

Blue-green algae



Learn about blue-green algae – bacteria that can be harmful to humans and animals – and what you should do if you spot it.

What is it?

Blue-green algae are microscopic, plant-like organisms that occur naturally in ponds, rivers, lakes and streams. Although often blue-green, they can also be olive-green or red.

How to recognize it

Blue-green algae are not normally visible in the water, but populations can rapidly increase to form a large mass or scum called a bloom when conditions are favourable.

Blooms most commonly occur in late summer and early fall. They thrive in areas where the water is shallow, slow moving and warm, but they may be present in deeper, cooler water.

Dense blue-green algae blooms may make the water look bluish-green, or like green pea soup or turquoise paint. Very dense blooms may form solid-looking clumps.

Fresh blooms often smell like newly mown grass, while older blooms may smell like rotting garbage.

Causes

One key factor contributing to the growth of blue-green algae is the amount of available nutrients such as phosphorus and nitrogen.

Blue-green algal blooms can be caused by agricultural and stormwater runoff as well as leaching from septic systems.

In Ontario, phosphorus tends to be the nutrient that influences the growth of algae.

If you spot it

Take a cautious approach, as some varieties of this algae can produce toxins that are harmful to both humans and animals.

If you suspect a blue-green algal bloom:

- assume toxins are present
- avoid using, drinking, bathing or swimming in the water (call your local health unit for swimming advisories)
- restrict pet and livestock access to the water

Contact your [local health unit](#) for information on health risks associated with blue-green algal blooms.

If it's near your water supply

Home treatment systems may not remove toxins and can get easily overwhelmed or clogged, so they should not be relied on. Do not boil the water, or manually treat the water with chlorine or other disinfectants, as this could increase the toxin levels.

If you:

- are connected to a municipal water supply system or other central water treatment and distribution system, you can continue to use the water normally unless notified otherwise by the system operator or the local health unit
- have your own well supply with a groundwater source (not including shore wells or infiltration galleries), or you receive trucked water in cisterns, you can also continue to use the water normally
- get your water supply from your own surface water intake in the area of a bloom, you should consider an alternate source of drinking water for the duration of the bloom

Report blue-green algal blooms

If you spot blue-green algal blooms, call the:

[Spills Action Centre](#)

416-325-3000 or 1-800-268-6060

TTY: 1-855-889-5775

Prevention

Take these simple steps to prevent the growth of blue-green algae:

- use phosphate-free detergents, personal care and household cleaning products
- avoid using fertilizers on lawns, especially fertilizers that contain phosphorus
- maintain a natural shoreline on lake and riverfront properties
- reduce agricultural runoff by planting or maintaining vegetation along waterways and minimizing fertilizer use
- check septic systems to ensure they do not leak into the water source