Staying Safe at the Lake: What Summer Camps Should Know about Blue-Green Algae

Wisconsin requires recreational and educational camps to maintain water activity areas free of hazards. Learn what your camp can do to protect campers and staff from the harmful effects of blue-green algae.

**What are blue-green algae?**
- Blue-green algae are photosynthetic bacteria known as *cyanobacteria* and are a natural part of water bodies.
- With enough sunlight and nutrients, cyanobacteria can grow to high levels and form a blue-green algae *bloom*.
- Blooms are often smelly, look like spilled paint or pea soup, and can change the color of the water to green, blue, turquoise, purple, tan, or white. Some blooms form a layer of scum or mats on the surface of the water.
- While some blooms can stay in the same location for a long time, others can quickly come and go with changing currents and wind patterns.
- Blue-green algae blooms can produce toxins that can make people and animals sick after they swallow, breathe in, or have contact with the water.

**How can we help campers and staff stay safe at the lake?**

Make sure they avoid swimming and playing in water that:

- Looks like spilled latex paint
- Looks like green pea soup
- Is discolored or streaky
- Has small green dots floating in it
- Has floating scum, globs, or mats
- Has dead fish or other animals

- Caution them from swallowing lake, river, or pond water and encourage them to shower off after swimming.
- Include blue-green algae education as part of water safety instruction.
- Evaluate lake and beach conditions on a daily basis since blooms may appear at any time.
How can we tell if what we’re seeing is a blue-green algae bloom?

Blooms have look-alikes! These conditions do not produce toxins and are NOT harmful:

- True algae (green algae)
- Yellow plant pollen
- Tiny aquatic plants (duckweed)

To determine whether what you’re seeing are true algae or blue-green algae, a staff member can conduct the jar or stick test. Remember to wear rubber or latex gloves for protection!

**The Jar Test**
- With gloves on, use a glass jar to collect a sample just below the surface of the water (avoid collecting just the top layer of scum).
- Fill the jar about three-quarters full (leave room at the top for gas production). Wipe any scum off the outside of the jar and screw the lid on.
- Leave the jar in a location where the contents will not be disturbed for 2–3 hours.
- After 2-3 hours, observe the jar to see where the algae have settled. Algae that sink to the bottom are likely true algae, and algae that form a greenish ring at the top of the water are likely blue-green algae (cyanobacteria).

**The Stick Test**
- With gloves on, push a long, sturdy stick into the surface of the algal material and slowly lift it out of the water.
- If the stick comes out looking like it has been dipped into a can of paint, the material is likely blue-green algae. If it comes out with long, green, hair-like strands or threads, the material is probably true algae (filamentous green algae).
- While accumulations of filamentous green algae may be a nuisance in a lake, they are not a health hazard.

While cyanobacteria float, true algae sink.

Green algae are not harmful.

What should we do if there is a bloom near our camp?

- Restrict access to swim activity areas impacted by algae blooms and other health hazards.
- Email the Department of Natural Resources at DNRHABS@wisconsin.gov to report a bloom and ask questions about blooms and bloom mitigation strategies. Include descriptions of the bloom location and photos.

What If a camper or staff member goes in water experiencing a bloom?

- They should immediately shower off with fresh, clean water.
- Monitor for sudden signs of blue-green algae-related illness such as:
  - Vomiting
  - Diarrhea
  - Headache
  - Abdominal pain
  - Cough
  - Sore throat
  - Skin rash
  - Blistering
- Seek medical care if symptoms occur or call the Wisconsin Poison Center at 800-222-1222 for advice.
- Report the illness to your local health department.