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To: Wisconsin Healthcare Providers, Infection Preventionists, Local and Tribal Health Departments, and Laboratorians

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Blue-green Algae (Cyanobacteria) and Cyanotoxin Poisoning Reporting Requirements

On July 1, 2018, revisions to Wis. Admin. Code ch. DHS 145 were published in the Administrative Register. The list of Communicable Diseases and Other Notifiable Conditions in Appendix A now includes blue-green algae (cyanobacteria) and cyanotoxin poisoning. Clarifications to the case reporting and investigation guidelines for cyanobacteria and cyanotoxin poisoning are provided below. Following these guidelines, health care providers, infection preventionists, and local public health departments play an important role in assuring timely intervention to prevent cyanobacteria-related illnesses and expanding scientific knowledge of signs and symptoms, risk factors, and health outcomes associated with cyanobacteria exposure.

Overview
Cyanobacteria, also known as blue-green algae, are aquatic photosynthetic bacteria naturally present in water bodies across Wisconsin. Some cyanobacterial species produce water-soluble toxins called *cyanotoxins*. Exposure to cyanotoxins through ingestion, inhalation, or contact can cause cyanobacterial poisoning in humans and animals. Risk is highest during blooms where the concentration of cyanobacteria in water bodies can increase dramatically. Blooms are typically prevalent during warm weather months in Wisconsin during May–September. Timely recognition and reporting of suspected cases of cyanobacterial poisoning enables public health professionals to investigate and intervene to prevent additional exposures and illnesses.

For Health Care Providers and Infection Preventionists
Diagnosis of cyanobacteria and cyanotoxin poisoning involves compatible signs and symptoms along with exposure to water that is suspected of, or tested to show evidence of, elevated cyanobacteria and/or cyanotoxin levels. There are no readily available clinical tests for cyanotoxins and diagnosis is clinical. Symptoms of poisoning can include:

- Skin, eye, or respiratory irritation.
- Abdominal pain.
- Vomiting or diarrhea.
- Headache.
- Liver or kidney damage.

Providers should ask patients about any visual evidence of algal blooms and inquire about posted health advisory signage or known public beach closures. Depending on the signs and symptoms, tests to

evaluate suspected cyanotoxin poisoning can include liver function tests, a basic metabolic panel, chest radiograph, and urinalysis for proteinuria and glycosuria. Health care providers should report any suspected human cases electronically through WEDSS or by mailing or faxing a completed Acute and Communicable Disease Case Report (F-44151) to the address on the form.

For Local and Tribal Health Departments
Local public health agencies (LPHAs) receiving a report of illness suspected to be due to cyanobacteria exposure should report the case to WEDSS as soon as possible. Due to the complexity of case investigation and risk assessment, BEOH will perform case investigations unless LPHAs choose to conduct initial routine follow-up for all cases in their jurisdictions. LPHAs that choose to perform their own initial case follow-up, including completion of the full patient interview and/or review of medical records, should notify the BEOH Harmful Algal Blooms Program. BEOH will work with LPHAs and other state agencies during investigations to coordinate environmental sampling, water testing, and public health intervention (for example, advisory postings, beach closures), as necessary and appropriate.

For Laboratorians
Diagnosis is clinical; there is no associated laboratory reporting component.

Additional information regarding cyanobacteria and cyanotoxin poisoning can be found on the DPH blue-green algae webpage.