Health Advisory: Increase in Cyclosporiasis Cases

Minnesota Department of Health Fri June 15 12:00 CDT 2018

Action Steps:

Local and tribal health departments: Please forward to hospitals, emergency departments, urgent care centers, clinics, and convenience clinics in your jurisdiction.

Hospitals, clinics, and other facilities: Please distribute to all health care providers in these facilities.

Health care providers:

- Consider *Cyclospora* as a potential cause of illness in persons with persistent diarrhea.
- Request testing for *Cyclospora* if it is suspected. See below for specific laboratory tests to request.
- Submit clinical materials from cyclosporiasis cases to MDH. This is required according to infectious disease reporting rules.

Background

An increase in cyclosporiasis cases have been reported in the past month, including two outbreaks. One outbreak has been associated with Del Monte vegetable trays purchased at Kwik Trip stores. A second outbreak has been identified associated with dining at Sonora Grill in Minneapolis.

*Cyclospora cayetanensis* is a protozoan parasite that causes an illness characterized by watery diarrhea, often profuse and protracted. Profuse diarrhea can last weeks to months, and may relapse. Additional symptoms may include anorexia, fatigue, weight loss, abdominal cramps, bloating, vomiting, and low-grade fever. Symptoms of cyclosporiasis usually begin 2-14 days after ingestion of oocysts in contaminated food or water. Direct person-to-person transmission is unlikely, as excreted oocysts take days to weeks to become infective.

Cyclosporiasis is endemic in tropical or subtropical regions of the world. Most outbreaks in the United States have been associated with consumption of imported fresh produce. Health care providers should consider *Cyclospora* as a potential cause of prolonged diarrheal illness. Health care providers should specifically request testing for *Cyclospora*. Laboratory confirmation may help guide antimicrobial therapy for the patient and help MDH identify the source of possible foodborne outbreaks.

Laboratory Diagnosis

Cyclospora infection is diagnosed by examining stool specimens. Laboratories should use sensitive recovery methods (concentration procedures) and detection methods that highlight *Cyclospora* oocysts. The oocysts can be stained with modified acid-fast or modified (“hot”) safranin techniques. *Cyclospora* oocysts also are autofluorescent, meaning that when stool containing the parasite is viewed under an ultraviolet (UV) fluorescence microscope the oocysts appear blue or green against a black background. Additional information is available on the CDC DPDx website: [https://www.cdc.gov/dpdx/cyclosporiasis/index.html](https://www.cdc.gov/dpdx/cyclosporiasis/index.html).
Additionally, there is a molecular gastrointestinal pathogen panel test that can detect *Cyclospora*.

The MDH Public Health Laboratory offers *Cyclospora* testing; please use the Clinical Testing and Submission form: [http://www.health.state.mn.us/divs/phl/clin/forms.html](http://www.health.state.mn.us/divs/phl/clin/forms.html) to submit specimens. Specimens collected prior to treatment should be refrigerated and sent to the diagnostic laboratory as rapidly as possible. If it is not possible to send the specimen to the laboratory promptly, it should be preserved. Because a range of tests might be performed, preserve stool in 10% formalin and Zn-PVA or one of the single-vial specimen collection systems.

**Treatment**

Trimethoprim/sulfamethoxazole (TMP/SMX), sold under the trade names Bactrim, Septra, and Cotrim, is the usual therapy for *Cyclospora* infection. No highly effective alternative antibiotic regimen has been identified yet for patients who do not respond to the standard treatment or have a sulfa allergy.

Submission of “clinical materials” (stool) from cyclosporiasis cases to MDH is required according to Infectious Disease Reporting Rules.

**Additional Information**

1. Reporting Cyclosporiasis ([http://www.health.state.mn.us/divs/idepc/dtopics/reportable/cyclosporiasis.html](http://www.health.state.mn.us/divs/idepc/dtopics/reportable/cyclosporiasis.html))
2. Infectious Disease Reporting ([http://www.health.state.mn.us/divs/idepc/dtopics/reportable/index.html](http://www.health.state.mn.us/divs/idepc/dtopics/reportable/index.html))

A copy of this HAN is available at: [http://www.health.state.mn.us/han/](http://www.health.state.mn.us/han/)

The content of this message is intended for public health and health care personnel and response partners who have a need to know the information to perform their duties.