A Fact Sheet From the State of Montana

Harmful Algal Blooms

What is a Harmful Algal Bloom?

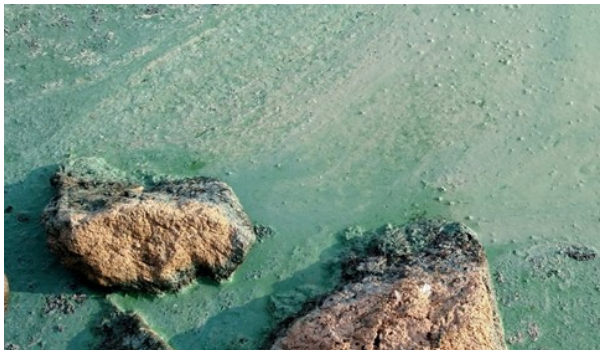
A Harmful algal bloom (HAB) is a rapid, large overgrowth of cyanobacteria on the surface of a waterbody. Cyanobacteria, also known as blue-green algae, are native tiny plant-like organisms that live in lakes, streams, and reservoirs.

Cyanobacteria

Are HABs toxic?

Certain species of cyanobacteria may produce toxins that can pose serious health risk to humans, pets, and wildlife. Exposure to cyanobacteria and their toxins may occur by ingestion of toxin-contaminated water or food, including fish, and during recreational activities such as swimming or waterskiing.

The presence of cyanobacteria does not always mean that toxins are present. After the bloom dissipates, toxins may still be present.



Cyanobacteria

How can I tell if there is a HAB?

Harmless green algae and HABs occur in freshwater, but only cyanobacteria can produce toxins that may be harmful. Green algae can be filamentous and may resemble string, horsehair, or moss. Cyanobacteria can resemble pea soup, wet paint and grass clippings and may appear as blue-green discoloration along rocks and shore.

Harmless green Algae

What Causes HABs?

HABs occur when water conditions (e.g., light, temperature, and nutrient levels) promote growth. This usually occurs in summer and fall in Montana. Human influences such as excess nutrient loads from land-based sources and increasing water temperatures are contributing to increased frequency and duration.

What to do if you see a HAB? Avoid human and animal contact with water once a bloom is suspected. Report a suspected HAB at HAB.MT.gov

What are the Health Risks?

Exposure to cyanobacteria while in recreational waters may cause skin irritations, including a rash, hives, or skin blisters. Adverse effects from exposure to cyanotoxins include liver and kidneys toxicity and neurological, reproductive, and gastrointestinal effects. Health effects from cyanotoxin exposure in animals can include vomiting, diarrhea, seizures, and death. Symptoms may occur within hours and are unlikely to occur after a few days.

When In Doubt, Stay Out

Stay out of water that is scummy, thick like paint, pea-green or blue-green

Can water be treated to remove toxins?

Conventional treatment and disinfection afforded by most public drinking water supplies are not effective in removing or deactivating cyanotoxins. Boiling the water does not remove toxins, and instead, breaks the cell wall to release more toxins.

How likely is it that my drinking water has cyanotoxins?

Water supplied by a Public Water System is safe for consumption and use. If the water should become unsafe, the water system will issue an alert. If you use untreated water and live near waters with a known algae bloom, call your local health department for information.

Can I recreate on lakes with a HAB?

Recreationists can still safely camp and picnic at waters experiencing blooms.

Are fish safe to eat?

Harmful algal blooms pose an unknown health risk to humans through fish consumption; some have been shown to accumulate in internal organs. It is advisable to avoid fish taken from such waters, particularly if they appear sickly or sluggish.

What should I do if I come into contact with a HAB?

Call poison control at 1-800-222-1222

For more information:

HAB.MT.gov

HAB@MT.gov

DEQ Montana Department of Environmental Quality

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