

Cyanobacteria blooms (blue-green algae)

What are cyanobacteria blooms?

Cyanobacteria blooms are sometimes called blue-green algae. In fact, cyanobacteria can cause blooms in a range of colours, including bright blue, red, brown and green. You can find cyanobacteria in all kinds of bodies of water but is more common for them to grow in shallow, slow moving or still water. This includes ponds, wetlands and shorelines of fresh water lakes, streams and rivers.

When the amount of cyanobacteria in a water body increases, a dense mass called a bloom will form. Cyanobacteria blooms are natural. However, some human activities (such as agriculture or a poorly functioning septic system) can make blooms more likely.

What do cyanobacteria blooms look like and how long will they last?

Not all blooms are easy to see. Some blooms can cover part or all of a water surface and can look thick, like soup. Blooms may last days, weeks, months or all year, and can even grow during winter when water may be covered in snow or has turned to ice. It is important to note that after a bloom has ended cyanobacteria can still persist in the water. If you are unsure about the quality of the water, contact your local health authority.



Are cyanobacteria harmful?

Cyanobacteria can produce several types of toxins that can be poisonous to people, pets or livestock.

How can I be exposed to cyanobacteria?

You can be exposed to cyanobacteria by drinking water or by getting it on your skin during recreational activities (swimming, boating or waterskiing, etc.).

During a cyanobacteria bloom, water will both look bad and may also smell bad. This will likely discourage many individuals from drinking or playing in this water. However, some individuals (such as young children) may be less careful, or may be unaware of the dangers.

Take special care to ensure that infants and babies are not exposed to water that is contaminated with cyanobacteria. The risk is particularly high for those who drink formula made with contaminated water. Boiling water will not remove cyanobacteria toxins from the water.

Do not expose plants that are grown for food to water contaminated with cyanobacteria. The toxins can concentrate on plant surfaces.

What are the symptoms of exposure to cyanobacteria?

Cyanobacteria can produce several types of toxins. Some can affect the nervous and respiratory systems. Symptoms are visible shortly after exposure. Others affect the liver and it takes days before symptoms appear.

Symptoms from drinking water with cyanobacterial toxins include: headaches, nausea, fever, sore throat, dizziness, stomach cramps, diarrhea, abdominal pain, vomiting, muscle aches, mouth ulcers and blistering of the lips.

Symptoms from contact with water contaminated with cyanobacteria include: skin rashes and irritation of the ears and eyes. It is important that

you rinse your body with clean water immediately after exposure to contaminated water.

Rinsing is recommended even without symptoms.

If you're showing any of the symptoms listed above and believe they may be from exposure to cyanobacteria, see your health care provider.

How are pets and livestock exposed to cyanobacteria?

Cyanobacteria toxins can harm pets and livestock if they come into contact with contaminated water. They may be exposed either by drinking, wading or playing. Some of the symptoms of exposure include jaundice (yellowing of the white of the eye and sensitivity to sunlight).

Never let pets or livestock drink or go into the water if there are visible blooms. Always ensure you are providing a safe source of drinking water.

How can I prevent illness from cyanobacteria?

To prevent illness from cyanobacteria:

- Follow advice from your local government, health authority and ministries on what water is safe to drink and where it is safe to swim
- Never drink untreated water from lakes, ponds or wetlands. Boiling water does not remove cyanobacterial toxins from the water and can even increase the concentration of toxins
- Never mix infant formula with water that you suspect contains cyanobacteria
- Follow swimming advisories related to cyanobacteria blooms or toxins
- Never wade, swim or bathe in water with visible blooms
- Never cook, wash dishes or do laundry in water contaminated with blooms

- Wear rubber gloves when washing a pet exposed to cyanobacteria. Use fresh water to wash hands well after cleaning your pet

Exposure to cyanobacteria is not the only risk associated with drinking untreated water. For more information on safe drinking water, see [HealthLinkBC File #49b Disinfecting drinking water](#).

Who should I contact to report cyanobacteria?

If you are concerned about cyanobacteria bloom in a body of water used for drinking or for recreation, contact your local health authority at www2.gov.bc.ca/gov/content/health/about-bc-s-health-care-system/partners/health-authorities/regional-health-authorities.

For more information

For more information about cyanobacteria in drinking water, see Health Canada's Guidelines for Canadian Drinking Water Quality at www.canada.ca/content/dam/canada/health-canada/migration/healthy-canadians/publications/healthy-living-vie-saine/water-cyanobacteria-cyanobacterie-eau/alt/water-cyanobacteria-cyanobacterie-eau-eng.pdf (PDF 1.35 MB).

For more information about cyanobacteria and recreational water quality, see Health Canada's Guidelines for Canadian Recreational Water Quality www.hc-sc.gc.ca/ewh-semt/alt_formats/pdf/pubs/water-eau/guide_water-2012-guide_eau/guide_water-2012-guide_eau-eng.pdf (PDF 1 MB).

For more information on how cyanobacteria affects pets or livestock, see Watershed Stewardship: A Guide for Agriculture www.dfo-mpo.gc.ca/Library/216753.pdf (PDF 2.51 MB).

For more HealthLinkBC File topics, visit www.HealthLinkBC.ca/healthfiles or your local public health unit. For non-emergency health information and advice in B.C. visit www.HealthLinkBC.ca or call **8-1-1** (toll-free). For the deaf and hard of hearing, call **7-1-1**. Translation services are available in more than 130 languages on request.