

VETERINARIAN ENHANCED SURVEILLANCE & REPORTING DUE TO MICROCYSTIN TOXIN IDENTIFICATION IN AN IOWA LAKE

BACKGROUND:

Microcystin toxin (a hepatotoxin) is released by blue-green algae or cyanobacteria. Cyanobacterial blooms occur when algae that are normally present grow exuberantly. Within a few days, a bloom can cause clear water to become cloudy. The blooms usually float to the surface and can be many inches thick, especially near the shoreline. Cyanobacterial blooms can form in warm, slow-moving waters that are rich in nutrients from sources such as manure or fertilizer runoff or improperly treated septic wastes. Blooms can occur at any time, but most often occur in late summer or early fall.

Both humans and animals can get microcystin poisoning from exposure to contaminated water. People can get microcystin poisoning from being exposed to contaminated waters, either by intentionally or accidentally swallowing water, by having direct skin contact (as when swimming, wading, or showering), or by breathing airborne droplets containing microcystins, such as during boating or waterskiing. Microcystin poisoning cannot be spread from one person to another, nor from an animal to a person.

SURVEILLANCE:

The Iowa Department of Public Health (IDPH) and the IDNR are participating in a CDC surveillance project assessing the human and animal health risks associated with algal blooms. As a part of this surveillance program IDPH is asking both human and animal health providers to report suspected or confirmed cases of microcystin poisoning.

IDPH is specifically asking veterinarians to report cases that meet the following criteria:

Symptoms:

- **Weakness OR**
 - **Reluctance to move OR**
 - **Anorexia OR**
 - **Pale mucous membranes OR**
 - **Confusion and/or extreme behavior changes OR**
 - **Acute liver failure and/or death OR**
 - **Survivors may experience photosensitization**
-
- **AND history of exposure to a water body with algal blooms within the past 7 days.**

How to report:

To report cases, please call the Iowa Department of Public Health at (800) 972-2026. Note this line is only staffed during business hours. If you call after hours, please leave a message and your call will be returned the next business day.

What to report:

Veterinarian name
Veterinarian's number
Client name
Client phone number
Client address

Upon receipt of this information IDPH will contact the patient directly to learn more about the exposure.

The Director of the Iowa Department of Public Health has designated suspected or confirmed cases of exposure to microcystin as a reportable disease in Iowa until October 31st

More information on Harmful algal blooms can be found at:

- Iowa Department of Public Health: http://www.idph.state.ia.us/eh/algal_blooms.asp
- Centers for Disease Control: <http://www.cdc.gov/hab/default.htm>

For questions, please contact Stuart Schmitz, State Toxicologist, at 515-281-8707 or Randy Lane at 515-281-5894