



NEW YORK CITY DEPARTMENT OF  
HEALTH AND MENTAL HYGIENE  
Mary T. Bassett, MD, MPH  
Commissioner

### **2017 Health Alert # 18: Increase in *Cyclospora* diarrheal disease**

Please Share this Alert with All Emergency Medicine, Family Medicine, Infection Control, Laboratory Medicine, Pediatrics, Primary Care, HIV Specialists, Infectious Disease and Internal Medicine Staff in Your Facility.

- The New York City Health Department is investigating an increase in the number of *Cyclospora* infections reported in 2017
- When evaluating patients with unexplained watery diarrhea for more than 5 days, consider *Cyclospora* and specifically request testing for *Cyclospora* when submitting stool specimens
  - *Cyclospora* examination is usually not performed during routine ova and parasite tests

July 24, 2017

Dear Colleagues,

New York City (NYC) clinicians should be on the alert for patients with diarrhea due to *Cyclospora* infection. Approximately 50 cases of cyclosporiasis are reported to the NYC Health Department every year, primarily between June and September. We have noted an increase in 2017 compared to previous years. A total of 27 cases were reported between January 1 – June 30, 2017 compared to 13 cases in 2016, and 21 cases in 2015 during the same time period. In June 2017 there were 22 cases reported, compared to 18 in June 2015 and 10 in June 2016. Approximately half of cases reported in 2017 had history of travel to endemic locations during the two weeks before illness onset, mainly Latin America. Epidemiologic investigations are ongoing to determine if there is a possible common source. We are also exploring the extent to which the increasing use of sensitive multiplex PCR diagnostic panels is leading to identification of disease that would have previously been overlooked.

*Cyclospora* is a coccidian parasite that causes watery diarrhea, nausea, loss of appetite, abdominal cramping and fatigue. Untreated, diarrhea and other symptoms may persist for weeks. Diarrhea may become intermittent and other symptoms may predominate. People become infected by ingesting food or water contaminated with fecal matter. Note that person to person transmission does not occur because the parasite requires time (days to weeks) after it is excreted to sporulate in the environment before it is infectious again. Treatment with trimethoprim-sulfamethoxazole (also known as Bactrim<sup>®</sup>, Septra<sup>®</sup>, or Cotrim<sup>®</sup>) is recommended. People living or traveling in tropical or subtropical regions of the world may be at risk due to endemic cyclosporiasis. In the United States, recent foodborne outbreaks of cyclosporiasis have been linked to various types of imported fresh produce (including raspberries, lettuce, and cilantro).

If patients present to you with persistent watery diarrhea (more than 5 days) and/or abdominal cramping, nausea, anorexia, or fatigue, please consider *Cyclospora* as a possible cause. Routine ova and parasite tests usually do not include examination for *Cyclospora*. Laboratory diagnosis of *Cyclospora* may be aided by staining with modified acid-fast or modified safranin techniques. The cell wall of *Cyclospora* oocysts are autofluorescent (blue-green) and detecting oocysts in stool may be helped by viewing samples under an ultraviolet microscope. **Most laboratories require that a physician specifically request testing for *Cyclospora* when submitting stool for laboratory diagnosis.** Multiplex polymerase chain reaction (PCR) panels (e.g., Biofire<sup>®</sup>) may include testing for *Cyclospora*. If using such a test when there is suspicion of this parasite, it is important to confirm that *Cyclospora* testing is a part of the multiplex panel.

Report all cases of *Cyclospora* infection to the Health Department. To report a suspect or confirmed case, or to obtain additional information or consultation, call 866-692-3641. Providers can also report by fax or the internet. Instructions and forms are available at <http://www1.nyc.gov/assets/doh/downloads/pdf/hcp/reporting-guide.pdf>.

We greatly appreciate your assistance in helping us identify and respond to communicable disease concerns in NYC.

Sincerely,

A handwritten signature in black ink, appearing to read "Demetre Daskalakis", is written over a light blue rectangular stamp. The signature is fluid and cursive.

Demetre C. Daskalakis, MD MPH  
Deputy Commissioner  
Division of Disease Control  
NYC Department of Health and Mental Hygiene