Frequently Asked Questions: Cyanobacterial (bluegreen algae) Blooms

N.C. Division of Water Resources

What are cyanobacteria?

Cyanobacteria, commonly called bluegreen algae, are naturally occurring bacteria present in most fresh waterbodies across North Carolina. Under certain environmental conditions, cyanobacteria can reproduce rapidly to form a cyanobacterial bloom. Blooms are most common during summer months when bright sunlight, warm temperatures, and increased nutrient availability promote cyanobacterial growth. Some cyanobacterial blooms are able to produce toxins, called cyanotoxins, which can cause illness in humans and animals that come into contact with water affected by a bloom.

What does a cyanobacterial bloom look like?

Cyanobacterial blooms may or may not be easily visible. Blooms can form below the water’s surface or along the bottom. Cyanobacterial blooms that form near the water’s surface can cause water discoloration, surface scums (often described as “spilled paint”), or floating clumps or mats. Blooms can appear bright green, blue, red, or brown. As cyanobacteria in a bloom begin to die, they may produce a strong, foul odor and turn milky blue in color.

How do I report a bloom?

Suspected algal blooms can be reported to the N.C. Division of Water Resources through Fish Kill/Algal Bloom Reporting App or by contacting the nearest Regional Office.

How can I protect myself, family, and pets from cyanobacterial blooms?

The N.C. Department of Health and Human Services (DHHS) recommends the following guidelines to safeguard people and pets from cyanobacterial blooms:

- Keep children and pets away from waters that appear discolored or scummy.
- Do not handle or touch large accumulations (“scums” or mats) of algae.
- Do not water ski or jet ski over algal mats.
- Do not use scummy water for cleaning or irrigation.
- If you accidently come into contact with an algal bloom, wash thoroughly.
- If your pet appears to stumble, stagger, or collapse after being in a pond, lake or river, seek veterinary care immediately.
- If your child appears ill after being in waters containing a bloom, seek medical care immediately.
- If you are unsure whether or not a bloom is present, it is best to stay out of the water.

How can I have my water tested for cyanobacteria/cyanotoxins?

Testing for cyanobacteria and cyanotoxins is specialized and can only be done by a few laboratories. At home test kits for algal toxins are commercially available through private vendors. See the U.S. Environmental Protection Agency’s website for a list of laboratories that can test for cyanobacteria and cyanotoxins.

Can cyanobacterial blooms be treated?

There are no effective means of treating a cyanobacterial bloom once it appears. Treatment with algaecides is not recommended as these compounds can cause the cyanobacteria to rupture releasing any toxins contained within the cells.