Cyanobacteria Blooms FAQs

CYANOBACTERIA (BLUE-GREEN ALGAE) BLOOMS
When in doubt, it's best to keep out!

What are cyanobacteria?

Cyanobacteria, also called blue-green algae, are microscopic organisms found naturally in all types of water. These single-celled organisms live in fresh, brackish (combined salt and fresh water), and marine water. These organisms use sunlight to make their own food. In warm, nutrient-rich (high in phosphorus and nitrogen) environments, cyanobacteria can multiply quickly, creating blooms that spread across the water's surface. The blooms might become visible.

How are cyanobacteria blooms formed?

Cyanobacteria blooms form when cyanobacteria, which are normally found in the water, start to multiply very quickly. Blooms can form in warm, slow-moving waters that are rich in nutrients from sources such as fertilizer runoff or septic tank overflows. Cyanobacteria blooms need nutrients to survive. The blooms can form at any time, but most often form in late summer or early fall.

What does a cyanobacteria bloom look like?

You might or might not be able to see cyanobacteria blooms. They sometimes stay below the water's surface, they sometimes float to the surface. Some cyanobacteria blooms can look like foam, scum, or mats, particularly when the wind blows them toward a shoreline. The blooms can be blue, bright green, brown, or red. Blooms sometimes look like paint floating on the water's surface. As cyanobacteria in a bloom die, the water may smell bad, similar to rotting plants.

Why are some cyanbacteria blooms harmful?

Cyanobacteria blooms that harm people, animals, or the environment are called cyanobacteria harmful algal blooms. Harmful cyanobacteria blooms may affect people, animals, or the environment by:

- blocking the sunlight that other organisms need to live. Cyanobacteria blooms can steal the oxygen and nutrients other organisms need to live.
- making toxins, called cyanotoxins. Cyanotoxins are among the most powerful natural poisons known. They can make people, their pets, and other animals sick. Unfortunately, there are no remedies to counteract the effects.
- You cannot tell if a bloom has toxins by looking at it.

How can people and animals come in contact with cyanobacteria and cyanotoxins in the environment?

People and animals can come in contact with cyanobacteria and cyanotoxins that are in the environment by:

- drinking water that comes from a lake or reservoir that has a cyanobacteria bloom.
- Swimming or doing other recreational activities in or on waters that have cyanobacteria blooms.

How do I protect myself, my family, and my pets from cyanobacteria blooms?

To protect yourself, your family and your pets from cyanobacteria blooms:

- Don't swim, water ski, or boat in areas where the water is discolored or where you see foam, scum, or mats of algae on the water's surface.
- Do not allow children or pets to play in or drink scummy water.
- If you do swim in water that might contain harmful cyanobacteria, rinse off with fresh water as soon as possible afterward.

National Center for Environmental Health
Division of Environmental Health and Health Hazards

CS258158

- Don't let pets or livestock swim in or drink from areas where the water is discolored or where you see foam, scum, or mats of cyanobacteria on the water's surface.
- If pets, especially dogs, swim in scummy water, rinse them off immediately. Do not let them lick the cyanobacteria off their fur.
- Report any "musty" smell or taste in your drinking water to your local water utility.
- Follow any water-body closures announced by local public health authorities.

Why do dogs get sick more often than people from cyanobacteria blooms?

Dogs will get in a body of water even if it looks or smells bad, including when it contains cyanobacteria. Dogs are also more likely to drink the contaminated water.

How are people or animals that have been exposed to cyanobacteria toxins treated?

If you or your pet comes in contact with a cyanobacteria, wash yourself and your pet thoroughly with fresh water.

- If you or your pet swallow water from where there is a harmful algae bloom, call your doctor, a Poison Center, or a veterinarian.
- Call a veterinarian if your animal shows any of the following symptoms of cyanobacteria poisoning: loss of appetite, loss of energy, vomiting, stumbling and falling, foaming at the mouth, diarrhea, convulsions, excessive drooling, tremors and seizures, or any other unexplained sickness after being in contact with water.

How can you help reduce cyanobacteria blooms from forming?

To help reduce cyanobacteria from forming:

- Use only the recommended amounts of fertilizers on your yard and gardens to reduce the amount that runs off into the environment.
- Properly maintain your household septic system.
- Maintain a buffer of natural vegetation around ponds and lakes to filter incoming water.

Is there testing for cyanobacteria toxins?

Yes, but the testing is specialized and can only be done by a few laboratories. Scientists are working to develop toxin test kits for water resource managers and others.

What is CDC doing to address concerns about cyanobacteria blooms?

The Centers for Disease Control and Prevention (CDC) is working to understand and prevent the health effects associated with cyanobacteria blooms by:

- Conducting surveillance on human and animal illnesses that are associated with exposures to cyanobacteria blooms in recreational and drinking waters.

For more information on cyanobacteria, visit https://www.cdc.gov/nceh/habs/general.html

For information on animal health and safety:
Veterinarian reference card - https://www.cdc.gov/habs/pdf/habsveterinarian_card.pdf
Animal Alert flyer - https://www.cdc.gov/habs/pdf/algal_bloom_tall_card.pdf
Animal Alert poster - https://www.cdc.gov/habs/pdf/algal_bloom_poster.pdf

For information on human health and safety:
Physician reference card - https://www.cdc.gov/habs/pdf/habsphysician_card.pdf

For more information on cyanobacteria blooms:
Call CDCInfo: 800-CDC-INFO (800-232-4636)
or Contact your local or state health department https://www.cdc.gov/mmwr/international/relres.html
or Call the Poison Information Center (800-222-1222)