

# Harmful Algal Blooms

## Advisories and Illness Reporting for Recreational Waters

### Harmful Algal Blooms (HABs)

While not all algal blooms are dangerous, harmful algal blooms (HABs) are caused by a large growth of cyanobacteria that release toxins into the water. Blooms are often visible on the water surface as unusually colored water with varied textures and patterns. HABs are most readily observable in recreational waters including lakes, ponds, streams, and rivers, where influxes in nitrogen and phosphorus from contaminants allow the cyanobacteria populations to increase rapidly. These water bodies are often used for recreation and as drinking water sources, making them a possible source of HAB exposure to the public.

### Exposure and Symptoms of HABs in Recreational Environments

People can be exposed to HABs while recreating in water by:

- Ingestion – Incidental/accidental swallowing of contaminated water such as during recreational activities.
- Skin Contact – Swimming, skiing, tubing and other recreational activities in HABs contaminated waters.
- Inhalation – Breathing aerosolized water droplets (misting) of HABs-contaminated water from recreational activities such as jet-skiing or power boating.

Symptoms are dependent on the type of exposure to a HAB and may include diarrhea, vomiting, abdominal pain, kidney toxicity, hives, weakness, allergies, sore throat, numbness, dizziness, difficulty breathing, rashes, and a runny nose.

### Advisories

Managers of public and private water bodies post an orange “caution” sign at beaches upon visual detection of a bloom and while water sample results are pending at a laboratory. A red “danger” sign is posted at beaches if cyanotoxin levels exceed the threshold for the toxins listed below. When a red sign is posted at beaches, a safety green “caution” sign is also posted at boat ramps. Recreational advisory thresholds are established based on US EPA guidance and research studies to protect public health.



Advisory	Microcystin	Anatoxin-a	Cylindrospermopsin	Saxitoxin
<b>Recreational Public Health Advisory</b> – A red sign is posted on beaches when toxin levels exceed the recommended threshold stating that algal toxins have been detected, and to avoid all contact with the water	8 µg/L	8 µg/L	15 µg/L	0.8 µg/L

*Note that values are reported in µg/L (microgram per cubic liter), which is equal to one (1) part per billion (ppb).*

### Actions to Take

When planning to visit a water body, review the following actions in case of a HAB or a HAB-related illness.

- Use the BeachGuard app to view current Ohio HAB and *E. coli* advisories: [publicapps.odh.ohio.gov/beachguardpublic](https://publicapps.odh.ohio.gov/beachguardpublic)
- Report a sighting of a HAB using the bloom report form: [https://epa.ohio.gov/static/Portals/35/hab/HAB\\_Report\\_Form.pdf](https://epa.ohio.gov/static/Portals/35/hab/HAB_Report_Form.pdf)
  - Send completed reports to [HABMailbox@epa.ohio.gov](mailto:HABMailbox@epa.ohio.gov)
  - Alternatively, a web report form may be completed at: <https://survey123.arcgis.com/share/ac459f1f0b344bfa93c0486b028fba6>
- Report a recreational water HAB-related illness using this form: [www.odh.ohio.gov/HABRecreationForm](https://www.odh.ohio.gov/HABRecreationForm)
  - Illness reports and questions should be reported to your local health district (LHD). Find your LHD using the webtool: [www.odh.ohio.gov/GetMyLHD](https://www.odh.ohio.gov/GetMyLHD)

### Contact Us

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