What are Harmful Algal Blooms and How to Respond

From the NE Dept. of Environmental Quality 2023 Guidelines

What should I look for to avoid Harmful Algal Blooms?

HABs usually have heavy surface growths of pea-green colored clumps, scum or streaks, with a disagreeable odor. It can have a thickness similar to motor oil and often looks like thick paint in the water. Algae blooms usually accumulate near the shoreline where pets and toddlers have easy access and the water is shallow and more stagnant. It is important to keep a watchful eye on children and pets so that they do not enter the water. Aspects to watch out for include:

- Water that has a neon green, pea green, blue-green or reddish-brown color.
- Water that has a bad odor.
- Foam, scum or a thick paint-like appearance on the water surface.
- Green or blue-green streaks on the surface.
- Areas with algae that look like grass clippings floating in the water.
- When algal blooms are present at a lake, avoid protected bays and shorelines on the windward side of the lake. These are areas that generally have higher concentrations of algae, and potentially toxins.

What are the risks and symptoms?

Pets and farm animals have died from drinking water containing an HAB (or licking their wet hair/fur/paws after they have been in the water). Toxins produced by HABs have been known to persist in water for up to 14 days after the bloom has disappeared.

The risks to humans come from external exposure (prolonged contact with skin) and from swallowing the water. Symptoms from external exposure are skin rashes, lesions and blisters. More severe cases can include mouth ulcers, ulcers inside the nose, eye and/or ear irritation and blistering of the lips. Symptoms from ingestion can include headaches, nausea, muscular pains, central abdominal pain, diarrhea and vomiting. Severe cases could include seizures, liver failure, respiratory arrest – even death, although this is rare. The severity of the illness is related to the amount of water ingested, and the concentrations of the toxins.

Are some people more at risk?

Yes. Some people are at a greater risk from HABs than the general population. Those at greater risk include:

- Children enjoy playing along the shoreline of lakes, but may have less awareness about potentially hazardous conditions, causing greater opportunity for exposure. Based on body weight, children tend to swallow a higher percentage of water than adults, and therefore could be at greater risk.
- Individuals with liver disease or kidney damage and those with weakened immune systems.

Tips on what you can do, and things to avoid:

- Be aware of areas with thick clumps of algae and keep animals and children away from the water.
- Don't wade or swim in water containing visible algae. Avoid direct contact with algae.
- Make sure children are supervised at all times when they are near water. Drowning, not exposure to algae, remains the greatest hazard of water recreation.
- If you do come in contact with the algae, rinse off with fresh water as soon as possible.
- Don't boat or water ski through algal blooms.
- Don't drink the water, and avoid any situation that could lead to swallowing the water.