

Harmful Algae Bloom (HAB) FAQs

What causes a harmful algae bloom (HAB)?

Blue-green algae, or Cyanobacteria, occurs naturally in the environment and is a vital part of the ecosystem. A harmful algae bloom (HAB) occurs when there is excessive growth of cyanobacteria which has the potential to produce toxins. Abundant nutrients (phosphorus and nitrogen), sunny conditions, warm temperatures and low-flow or low-water conditions can contribute to exponential growth resulting in blue-green algae blooms.

When is a health advisory issued for a HAB?

When a HAB is suspected, Idaho Department of Environmental Quality will collect a water sample from the affected lake and send the sample to a lab for analysis. Health advisories are issued for the lake when the number of blue-green algae cells in the water is above a level recommended as unsafe for recreating.

What about other types of algae?

Algae in our lakes, ponds, and streams are an essential component of the food web and a healthy aquatic ecosystem. Algae have many forms and colors, and most do not produce toxins. Blue-green algae (cyanobacteria) are the exception, and when blue-green algae blooms, toxins can be produced. The color of the blue-green algae is typically green, blue-green, yellow, and may also appear red or brown. If you see algae that resemble underwater moss or stringy mats, it is likely a green algae, which do not produce toxins.

When a health advisory is issued, is the entire lake unsafe for recreational use?

Blue-green algae blooms are known to be very patchy in nature. Higher densities may be present in areas not surveyed, particularly along shorelines. The density of blue-green algae can change with wind direction and temperature. Regardless of whether a health advisory is in effect, recreational users should avoid contact with water whenever surface concentrations of blue-green algae are evident or when the lake has scums with obvious green to blue-green appearance.

What does a blue-green algae bloom look like?

The physical appearance of blue-green algae blooms can be unsightly, often presenting discolored water, streaks or globs of scum and causing thick green mats along shorelines. Blue-green algae blooms at peak conditions have been described as looking like latex paint has been poured into the water and is floating on the surface.



Figure 1. Iridescent green color of a harmful algae bloom on Hauser Lake, September 2010.



Figure 2. Green color of water in Fernan Lake during a harmful algae bloom, July 2015.



Figure 3. Green shoreline scum during a harmful algae bloom on Fernan Lake, July 2014.

Can I swim and undertake other watersports when a HAB is in process?

Swimming and water sports or activities, including waterskiing, which result in direct contact with affected water are not recommended.

What should I do if I come into contact with affected lake water when a HAB is in process?

If contact with affected lake water does occur, users should remove any affected clothing and wash themselves thoroughly with clean water after coming ashore.

Is it safe for pets and other animals to access water when a HAB is in process?

Dogs and other pets can also experience health effects through exposure to the blue-green algae toxin, so it is safer not to let them enter or drink water in affected areas. After swimming in water, pet's fur can contain blue-green algae toxins, and can be ingested when the pet cleans and licks fur.

Livestock owners are reminded to continue to check stock water supplies for blue-green algae and to remove stock from foreshores when blue-green algae are present in the water body.

Can I eat fish from affected areas?

Any fish caught should be cleaned and washed thoroughly in uncontaminated water and any internal organs disposed of before consumption. If people choose to eat fish from this area, it is recommended that they remove all fat, skin and organs before cooking, since toxins are more likely to collect in those tissues.

What are some of the symptoms of blue-green algae toxin?

Symptoms of exposure to algal toxins vary according to exposure. Exposure is most likely through contact with skin, ingestion, and inhalation. Symptoms include rashes, hives, diarrhea, vomiting, coughing, or wheezing. More-severe symptoms affecting the liver and nervous system may result from longer or greater amounts of exposure. If symptoms persist, consult your local health care provider.

How will the public know when conditions are safe again?

The public will be advised when conditions we are aware of no longer exist. The public should always avoid contact with, and ingesting water from, surface water with a scum layer that they are unfamiliar with or when the water has an unsightly color.

Long-term water quality improvements can be expected to reduce future algae blooms so the Idaho Department of Environmental Quality and other groups are working with residents and landowners to implement nutrient reduction projects.

How can you help reduce blue-green algae blooms from forming?

To help reduce blue-green algae from forming:

- Use only the recommended amounts of fertilizers on your yard and gardens to reduce the amount that runs off into the environment. In most cases phosphorus-free fertilizers are your best choice for protecting Idaho's lakes. Soil phosphorus content testing is recommended prior to application of fertilizers containing phosphorus.
- Properly maintain your household septic system.
- Maintain a buffer of natural vegetation around ponds and lakes to filter incoming water and prevent phosphorus containing soils and runoff from getting into lakes and streams

What do I do if I observe surface water with a scum layer or when the water has an unsightly color?

Please call Idaho Department of Environmental Quality at (208) 373-0502 to report a potential HAB. You will be directed to the appropriate regional office. Idaho Department of Environmental Quality bases responses on calls received by the public, and relies on public observation for identifying potential HABs.