

BLUE-GREEN ALGAE FAQs

ARE ALL KINDS OF BLUE-GREEN ALGAE POTENTIALLY HARMFUL?

No. Blue-green algae are actually cyanobacteria, a natural part of aquatic ecosystems which commonly occur in small numbers. They are true bacteria that function like plants. Since cyanobacteria are algae, they actually consume carbon dioxide, which is considered a green house gas, and produce oxygen. As primary producers, they are also an important part of the food web and are eaten by simple organisms and some fish. Some types of cyanobacteria have the potential to produce poisons called cyanotoxins, which can be harmful to humans and animals. They can also produce unpleasant earthy or musty tastes and odors, which are not toxic, but may indicate the presence of cyanotoxins in surface water.

WHAT ARE THE SYMPTOMS OF EXPOSURE TO HARMFUL BLUE-GREEN ALGAE?

According to the Centers for Disease Control, skin exposure may cause a rash, hives, or skin blisters (especially on the lips and under swimsuits).

Inhaling water from irrigation or water-related recreation can cause runny eyes and nose, a sore throat, asthma-like symptoms, or allergic reactions.

Swallowing water that has cyanobacterial toxins in it can cause acute, severe gastroenteritis (including diarrhea and vomiting).

Liver toxicity (i.e., increased serum levels of liver enzymes). Symptoms of liver poisoning may take hours or days to show up in people or animals. Symptoms include abdominal pain, diarrhea, and vomiting.

Kidney toxicity & Neurotoxicity. These symptoms can appear within 15 to 20 minutes after exposure. In dogs, the neurotoxins can cause salivation and other neurologic symptoms, including weakness, staggering, difficulty breathing, convulsions, and death. People may have numb lips, tingling fingers and toes, or they may feel dizzy.

CAN EXPOSURE BE FATAL?

There is currently no comprehensive assessment of cyanotoxin poisonings in the United States. However, anecdotal evidence of human and animal poisonings, and in some cases death, have been reported in over 50 countries including at least 36 U.S. states. Animal poisonings are more frequent than human poisonings because people generally avoid contact with dense cyanobacterial accumulations. A recent study has tied cyanobacteria to deaths of California's sea otters.

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HOW WIDESPREAD IS THE PROBLEM IN CALIFORNIA?

Cyanobacteria are naturally present in small amounts in many of California's rivers, creeks, lakes and coastal waters. They become a problem when certain varieties bloom excessively. These situations are called Harmful Algal Blooms (HABs), and they can occur pretty much in any part of California if conditions are right.

WHEN AM I MOST LIKELY TO ENCOUNTER HARMFUL BLUE-GREEN ALGAE?

Drinking water that comes from a lake or reservoir where blue-green algae is blooming.

Drinking untreated water.

Engaging in recreational activities in waters with blooming blue-green algae

Inhaling water from activities such as jet-skiing or boating.

Inhaling spray when watering lawns, irrigating golf-courses, etc. with pond water.

WHAT IS BEING DONE ABOUT THE PROBLEM?

There are several studies being done to standardize methods used to measure cyanobacteria and the levels of poison associated with it. The state and regional water boards are also involved in monitoring California's waters for HABs. When they occur, regional water boards assist local agencies in alerting the media and public and making sure hazardous areas are posted.