

CYANOBACTERIA AND HOW IT IMPACTS YOU



WHAT IS CYANOBACTERIA?

Cyanobacteria, also referred to as blue-green algae, are naturally occurring organisms that are found in ponds as the base of the food web. Under normal conditions, cyanobacteria are beneficial and not harmful. However, overabundant cyanobacterial growth, known as **blooms**, can release cyanotoxins and become toxic. These blooms have been occurring more frequently throughout New England.

WHAT DO CYANOBACTERIA BLOOMS LOOK LIKE & WHY DO THEY OCCUR?

Rapid multiplication of cyanobacteria leads to blooms, which appear as dense, visible surface scums or mats, often appearing green, blue-green, or even brownish-red. Turquoise-green clumps of cyanobacteria can also form in otherwise clear water.

Certain environmental conditions, such as warm weather, sunlight, excess nutrients, and stagnant/slow-moving water help cyanobacteria grow faster. Specific factors behind each bloom vary as every water body is different.

Cyanobacteria ordinarily feed off phosphorus in freshwater ponds, however, there are species of cyanobacteria that can also utilize nitrogen as a food source.

The most common sources of nutrients that cyanobacteria feed off of come from *septic systems (Title V does not treat for nutrients)*, *agriculture, fertilizer, runoff, and precipitation*. In addition, phosphorus that enters a pond can be stored in the sediment and then released under conditions of low oxygen (usually mid-late summer). This phosphorus is then released into the water as food for cyanobacteria.



EFFECTS OF CYANOBACTERIA

Cyanobacteria blooms can be dangerous to humans, pets, and wildlife. The toxins can be found in the water as well as in the air.

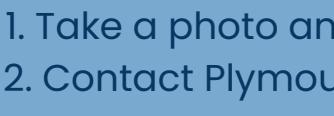
Human exposure may result in the following:

- Gastrointestinal symptoms
- Skin irritation
- Neurological and/or liver issues

If you are exposed to cyanobacteria blooms, it is recommended to shower as soon as possible and wash your clothing. *Contact your healthcare provider if you experience any of the symptoms listed above.*

For pets and wildlife, exposure to cyanobacteria blooms can be deadly. It is recommended to wash your pet's paws and fur as soon as possible.

THINK IT'S CYANOBACTERIA? WHAT'S NEXT?



Cyanobacterial toxins are generally released as the cell is dying, so it is protocol to highlight the advisory for two weeks after the bloom has dissipated.

If you think it's cyanobacteria, please follow the steps below:

1. Take a photo and note the location (address, area of pond)
2. Contact Plymouth's Office of Public Health:
 - Email: publichealth@plymouth-ma.gov
 - Phone: 508-747-1620 x10118

3. Sign up for public health e-alerts to get notified of town-wide advisories & when they are lifted.