

# Harmful algal blooms

## Summertime in Minnesota: when in doubt, best keep out!

When temperatures climb and the summer sun beats down, conditions are ripe for Minnesota lakes to produce blue-green algal blooms, some of which can be harmful to pets and people.

### What are blue-green algae?

Blue-green algae are not algae at all, but types of bacteria called cyanobacteria that are normally present in many lakes. This type of bacteria thrives in warm, nutrient-rich water. When conditions are right, the bacteria can grow quickly forming “blooms.”

### What do blue-green algal blooms look like?

Blue-green algal blooms are often described as looking like pea soup or spilled green paint. However, blooms are not always large and dense and can sometimes cover small portions of the lake with little visible algae present. Blooms can also produce a swampy odor when the cells break down.

### What are harmful algal blooms?

When blue-green algal blooms produce cyanotoxins that can make humans and animals sick, they are considered harmful. In general, algae are not harmful.

### When do harmful algal blooms occur?

Blue-green algae prefer warm, calm, sunny weather and water temperatures higher than 75 °F. Blooms usually occur during summer and early fall, but can occur other times of the year, if conditions are right.

### Where are harmful algal blooms found?

Harmful algae can be found everywhere in Minnesota, but thrive in warm, shallow, nutrient-rich lakes. They will often be found on the downwind side of a lake or in a secluded bay or shoreline.



*Lake with a thick blue-green algal bloom*



*Severe blue-green algal bloom*

## What are the possible health effects?

You can become sick if you swallow, have skin contact with, or breathe in airborne water droplets while swimming, boating, waterskiing, tubing, bathing, or showering in water that has harmful algae or if you drink water that contains algal toxins. If you become sick, symptoms you might experience include vomiting, diarrhea, rash, eye irritation, cough, sore throat, and headache. Symptoms generally begin hours to 2 days after exposure.

## Can animals be affected?

Pets, especially dogs, are susceptible to harmful algae because they swallow more water while swimming and doing other activities like retrieving a ball from the water. They are also less deterred by green, smelly water that may contain harmful algae. Animals can experience symptoms within minutes of exposure to the toxins. Symptoms they might experience include vomiting, diarrhea, weakness, difficulty breathing, and seizures. In the worst cases, animals have died. If your pet experiences these symptoms after exposure to algae, contact your veterinarian.



*Harmful algae on a shore*

## What should I do if I see blue-green algae in my drinking water source?

Avoid using untreated lake or river water for drinking, cooking, and brushing teeth, particularly for infants and small children. Boiling water will not destroy toxins and could actually increase toxin levels. Simple treatment options are also not effective, because multiple treatment steps are typically required to remove algal toxins.

Water that may be contaminated can be used for handwashing, bathing, washing dishes, or laundry, though it may irritate skin. Young children should be supervised when bathing to prevent them from swallowing water. After washing, skin and items that go into the mouths of infants and young children (i.e., teething rings, nipples, bottles, toys, silverware) should be rinsed with uncontaminated water.

## What should I do if I see a bloom?

There is no way to tell if a blue-green algal bloom is toxic just by looking at it. Adults, children, and animals should avoid contact with water with blue-green algae. The risk of illness after a bloom goes away is low, however toxins can persist in the water after the bloom has cleared up. Watch for signs of recent blooms, such as green scum on the shoreline and keep pets from eating debris that has washed up on the shore. When in doubt, stay out! If you or your pet go into water where there may be a bloom, wash off with fresh water immediately afterwards.

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