

Harmful Algal Blooms (HABs) Frequently Asked Questions

www.kdheks.gov/algae-illness

1. What causes blue-green algae blooms?

Blue-green algae are a natural part of water based ecosystems. They become a problem when nutrients (phosphorus and nitrogen) are present in concentrations above what would occur naturally. Under these conditions, the algae can “bloom,” or grow very quickly to extreme numbers. Although summer heat and calm water do not “cause” blue-green blooms, those additional conditions make algae blooms far more likely because blue-greens are especially adapted to take advantage of hot and calm conditions

2. Are all algae bad and cause illness?

No, algae are a normal part of the ecosystem and many species serve as food for other aquatic creatures. Blue-green algae are a normal part of the environment when they are present in low numbers.

3. Do blue-green algae cause illness in animals?

Yes! State veterinarians confirmed that dogs died in past summers - all from exposure to toxins associated with blue green algae. Pets should not be allowed near the shore where decaying algae may be visible, as the algae may stick to their feet, and should the dogs lick their paws, they could ingest enough toxin to cause death. Horses are very susceptible to toxins and should not drink water from ponds or lakes with blue-green algae. ***Children, pets and livestock should not be allowed in or near ponds or lakes with blue-green algae.***

4. How do I evaluate my risk if I want to get in water?

While there is no hard and fast rule, a general guideline is that, “the worse it looks, the worse the risk is likely to be.” Waters that appear clear to slightly green are likely to carry no more risk than would any form of recreation on or in natural waters. However, the greener the water, the more likely it will be dominated by blue-green algae, and the risk goes up. Situations to avoid include strong green or dark green water, the presence of observable floating chunks (algal colonies), or the presence of a surface scum. In addition, if there is an offensive odor or stench, then it’s best to move to a different area. Under these conditions, the risk of exposure to algae and their toxins increases. If a lake has signage posted warning of the presence of blue-green algae, it means experts who deal with these issues have made an examination of that lake and KDHE is obligated to inform the public of the risks with water contact.

“WHEN IN DOUBT – STAY OUT.”

5. Where does the “risk” from blue-green algae come from?

Many species of blue-green algae produce chemical compounds which are toxic to warm-blooded creatures (people, pets and livestock), and some are toxic to other organisms like fish. The biggest risk to health comes from coming into contact with or ingesting the toxins produced by the algae while engaging in what is called “full body contact” (during swimming, skiing or jet skiing, for example), or from inhaling spray cast up from the water’s surface by recreational activities or by the wind. Blue-green algae can also cause dermatological symptoms with prolonged skin contact with water or wet clothes. Children and pets are most at risk while engaging in recreation in the water because they are more likely to accidentally or intentionally swallow lake water. Pets can become ill after being exposed to spray, or even from eating dried algae along the shore or after licking algae from their fur. It is best to keep pets and children far away from exposures and move to safer locations. No antidote exists for any known algal toxin currently. This makes prevention the best option for protecting human and animal health during a bloom.

6. Is there anything I can use to kill blue-green algae in my lake?

While there are a number of chemicals marketed to control algae (i.e. algaecides, the most common of which is copper sulphate), using these while a bloom is in progress is a poor choice. Once a blue-green algae bloom is present, killing it will cause toxins to be released to the water. While the water may look clearer and inviting for recreation, toxins may still be present in high amounts. Also, use of an algaecide is a temporary and symptomatic treatment of the problem as the blooms will likely return in short order (days to a couple weeks). The best approach to reducing or eliminating blue-green blooms in a lake is to make sure excessive nutrients (phosphorus and nitrogen) in runoff are prevented or significantly reduced.

7. How do you decide whether a lake should be under a ‘watch’ or a ‘warning’?

After many years of data and statistical analyses, KDHE has established the following recommendations for a **Watch** and a **Warning**. A Watch will be recommended if cell counts are 80,000 cells/mL to <250,000 cells/ml OR microcystin toxin levels of ≥ 4 $\mu\text{g/L}$ to < 20 $\mu\text{g/L}$. A Warning will be recommended if cell counts are $\geq 250,000$ cells/mL OR microcystin toxin levels of ≥ 20 $\mu\text{g/L}$ to 2,000 $\mu\text{g/L}$.

8. Why is this a health issue?

Blue-green algae, which is actually a bacterium, produce toxins which can cause skin reactions, respiratory problems, diarrhea, vomiting or even death if ingested, especially in children or the elderly. There have been numerous incidences reported in Kansas, dealing with pet deaths after drinking lake water with blue green algae and skin rashes on people in Kansas.

9. What should I do if I accidentally get lake water on my skin?

Wash thoroughly with soap and water. If rash or other symptoms occur, seek medical attention immediately.

10. Is it safe to go fishing and eat the fish I catch?

Where blue-green algae is present, avoid coming in contact with lake water as much as possible. Clean fish discarding entrails and other body parts, and consume only the fillet portion. There have been some studies indicating that consumption of a large number of fish from lakes with high toxin levels, even if the consumption is of fillet only, should be limited.

11. I have a private farm pond. Does KDHE sample private ponds?

KDHE does not sample or provide laboratory analysis for private ponds. See instructions on conducting a “Jar Test” to initially determine if you have a blue-green algae bloom. Water samples for blue-green algae identification can be submitted to the Kansas State Veterinary Diagnostic Laboratory. For more information, please contact the Kansas State Veterinary Diagnostic Laboratory at **866-512-5650**.

12. I have a private farm pond and I believe that one of my animals got sick/died from coming in contact with blue-green algae. Who do I contact?

Contact your local veterinarian, county extension agent or Kansas State University for help with this issue.

13. Does KDHE close lakes with Blue-Green Algae?

No, KDHE does not have the authority to close a lake. KDHE provides information regarding Watches or Warnings. The lake management officials determine whether or not to actually close lakes or beaches. If there are questions about whether the lake is closed, look at the current watch/warnings tab on this website, consult individual lake websites or call lake management offices for additional information.

14. What if I get sick and suspect it was from recreating at a lake?

Please consult your physician immediately. Let them know of your activity at a water body and which lake it was. Physicians can then complete the secure online form to notify KDHE of a potential illness from Harmful Algal Blooms. That lake can then be investigated to determine whether the illness reported could reasonably have been caused by exposure to blue-green algae. There is also a form if your pets or livestock become ill. KDHE is tracking human and animal illnesses to assist in planning for future HAB issues.

15. Where can I get current information about lakes?

Check the KDHE website for the most up-to-date information about public health watches and warnings at Kansas public lakes. If you need information regarding beach closure, please check posted signs in the area or check with local lake management authorities.

16. How does KDHE decide what lakes to sample?

Due to limited funding and staff, KDHE samples public use lakes only in response to complaints of human or animal illness or visual sighting of possible blue-green algae by the public or lake officials. For KDHE to respond to a blue-green algae sighting, the request from the public must be made through the online Algae Bloom Reporting Form found on the KDHE website.

17. Is there a toll free number I can call for lake status information?

Yes, for the most up-to-date information about Kansas public health watches and warnings use the After Hours Lake Status phone number at **1-785-296-1664**.

18. What is the safest way to protect myself, my family, and my pets if I see a HAB in a lake that I was going to recreate in?

When In Doubt, Stay Out.