Harmful Algae Blooms and Drinking Water: What you need to know



IMPORTANT INFORMATION FOR SURFACE WATER DRAWERS

Harmful Algae Blooms (HABs) can produce toxins dangerous to people and pets.

Canandaigua Lake, and other regional lakes, are beginning to experience seasonal cyanobacteria (sometimes referred to as blue-green algae). Cyanobacteria naturally occur in our surface waters. Certain conditions such as warmer water temperatures, increased nutrients (primarily nitrogen and phosphorus), and calm water conditions can cause cyanobacteria to grow rapidly, producing "blooms" — referred to as harmful algae blooms or HABs.

Contact with cyanotoxins can cause diarrhea, vomiting; skin, eye or throat irritation and allergic reactions or breathing difficulties. Animal illnesses and deaths also have occurred when animals consumed large amounts of accumulated algal scum from along shorelines or when they groom blue-green algae scum from their fur.

If you draw household and drinking water from the lake, become informed.

Conventional water treatment in public water systems (consisting of coagulation, sedimentation, filtration and chlorination) can remove intact cyanobacterial cells and low levels of cyanotoxins from source waters. However, water systems may face challenges in providing drinking water during a severe bloom event with high levels of cyanobacteria and cyanotoxins present.

Residents drawing water directly from the lake face further challenges when there are high levels of cyanobacteria and cyanotoxins present due to the varying capabilities of our household treatment units to remove cyanotoxins.

The Canandaigua Lake Watershed Association (CLWA) is striving to provide homeowners who draw water directly from the lake, or who are using a home treatment system where water does not come from a public treatment plant, with information and resources to promote safe drinking water and residential best use practices.

Share this newsletter to help your family and pets stay healthy and make informed decisions. Place the poster inserted in this newsletter in a prominent place in your home or rental.

Canandaigua Lake Watershed Association

PO Box 323 Canandaigua, NY 14424 canandaigualakeassoc.org

Visit us on Facebook and Instagram!

FAQs about Harmful Algae Blooms and Drinking Water

What are the risks of drawing surface water for drinking and household use?

The New York State Department of Health recently issued information for people not able to connect their homes to a public water supply or to a drilled well for their drinking water. These people use a surface water source such as a lake, river, stream or spring for household water. Never drink, prepare food, cook, or make ice with untreated surface water, bloom or no bloom. Untreated surface water might contain cyanobacteria and their toxins as well as other bacteria, parasites or viruses that can cause symptoms such as diarrhea, nausea and vomiting.

Young children, pregnant women, older adults and people with health issues are at higher risk from symptoms associated with these drinking water contaminants. If you must wash dishes with untreated surface water, rinse with bottled water. You may also consider not using it during a bloom for showering, bathing or washing, especially if your water looks cloudy.

We have a private water system. What precautions should we take during an active bloom?

The poster inserted with this newsletter shows pictures of HABs. Even if you are treating surface water yourself, please be advised that boiling the water will not remove cyanobacteria or their toxins during a bloom. As the Department of Health recommends, always use bottled water during a bloom.

Take precautions if your water looks cloudy coming out of the tap or water pressure changes. This could indicate that your water contains blue-green algae toxins as well as bacteria, parasites or viruses that can cause illness.

Contact your local health department if you have questions about your water. Find contact information at health.ny.gov/ EnvironmentalContacts.

How will we know if there is an outbreak on Canandaigua Lake?

The NYS Department of Health will notify the public if municipal water systems have been affected by the toxins associated with HABs, and of beach closures on the Lake. Local news sources usually cover the advisories. These advisories can signal the need for those using private treatment systems to also take precautionary measures as advised by the Department of Health.

The Canandaigua Lake Watershed Association and the Canandaigua Lake Watershed Council strive to provide current information on lake conditions by sending email blasts and posting notifications on the CLWA Facebook page. Sign up for the CLWA mailing list: https://www.canandaigualakeassoc.org/get-involved/sign-up-for-e-news/.

The New York State Department of Environmental Conservation (DEC) lists HABs affected waterbodies at NYHABs: www.dec.ny.gov/chemical/83310.html.

We have no option but an in-home treatment system. What can we do to ensure safety?

With in-home treatment systems, you are living with some risk of exposure to harmful cyanobacteria and their toxins as well as other contaminants.

Water treatment systems that use some combination of ozone, chlorine, carbon filtration and reverse osmosis may reduce some cyanobacteria and their toxins. Ultraviolet light, chloramines, water softeners and boiling water may not reduce algal toxins.

Please work with a water treatment professional that can evaluate credible third-party certifications of equipment, such as the National Sanitation Foundation standard (NSF P477). The professional should consider your household needs and design and size a system appropriately. Once designed, your water treatment professional should work with you to develop a plan to evaluate and maintain your system. A system that is not maintained can result in failure of water treatment and loss of water pressure.

Does CLWA recommend any professional in-home system installers?

We do not. Each system is unique, as are the needs of each household.

LOOK OUT FOR HARMFUL ALGAL BLOOM

A harmful algal bloom (HAB) is an overgrowth of algae in a water body that could affect water quality and aquatic life. Some HABs produced by bacteria can create toxins that may also harm people, animals, and the local environment.





Algal blooms can make the water appear green, blue, brown, gold, or red.



Seeing colors, scum, mats, foam, or paint-like streaks in the water or clumps on the shore may indicate a bloom. However, only professional water testing can confirm if HABs and toxins are present. States often have monitoring programs for this purpose.



EXPOSED?

Shower immediately. See a doctor or vet if symptoms occur.

SYMPTOMS OF EXPOSURE

Vary depending on how the person or animal was exposed, and whether the HAB is in salt or fresh water.



Ear, eye, headache, nose, skin and throat irritation



Paralysis, respiratory illness and seizures



Abdominal pain, diarrhea, liver and kidney damage and vomitina



Drooling, diarrhea, low energy, not eating, stumbling, tremors and vomiting

WHEN IN DOUBT. STAY OUT!

Stay away from the water when a suspected HAB is present.



DON'T Play with scum or mats on the shore



Let animals drink water, eat







Boat or kayak

TO REPORT POSSIBLE HARMFUL ALGAL BLOOMS:

Email: HABs@canandaigualakeassoc.org

TO REPORT PET OR HUMAN HEALTH RELATED SYMPTOMS IN ONTARIO COUNTY: (585) 396-4343

TO REPORT PET OR HUMAN HEALTH RELATED SYMPTOMS IN YATES COUNTY: (315) 536-5160







What to do during a HAB event.

- Remember, never drink, prepare or cook food, or make ice with untreated surface water. Consider not using it during a bloom for bathing, especially if your water looks cloudy or if a HABS advisory has been issued.
- Remember, use bottled water during a bloom, even if you have an in-home treatment system. Boiling water will not remove algal toxins.
- Store enough bottled drinking water for three days. It is recommended to keep a three-day supply of bottled water on hand in the event that toxins are present in your drinking water or an emergency arises, such as a violent storm. It is recommended you have one gallon of water for each person (and pet) in your household. For example, if there are three people in your household, you would need three gallons of water for three days, a total of nine gallons.
- Keep people and animals away from blooms in surface waters. Don't swim, wade, boat, fish or eat fish caught from areas near blooms.
- Consider visiting a health care provider if you, a family member or pets experience symptoms that might be related to harmful algae bloom exposure.
- Report bloom-related symptoms to the NYS Department of Health at harmfulalgae@health.ny.gov. You can also use the local health department phone numbers included on the enclosed poster.
- Report blooms to New York State Department of Environmental Conservation at NYHABS: https://www.dec.ny.gov/chemical/83310.html.

How to protect against future blooms.

- Connect to public water if possible. Public water is the best option for drinking, preparing and cooking food, making ice, washing and bathing, because water suppliers are required to treat, disinfect and monitor water for customers.
- Contact your local water treatment professional and have them do a full assessment of your current water treatment system to see if there are additional measures of protection that can be added to your existing system.
- Consider installing a private well. The New York State Department of Environmental Conservation maintains a list of Registered Water Well Contractors. To find an approved water well contractor your area go to www.dec.ny.gov/lands/33317.html

How you can stay informed about HABS.

- → Sign up to receive email blasts from the Canandaigua Lake Watershed Association by going to www.canandaigualakeassoc.org and clicking on Signup for ENews. The CLWA, along with our partners at the Canandaigua Lake Watershed Council, strives to send out timely water quality updates during an active bloom situation.
- → Review the interactive map of HABs reported on Canandaigua Lake to see if blooms are in your area. CLWA has 29 volunteers actively monitoring the shoreline for blooms and reporting their findings on the CLWA website.
- → Report suspicious blooms by sending a photo to HABs@canandaigualakeassoc.org. Be sure to document the location.
- → Visit the Canandaigua Lake Watershed Council website for more information on the programs to protect water quality: https://www.canandaigualake.org/
- → Review the NYS Department of Health and the NYS Department of Environmental Conservation websites regularly for updates and additional resources.
- → Share the enclosed flyer to help spread the word about HABs to neighbors and visitors. If you are renting your cottage, please consider including this in your information binder.
- → Take the "Private Water Systems Survey" on the CLWA website and help us gather information on the status of water systems around the lake for research and education purposes.



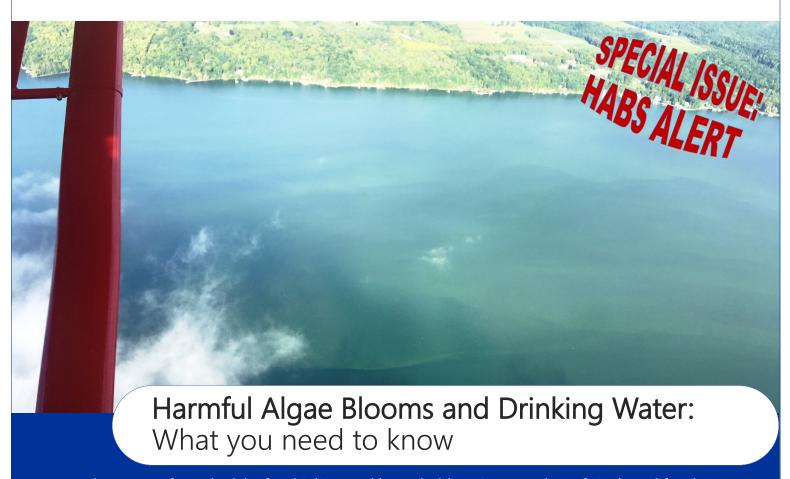
Non-Profit Org.
U.S. Postage
PAID
Canandaigua, NY
Permit No.40

CONTACT US:

PO Box 323 Canandaigua, NY 14424

585.394.5030 info@canandaigualakeassoc.org www.canandaigualakeassoc.org

Find us on Facebook and Instagram!



Do you draw water from the lake for drinking and household use? Do you have friends and family who do? If yes, please read and pass on. What you learn can keep you healthy.