Cyclosporiasis Outbreak Update and Its Laboratory Diagnosis

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August 2013

From June 28 to August 8, 2013, 514 documented cases of Cyclospora diarrhea infection have been reported to the CDC involving at least 17 states. The great majority of infections have been documented in Nebraska, Texas, and Iowa with just a few infections reported in New York State. In previously healthy individuals, most infections are self-limited and resolve without specific medical intervention. On occasion, supportive care including fluid replacement and treatment for nausea may be indicated. Over 24 patients have been hospitalized in this recent Cyclospora outbreak with no deaths reported.

*Cyclospora cayetanensis* is a protozoan parasite that causes diarrheal disease, usually following the ingestion of fecally-contaminated food or water. For this most recent *Cyclospora* outbreak, a trace-back investigation conducted by the FDA identified a food service processor of pre-packaged salads located in Mexico as the source of the infection. At this time, it is uncertain whether the salad was contaminated from irrigation water or from water used at the processing plant for washing the salad prior to packaging.

The laboratory diagnosis of cyclosporiasis is dependent upon the microscopic detection of *Cyclospora* oocysts in stool specimens using special stains, such as the modified acid-fast stain. These special stains may not be routinely performed in all clinical microbiology laboratories. Healthcare providers are reminded that Laboratory Alliance’s clinical microbiology department routinely performs tests on all stool specimens submitted for *Cryptosporidium/Giardia* or comprehensive Ova & Parasite examinations that will allow for the reliable detection of *Cyclospora* as well as many other potential protozoan pathogens in stool specimens. Alternatively, healthcare providers who have a high index of suspicion that a patient may have a *Cyclospora* infection can specifically order a special test, called *Cryptosporidium/Cyclospora/Isospora* (OAPC) that will not only screen for *Cyclospora* but two other protozoan pathogens as well. For more information, see our online Directory of Services Test Listings for *Giardia* and *Cryptosporidium*, and also *Cryptosporidium/Cyclospora/Isospora*. 