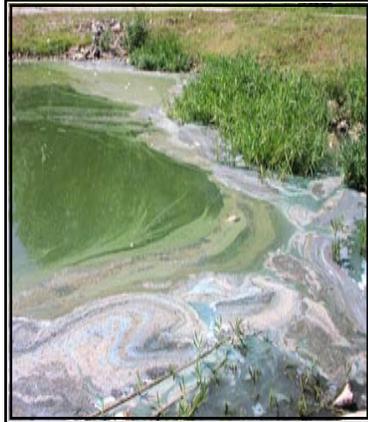


HARMFUL ALGAL BLOOMS SEASON (HAB)

Harmful algal blooms generally begin in May and can occur through October or later. Reports mostly coincide with the longest periods of light and warmest water temperatures, and typically flourish in nutrient loaded water bodies. Three holiday weekends when public waters are most used fall in times when HAB are likely to occur:

- Memorial Day
- Independence Day
- Labor Day



In 2012, Kansas experienced HAB involving 26 reported water bodies. There were 4 confirmed or suspected cases of human illness associated with HABs in 2012. Animals (pets and livestock) that swim in or drink water affected by HAB or eat dried algae along beaches are seriously affected. In 2011, there were five confirmed dog deaths, one suspect and one confirmed dog illness due to HAB.

Kansas Department of Health and Environment
Bureau of Water
1000 SW Jackson Street, Suite 420
Topeka, KS 66612
Epi Hotline: 877-427-7317
E-mail: HarmfulAlgae@kdheks.gov

2015

Our Mission:

To protect and improve the health and environment of all Kansans.



This Publication is made possible through funding provided by:



For the latest Harmful Algae Bloom (HAB) Warnings and watch visit:

www.kdheks.gov

PHYSICIAN'S GUIDE

HARMFUL ALGAL BLOOM (HAB)



WHAT ARE HARMFUL ALGAE BLOOM (HAB)?

Cyanobacteria or blue-green algae are bacteria that grow in water. They are usually too small to be seen, but sometimes can form colonies. Blooms occur in fresh water when the bacteria grow exuberantly and produce toxins that cause acute illness. People can be exposed to toxins while



wading, playing, swallowing affected water, or inhaling water droplets while enjoying high-speed activities such as boating or jet skiing.

Some bloom look like foam on the surface of fresh water lakes and ponds. The blooms can be blue, green, brown and may look like paint floating on the water.

KANSAS WATER SAMPLING

KDHE does not conduct routine algae bloom monitoring but samples public use lakes in response to complaints of human or animal illness, and/or visual sighting of possible blue-green algae by the public or lake officials

KDHE does not sample or provide laboratory analysis for private ponds. Water samples for blue-green algae identification can be submitted to the Kansas State Veterinary Diagnostic Laboratory for a small fee. Visit the KDHE website www.kdheks.gov for water sample collection and shipping instructions. For more information, please contact the Kansas State Veterinary Diagnostic Laboratory at 866-512-5650.

PHYSICIANS CAN:

Educate Clients: Know where to go to find out about current Warnings and watches.

Know the signs of human illness due to HAB:

Disease due to cyanobacterial toxins varies according to the type of toxin and the type of water exposure (inhalation, ingestion, dermal). Humans can present a range of symptoms including:



- Vomiting
- Diarrhea
- Fever
- Sore Throat
- Headache
- Liver Damage
- Blisters of the Mouth
- Nausea
- Muscle Pain
- Stomach Cramps
- Skin Irritation

Swimmers in water containing cyanobacterial toxins may suffer allergic reactions such as, asthma, rashes, blisters around the mouth and nose.

Cyanobacterial toxins are classified by how they affect the human body including:

- Hepatotoxins
- Neurotoxins
- And other toxins that cause skin, eye, ear, nose, throat, or gastrointestinal symptoms

REPORTING HUMAN ILLNESS

To facilitate the process, KDHE recommends the use of the online Human Illness Reporting Form located at www.kdheks.gov and click the Blue Green Algae button to report suspected HAB-related human illness. Questions about this form? Please call KDHE - Bureau of Epidemiology and Public Health Informatics at : 877-427-7317 or email epihotline@kdheks.gov.

KDHE MAY ISSUE PUBLIC HEALTH ADVISORY

WATCH

Notifies public that a hazardous condition may exist. Recommends signs be posted at public access locations.

Advises that the water may be unsafe for humans and animals. Discourages direct water contact. Occurs when Microcystin toxin concentration is greater than or equal to 4 ug/L but less than 20ug/L and with cell counts between 80,000 and <250,000 cells/mL.

WATCH

Harmful Algae May Be Present

Blue-Green Algae May Be Harmful To Humans & Animals



- Use caution when contacting lake water and wash with clean water afterward
- Avoid areas of algae accumulation
- Don't let people/pets eat dried algae or drink untreated lake water
- Clean fish well and discard guts

In case of harmful algae contact, call doctor, veterinarian if people, animals have rashes, vomiting, diarrhea, eye irritation, asthma, breathing problems or other unexpected illness

Report new algae blooms to Kansas Department of Health and Senior Services
 Kansas Department of Health and Senior Services
 1400 S. 10th Ave., Topeka, Kansas 66612
 877-427-7317

Photo: Dept. of Health and Senior Services © 2010 Kansas, Topeka, Kansas 66612, 1400 S. 10th Ave. www.kdheks.gov

WARNING

Notifies the public that conditions ARE unsafe for contact. Recommends that water contact be prohibited. Microcystin toxin concentration is greater than or equal to 20 ug/L to 2,000 ug/L and cell counts are greater than 250,000 cells/mL to ≤10,000,000 cells/ml. All conditions of "watch" remain in effect.

WARNING

Harmful Algae Present

People & Animals May Get Sick



- Avoid areas of algae accumulation
- Clean fish well and discard guts
- Don't let people/pets eat dried algae or drink untreated lake water
- If people/pets contact lake water-wash with clean water as soon as possible

In case of harmful algae contact, call doctor, veterinarian if people, animals have rashes, vomiting, diarrhea, eye irritation, asthma, breathing problems or other unexpected illness

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