



The Commonwealth of Massachusetts
Executive Office of Health and Human Services
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Bureau of Infectious Disease and Laboratory Sciences
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Clinical Advisory

To: Massachusetts Clinicians

From: Larry Madoff, MD
Medical Director

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Date: July 17, 2019

Re: Increase in *Cyclospora* infection in Massachusetts

The Massachusetts Department of Public Health (MDPH) has observed an increase in reported *Cyclospora* infections since June 2019. Over the past three years, MDPH had received 18 to 33 reports of *Cyclospora* infection annually, and most were associated with travel to areas where the parasite more commonly occurs. This year, MDPH has already received reports of over 100 cases of *Cyclospora* infection since May of this year. Most of these cases have occurred in greater Boston, but infections have been reported in residents of most counties in the Commonwealth. This year, very few cases have been associated with travel. Other states in the US have also reported increases in the number of cases of cyclosporiasis.

MDPH recommends the following:

- Health care providers should consider *Cyclospora* infection as a potential cause of prolonged diarrheal illness in patients regardless of travel history.
- If suspected, health care providers should specifically request testing for *Cyclospora*.

Cyclosporiasis is a protozoan parasitic infection that results from ingesting infective *Cyclospora cayetanensis* cysts. Outbreaks in the United States and Canada have historically been linked to various types of imported fresh produce including: Guatemalan raspberries and snow peas (2000 and 2004), Thai basil (2001), Mexican bagged salad mix (2013), and prepackaged commercial fresh vegetable trays (2018). Outbreaks involving restaurants have been reported. At this time, no particular food item has been linked to the cases of *Cyclospora* infection occurring this year in Massachusetts.

Individuals become symptomatic approximately one week after ingesting contaminated food (range 2-14 days). *Cyclospora* is not spread through direct person-to-person contact since it does not develop from oocyst to infectious cyst until after a period in the environment. Symptoms typically include watery diarrhea, with frequent and sometimes explosive diarrhea. Other common symptoms include loss of appetite, weight loss, abdominal cramping and bloating, flatulence, nausea, and prolonged fatigue. Low-grade fever occurs in 50% of patients. Infection is usually self-limited, but untreated people may have remitting, relapsing symptoms for weeks to months. Cyclosporiasis is typically and effectively treated using a 7-10 day regimen of trimethoprim-sulfamethoxazole (TMP-SMX). There are no alternative agents demonstrated to be effective.

Currently, most testing to assist in the diagnosis of cyclosporiasis involves microscopy, with several staining methods in use. Microscopy to identify *Cyclospora cayetanensis* is not a test done routinely in most clinical laboratories even when stool is examined for ova and parasites, and may require a specific request.

Several molecular methods with conventional and real-time PCR can sensitively and specifically detect *Cyclospora cayetanensis* in stool. There are commercial panels that include *Cyclospora cayetanensis* among other enteric pathogens.

Clinicians should check which laboratory methods are available and preferred in their clinical practice. Testing for *Cyclospora* is not currently available at the MA State Public Health Laboratory.

Patients with laboratory-confirmed *Cyclospora* infection should be promptly reported to the local board of health or MDPH by calling **(617) 983-6800**. Infection identified in Boston residents should be reported to the Boston Public Health Commission by calling (617) 534-5611.

For more information:

- CDC Cyclosporiasis website: <http://www.cdc.gov/parasites/cyclosporiasis/>
- Public Health Fact Sheet (also available in Spanish and Portuguese on the MDPH web site): <https://www.mass.gov/service-details/cyclospora>