

# Blue-green algae (Cyanobacteria)

## What are Cyanobacteria?

Cyanobacteria live in water and produce their own food through photosynthesis. Other names for cyanobacteria are blue-green algae or pond scum. Blue-green algae grow in warm, shallow, slow moving water and form a bloom.

## What are blue-green algae blooms?

Algae blooms are a visible growth of algae found in lakes, ponds and marshes. Blooms look like thick pea soup and may have a blue-green colour and a bad, rotten-egg smell.

## What causes a bloom?

No single factor causes a blue-green algae bloom. Blooms are more likely to occur during hot, sunny weather, in calm water that is rich in phosphorus and nitrogen.

## How will blue-green algae blooms affect my health?

Contact with blue-green algae may cause skin and eye irritation, allergic reactions, or a rash. Some blue-green algae produce a toxin. Swallowing water with blue-green algae toxin may cause vomiting, nausea, diarrhea, and stomach cramps. If you are experiencing health effects from contact with blue-green algae, seek medical attention.

## Is it safe to drink water that has blue-green algae in it? Can I cook or bathe in the water? Can I water my vegetable garden with the water?

Municipal water treatment plants can remove blue-green algae and toxins from surface water using filtration and chlorination. Residential water treatment may not be effective in removing blue-green algae cells and toxins. Consult the manufacturer to determine if a water treatment device is capable of removing cells and toxins.

Untreated surface water containing blue-green algae blooms is unsafe for drinking and cooking. Boiling water does not destroy blue-green algae toxin and may actually release more toxin as the cells are destroyed. Do not use water from sources with blooms to water plants you can eat. Toxins in the water can contaminate fruits and vegetables.

We cannot see, smell or taste the toxins. Unless your water supply is treated, use an alternate source of water for drinking, cooking and bathing.

## Can I eat fish from water with a bloom?

You can safely eat fish fillets in moderation from lakes with blooms. It is recommended to avoid eating whole fish and trimmings, as fish store toxins in their livers.

## Does a blue-green algae blooms mean the water is contaminated?

No. Blue-green algae grow naturally and are not considered a contaminant in water. However, as much as 60 percent of all blue-green algae blooms contain toxins. Blooms containing even one species of toxic blue-green algae may be harmful to your health. The only way to tell if a bloom has the toxin is to have water samples analysed in a laboratory.

## What precautions should be taken when an algae bloom is present?

- Avoid contact with water where a swimming advisory is in effect.
- Avoid water with algae blooms or scum, even if there is no swimming advisory.
- If you are in contact with a bloom, shower as soon as possible.
- Wash any clothing or material that has contacted the bloom.
- Do not let children or pets swim in or drink water where there are visible algae.
- Do not allow livestock into areas with visible algae.
- Do not water ski in water with blue-green algae.
- Do not irrigate your lawn or garden with water that has blue-green algae.
- If you are experiencing health effects from contact with blue-green algae, seek medical attention.

Recreational areas of lakes and ponds may be tested when algae blooms are present. If toxin levels are too high, an advisory will be posted by the local health authority in the recreational areas that will warn the public to avoid the water until the advisory can be rescinded.

The link below provides the contact information for public health officers throughout the province:

<https://www.saskatchewan.ca/residents/health/public-health/public-health-inspectors>