

Harmful Algal Blooms & Public Health



Poison Ivy Point

Health Department's Regulatory Role



Public Bathing Beaches

- Clear Protocol for closing and reopening public beaches



Public Drinking Water Supplies

- No legally enforceable standards
- EPA Health Advisories for certain cyanotoxins

EPA's Drinking Water Health Advisories (HAs) for Two Common Cyanotoxins

- HAs are informal technical guidance
- HAs for cyanotoxins are 10 day exposure values
 - Microcystin HA level:
 - 0.3 $\mu\text{g}/\text{L}$ for infants and young children
 - 1.6 $\mu\text{g}/\text{L}$ for school children and adults
 - Cylindrospermopsin HA level:
 - 0.7 $\mu\text{g}/\text{L}$ for infants and young children
 - 3 $\mu\text{g}/\text{L}$ for school children and adults
 - Anatoxin-a has no HA level yet





Public Water Supplies Monitoring For HABs in Tompkins County:

- Bolton Point (SCLIWC)
- City of Ithaca
- Cornell University
- Village of Groton
- A few smaller systems

PWS Vulnerability and HABs Monitoring



Assessing for Vulnerability:

- Location and environment of source
- Existing treatment process

Monitoring for HABs:

- Visual observation at intake
- Changes in water quality parameters
- Sampling when warranted

Incident Response:

- Coordinated between PWS, TCHD and NYSDOH

Private Beach Wells and Lake-water Intakes



Poison Ivy Point

Private Beach Wells and Lake-water Intakes

- Not a recommended source to start
- No regulatory requirements
 - TC Sanitary Code exception for rentals
- No home treatment system endorsed by NYSDOH

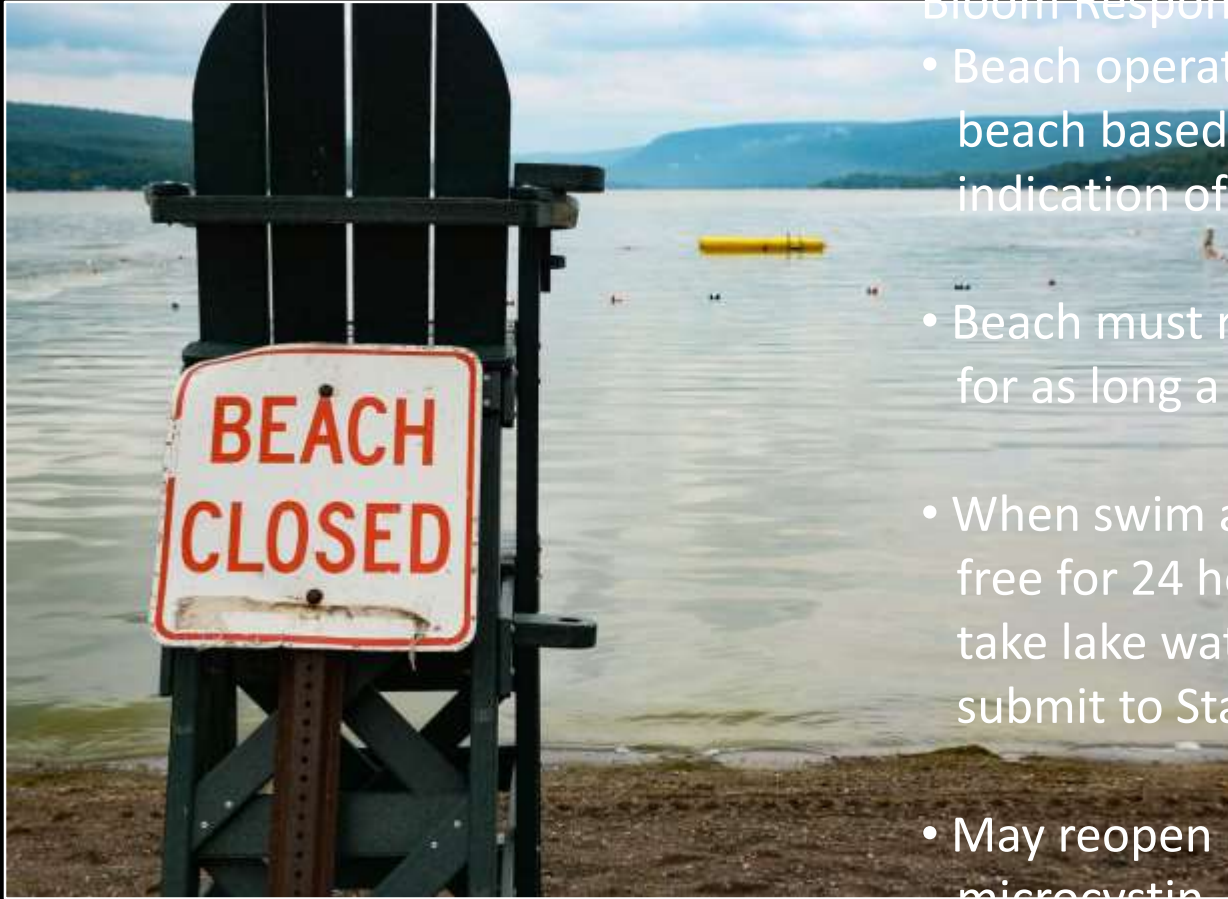


Private Beach Wells and Lake-water Intakes

- Health Department role educational
 - Know it
 - Avoid it
 - Report it
- Uncertainty around how long toxicity may linger after a bloom dissipates



HABs at Public Beaches



Bloom Response:

- Beach operator or HD close beach based on visual indication of a HAB
- Beach must remain closed for as long a bloom remains
- When swim area is bloom free for 24 hours HD will take lake water sample and submit to State laboratory
- May reopen if $< 4 \mu\text{g/L}$ for microcystin

HABs on Open Water or at Private Beaches



Know it.



- Know when to be suspicious of a bloom, floating mat or scum
 - HABs are not always green
 - Visit DEC's or DOH's HAB web-pages for additional photos

Avoid it.



- Don't swim, fish, boat or allow pets or livestock near a suspected bloom
- Never drink or prepare food with water during bloom – even if using home treatment system
- Remain aware of press releases and advisory posters

Report it.

Suspicious Algae Bloom Report Form
Please complete this form and e-mail to HABsInfo@dec.ny.gov.
If possible, please attach digital photos of the suspected bloom.
(Fields in red are required)



First Name Last Name Phone Number E-mail Date bloom was observed

Name of waterbody Closest address or landmark to bloom County City/Town

Describe where on the lake you see the bloom Which sections of the lake have a bloom? (Select all that apply)
 North East North East South East
 South West North West South West

Have you seen a bloom on this lake before? Is the location open to the public?

Is the lake used for drinking water? Public Water Supply Individual Water Intakes Unknown
Is the lake used for swimming? Swimming Beach Private Swimming Unknown
Are people actively swimming in the bloom? Yes No Unknown
How large is the extent of the bloom? Small localized (few properties) Large Localized (many properties) Widespread/Lake-wide

Is the bloom on the surface of the water? Yes No Unknown
Does the water look like any of the descriptions to the right? (Select all that apply)
[Please use the DEC's photo gallery to help visualize the descriptions.](#)

Bubbling scum on surface of the water
 Heavy, silky strands on rocks, plants, or water
 Green scum/lumps on or in the water
 Green streaks on the water surface
 Pile scum appearance within the water
 Spilled paint appearance on the surface of the water (green, blue-green, white)
 Other (please specify)

GPS coordinates of bloom location (Please use Decimal Degree format Ex: 42.85721, -73.748562)
Latitude
Longitude

Is anyone experiencing health effects after exposure to the bloom? (if yes, contact your doctor and the state or county DOH immediately.)

Additional comments about the bloom or its appearance

Please send completed form and photos via email to:
HABsInfo@dec.ny.gov

For information about algae blooms, go to [DEC Harmful Algae Bloom site](#); for information about health concerns, go to [NYSDOH blue-green algae site](#). DEC will share this information with the NYSDOH. DEC may contact you if more information is needed. Information may be posted on the [DEC Harmful Algae Bloom Notifications page](#).

IMPORTANT: You must have the latest version of Adobe Reader on your computer to fully utilize this form. You can download software at: [Free Adobe Reader Download](#). (Note: By clicking on Free Adobe Reader Download link, you will leave the DEC Website. DEC does not endorse and is not responsible for the content of the linked website.)

- Go to the DEC's HAB web-page, fill out and submit electronic report form
- Visit health care provider or contact health department if you have symptoms that might be due to HAB exposure

Resources and Contact Info

- **NYS Department of Environmental Conservation**
 - HABs webpage: <http://www.dec.ny.gov/chemical/77118.html>
 - Report suspected blooms to: HABsInfo@dec.ny.gov
- **NYS Department of Health**
 - Blue-green Algae webpage: <https://www.health.ny.gov/environmental/water/drinking/bluegreenalgae/>
 - Report symptoms to: harmfulalgae@health.ny.gov
- **Tompkins County Health Department**
 - Blue-green Algae webpage: <http://www.tompkinscountyny.gov/health/eh/water/algae>
 - facebook page: <https://www.facebook.com/TompkinsPublicHealth/>
 - Report suspected bloom related symptoms: (607) 274-6604
- **Environmental Protection Agency**
 - HAB and Cyanobacteria webpage: <https://www.epa.gov/water-research/harmful-algal-blooms-cyanobacteria>