

Harmful Algal Bloom Exposures in Recreational Waterbodies in Pennsylvania

DATE:	June 29, 2022
TO:	Health Alert Network
FROM:	Denise A. Johnson, M.D., FACOG, FACHE, Acting Secretary of Health
SUBJECT:	Harmful Algal Bloom Exposures in Recreational Waterbodies in Pennsylvania
DISTRIBUTION:	Statewide
LOCATION:	Statewide
STREET ADDRESS:	n/a
COUNTY:	n/a
MUNICIPALITY:	n/a
ZIP CODE:	n/a

This transmission is a “Health Advisory” and provides important information for a specific incident or situation; may not require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, INFECTION CONTROL, NURSING AND LABORATORY STAFF IN YOUR HOSPITAL

EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE

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LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE

PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP

Summary

- Harmful algal blooms (HABs) can occur throughout Pennsylvania’s waterbodies, particularly during warmer months.
- Exposure to HABs can cause sickness in animals and humans.
- Members of the public should follow waterbody advisories or closures, and stay out of water that is discolored, smells bad, or that has the presence of visible foam, algal mats, or a paint-like appearance.
- Healthcare providers should assess for potential HAB exposures when caring for patients exhibiting compatible symptoms following recreational water activities.
- Report potential HAB exposures or illnesses to env.health.concern@pa.gov.
- To report a suspected HAB, or for additional inquiries about HABs, contact HABs@pa.gov.

Overview

Exposure to HABs can cause sickness in humans and animals. HABs can occur in waterbodies throughout the state, and they are most prevalent during warmer months (June through September). To minimize the risk of exposure and sickness, we recommend the public follow any waterbody advisories or closures, avoid water that is discolored, has a foul odor, or that has visible foam scum, or mats.

Background

HABs occur when naturally occurring cyanobacteria (also known as blue-green algae) grow out of control or “bloom” and produce cyanotoxins. Commonly produced cyanotoxins include microcystins, cylindrospermopsins, anatoxin-a, guanitoxin, saxitoxins, nodularins, and lyngbyatoxins. HABs can occur in freshwater, brackish, and marine waterbodies. Although research on the causes of HABs continues, there are a number of factors that have been identified to contribute to the occurrence of HABs. These include calm, slow-moving water, nutrient-rich water, and warm temperatures. The typical season for HABs in Pennsylvania is June through September, although HABs can occur during other times of the year under certain conditions.

Exposure to HABs can make humans and animals sick. People can be exposed through direct skin contact to recreational water activities such as swimming or wading, by drinking contaminated water, eating contaminated fish or shellfish, or by breathing in small droplets in the air containing toxins.

People exposed to cyanotoxins may experience irritation of the skin, eyes, nose, throat, and/or lungs, stomach pain, headache, neurological symptoms such as drowsiness, speech disturbances, and numbness or tingling, vomiting, diarrhea, or liver damage. Symptoms depend on the route and duration of exposure, the type and amount of toxin present, and the presence of existing comorbidities.

There are no clinically diagnostic tests for cyanotoxins. Treatment for exposure mainly consists of symptom-directed and supportive care, although oral exposures may require elevated care in severe cases. Symptoms typically self-resolve within 72 hours.

Recommendations

For the general public:

- Stay out of water with an algal bloom. Do not swim, fish, boat, or play water sports in areas where the water is discolored, smells bad, has the presence of foam, scum, algal mats, or paint-like appearance on the surface, or that has dead fish or other animals present.
- Seek and follow any waterbody and beach advisories or closures.
- Wash your hands after contact with untreated water.
- Shower after participating in recreational waterbody activities.
- Do not swallow untreated surface water.
- Consult with a healthcare provider before taking supplements containing blue-green algae.
- Consult with a healthcare provider if you might be ill from exposure to HAB cyanotoxins.

For healthcare providers:

- When caring for a patient with potential HAB-associated illness, identify symptoms and assess potential exposures.
- Review the Clinician Toolbox for [Cyanobacterial Blooms and Associated Illnesses \(astho.org\)](https://www.astho.org/Cyanobacterial-Blooms-and-Associated-Illnesses)
- Report potential cyanotoxin exposures or illnesses to env.health.concern@pa.gov

Additional resources on harmful algal blooms in Pennsylvania:

- [HABs \(pa.gov\)](https://www.pa.gov/hab)
 - [HABs Training Summary Document](#)
 - [HABs Fact Sheet](#)
 - [HABs Fact Sheet for Health Professionals](#)
 - [HABs Frequently Asked Questions](#)

- [PA-DOH: Harmful Algal Blooms \(HABs\) in Pennsylvania - TRAIN PA - an affiliate of the TRAIN Learning Network powered by the Public Health Foundation](#)
- [HABs Dashboard \(pa.gov\)](#)
- To report a suspected HABs, or for additional inquiries about HABs, contact HABs@pa.gov

Categories of Health Alert messages:

Health Alert: conveys the highest level of importance; warrants immediate action or attention.

Health Advisory: provides important information for a specific incident or situation; may not require immediate action.

Health Update: provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of June 29,2022 but may be modified in the future.
