2019 Health Alert # 17: Increase in *Cyclospora* diarrheal disease

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

- The New York City Health Department is investigating an increase in the number of *Cyclospora* infections reported in 2019
- When evaluating patients with unexplained watery diarrhea for more than five days, consider *Cyclospora* and specifically request testing for *Cyclospora* when submitting stool specimens
  - *Cyclospora* examination requires special testing (e.g., partial acid-fast stain and/or polymerase chain reaction {PCR} testing) that is usually not performed as part of a routine ova and parasite examination

July 18, 2019

Dear Colleagues,

New York City clinicians should be on the alert for patients with diarrhea due to *Cyclospora* infection. We have noted an increase in 2019 compared to previous years. Over 90 cases have been reported between January 1 – July 15, 2019 compared to 56 cases in 2018, and 43 cases in 2017 during the same time period. Since July 1, 2019 alone there have been 40 cases diagnosed and reported to the NYC Health Department. Approximately 30% of patients have reported travel outside of the United States in the two weeks prior to symptom onset, primarily to Latin America. Epidemiologic investigations are ongoing to determine if there is a possible common food source for cases with no travel outside of NYC. Additionally, we are confident that increasing use of syndromic multiplex PCR diagnostic panels is leading to identification of disease that would have previously been overlooked.

About Cyclosporiasis:
- *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.
- 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.
- The incubation period is approximately 1 week, but can range from 2 – 14 days or more.
- People living or traveling in tropical or subtropical regions of the world may be at risk due to endemic cyclosporiasis. In the United States, prior foodborne outbreaks of cyclosporiasis have been linked to various types of imported fresh produce (including raspberries, lettuce, and cilantro).
**Diagnosis:**

- 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*. When ordering stool microscopy, please specifically request testing for *Cyclospora*. When ordering a GI syndromic multiplex panel, please confirm that *Cyclospora* is part of the panel.

**Treatment:**

- Treatment with trimethoprim-sulfamethoxazole (also known as Bactrim®, Septra®, or Cotrim®) is recommended.

**Laboratory Testing:**

- 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 health care provider specifically request testing for *Cyclospora* when submitting stool for laboratory diagnosis.**
  - When ordering stool microscopy, please specifically request testing for *Cyclospora*.
  - When ordering a GI syndromic multiplex (PCR) panel (e.g., Biofire®), please confirm that *Cyclospora* is part of the panel.
- Send positive specimens directly to the New York State Wadsworth Center Laboratory – Parasitology Laboratory for confirmation of testing. Samples should be submitted in Cary-Blair or an ethanol-based preservative.

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 the NYC Provider Access Line (PAL) at **866-692-3641**. Providers can also report by fax or via **Reporting Central**, the Health Department’s web-based reporting portal. More information about reporting can be found at **nyc.gov/health/diseasereporting**.

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

Sincerely,

Demetre C. Daskalakis, MD, MPH
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