

Health Advisory: Cyclospora Increase

Minnesota Department of Health Tue Jul 09 13:00 CDT 2019

Action Steps

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

Hospitals and clinics: 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.
- Trimethoprim-sulfamethoxazole (TMP-SMX) is the preferred and most effective therapy for *Cyclospora* infection.

Background

Increasing numbers of cyclosporiasis cases have been reported in the past month. In 2018, 156 *Cyclospora* cases were reported in Minnesota, markedly higher than the number of cases reported in the previous 10 years (range, 0 to 23 per year).

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 clinical management 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>.

Additionally, a molecular gastrointestinal pathogen panel test is available that can detect *Cyclospora* and is highly sensitive.

The MDH Public Health Laboratory offers *Cyclospora* testing; please use the Clinical Testing and Submission form: <https://www.health.state.mn.us/diseases/idlab/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 in enteric transport media. If diagnostic testing is requested at MDH, stools in PVA or

HEALTH ADVISORY: CYCLOSPORA INCREASE

equivalent is requested. If *Cyclospora* has already been detected at the clinical laboratory and are being sent to MDH for surveillance, stools in Cary-Blair are preferred.

Treatment

Trimethoprim-sulfamethoxazole (TMP-SMX) is the preferred and most effective therapy for *Cyclospora* infection. The typical adult dosing regimen is 160 mg TMP/800 mg SMX twice daily for 7 to 10 days (higher doses or longer courses may be required for immunocompromised patients).

No highly effective alternative treatment options are available for persons with allergies to sulfa or trimethoprim. Clinical management options for patients who cannot take TMP/SMX include observation and symptomatic treatment with non-antimicrobial medications, desensitization to TMP-SMX under the care of an allergist, or the use of an antimicrobial whose effectiveness against *Cyclospora* is based on limited data. Some reports indicate nitazoxanide and ciprofloxacin may have some activity against *Cyclospora*.

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

Additional Information

- Health Care Provider Information on Cyclosporiasis (<https://www.health.state.mn.us/diseases/cyclosporiasis/hcp.html>)
- Reporting Cyclosporiasis (<https://www.health.state.mn.us/diseases/cyclosporiasis/report.html>)

A copy of this HAN is available at <https://www.health.state.mn.us/communities/ep/han/index.html>
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.