are generally seasonal in nature (brought on during summer's high temperatures and dissipating with fall's cooler weather and/or rain). Blooms have been observed more often in shallow areas with calm waters, such as sheltered coves and bays, and small, quiet lakes and ponds.

DANGER

Toxins from algae in this water can harm people and kill animals

- Stay out of the water until further notice. Do not touch scum in the water or on shore.
- Do not let pets or other animals drink or go into the water or go near the scum.
- Do not eat fish or shellfish from this water.
- Do not use this water for drinking or cooking. Boiling or filtering will not make the water safe.

For people, the toxins can cause:
 • Skin rashes, eye irritation
 • Diarrhea, vomiting
 • Convulsions and death

For animals, the toxins can cause:
 • Diarrhea, vomiting
 • Convulsions and death

Call your doctor or veterinarian if you or your pet get sick after going in the water.
 For information on harmful algae, go to mywaterquality.ca.gov/monitoring_council/cyanobab_network
 For local information, contact:

WARNING

Toxins from algae in this water can harm people and kill animals

- No swimming.
- Do not let pets or other animals go into or drink the water, or go near the scum.
- Stay away from scum, and cloudy or discolored water.
- Do not use this water for drinking or cooking. Boiling or filtering will not make the water safe.
- Do not eat shellfish from this water.
- For fish caught here, throw away guts and clean fillets with tap water or bottled water before cooking.

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 • Skin rashes, eye irritation
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 • Convulsions and death

For animals, the toxins can cause:
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What about the fish?

Fish can be negatively affected by harmful algal blooms from direct contact with cyanobacteria toxins in the water and ingestion through their diet. Fish can die from their exposure to cyanobacteria toxins and from low dissolved oxygen levels associated with decaying blooms. If you find dead fish or wildlife, do not touch or handle them. You can file a mortality report to the CA Dept. of Fish and Wildlife at www.wildlife.ca.gov or (916) 358-2790.

