



When in doubt,  
keep pets out!

Dylan Silver Wikimedia

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

- Stay out of water that may have a HAB.
- Don't let children or pets play in HAB debris on shore.
- After swimming/wading in water, even with no visible HABs, rinse off with fresh water as soon as possible.
- NEVER swallow untreated surface water. It may contain algal toxins or other bacteria, parasites, or viruses that could cause illness if consumed.
- Do not let pets lick or eat HAB material from their fur.
- Don't drink/cook with suspected water. In-home treatments like boiling, chlorine bleach or water filtration units offer no protection from HAB toxins!
- See a doctor if you or your children might be ill from HAB toxins. Contact your veterinarian for sick pets.

### What about fishing and other activities?

Consume minimal amounts of fish fillets from water bodies with recent HAB events. Research indicates toxin levels are highest in internal organs but can be found in fillets. At a minimum, remove the skin and wash fillets thoroughly before cooking; being sure not to use HAB affected water.

Other activities near the water such as camping, biking, picnicking, and hiking are safe. If you are picnicking, and have had contact with suspected water or shore debris, be sure to wash your hands before handling food.

## If in doubt, stay out!

Have fun on and in the water, but know that harmful algal blooms (HABs) are a global problem in lakes, rivers and other water bodies. Knowing how to identify HABs and being alert can keep you, your family and your pets safe!

### Avoid contact with water that:

- Looks like spilled paint
- Has surface scum, mats or films
- Is discolored or has colored streaks
- Has green globs floating below the surface

### And ALWAYS AVOID...

swallowing water from lakes or other water bodies!

### Where can I report a bloom or find more information?

Report a bloom to: The Pennsylvania Department of Environmental Protection (PADEP) at 814-332-6839

For more information, visit [www.paseagrant.org](http://www.paseagrant.org)

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HABs NOAA

## HARMFUL ALGAL BLOOMS

# HABs

WHAT YOU CAN DO  
TO PROTECT YOUR FAMILY,  
PETS AND OTHER ANIMALS



HABs Anna McCartney





Cladophora (muck) bloom Anna McCartney

## What are algal blooms?

Algae are tiny organisms that are found in water. Most types of algae are beneficial; they produce oxygen and food for animals that live in water. However, when conditions are favorable (such as an increase in water temperature and available nutrients) algae can produce algal blooms (large dense growth of algae). Large blooms, even non-toxic ones, can affect ecosystem health. Some blooms create dead zones as massive amounts of algae die and bacteria decompose the organic matter. As they decay they deplete oxygen in the water, and fish and other organisms can't survive.

Cladophora (**above and below**) and other forms of algae can produce thick mats of algae that are not aesthetically pleasing and are considered a nuisance to local communities. These "muck" zones can harbor bacteria that can close beaches. **However, they do not produce algal toxins.** In summer months when blooms die, cladophora mats float to the surface, and wind and wave action causes them to wash up in mats on shorelines where they decay.



Cladophora (muck) bloom Anna McCartney



HABs Ohio EPA

## What are harmful algal blooms?

Harmful algal blooms (above and below) are caused by blue-green algae that produce toxins. Although the name implies algae, they are technically a type of bacteria, called cyanobacteria. These microscopic organisms are found naturally in all types of water but grow quickly, or bloom, when the water is warm, stagnant, and full of nutrients. Blooms usually occur during summer and fall but can occur anytime during the year. When they produce toxins, these blooms can become dangerous. Even after visible blooms subside, the toxins may still be present in the water.

HABs have been observed worldwide, including Lake Erie and other Pennsylvania waters, and can occur almost anywhere: lakes, ponds, stormwater retention basins, rivers, streams, or reservoirs. These blooms are generally characterized by surface scums that resemble spilled paint or pea soup. They are often green or blue-green, but may be brown, black, white, purple, or red. Swallowing or contact with affected water or scum can cause serious illness.



HABs Pete Alex

## TOXIC ALGAE ALERT

A confirmed harmful algal bloom has made this location potentially dangerous for humans and animals

**AVOID ALL CONTACT WITH THIS WATER and SURFACE SCUM**



For more information contact the Pennsylvania Department of Environmental Protection (PADEP) at 814-332-6839

OR  
Visit [www.paseagrant.org](http://www.paseagrant.org)

Anna McCartney

## How will I know if there is a HAB?

**Look for posted HAB advisories or ask a park manager about any recent HABs** because colorless toxins can remain in the water after visible blooms fade.

Confirmation of HABs can only be made under a microscope or with a field test kit. HABs generally occur from late summer into early fall when water temperatures are warmest and an abundance of sunlight and nutrients are available.

## How dangerous are HABs?

Humans, pets, livestock and wildlife that come into contact with, or ingest HAB toxins can experience sickness, paralysis or even death.

## Know the signs of HAB poisoning:

**Humans:** rashes, blisters and hives, and eye and nose irritations. If swallowed can cause diarrhea, vomiting, abdominal pain, numbness of lips, tingling in fingers and toes, dizziness, and headache.

**Pets/livestock/wildlife:** staggering, difficulty breathing, convulsions, salivation, weakness, and vomiting.



HABs Tom Archer