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Outbreaks of Cyclospora Infections in US and Canada

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The CDC recently reported a number of outbreaks of *Cyclospora cayetanensis* infection in May and June 1996 in at least 10 states in the United States and Ontario, Canada. *Cyclospora cayetanensis* is a parasite that causes a diarrheal illness. Only three outbreaks have been reported in the United States since it was first diagnosed in humans in 1977.

Several hundred laboratory-confirmed cases have been reported to the CDC, mostly involving immuno-competent adults. Preliminary evidence suggests that consumption of raspberries and mixtures of berries and other fresh fruits may be associated with *Cyclospora* infection. The CDC, the FDA, and health officials in the

United States and Canada are collaborating to determine the extent and cause of the outbreaks, the sources of contamination, and whether transmission is ongoing. Additional efforts include testing samples of produce for *Cyclospora*.

Although Cyclospora is transmitted by the fecal-oral route, direct person-to-person transmission is unlikely, because excreted oocysts require days to weeks under favorable conditions to become infectious (ie, sporulate). The incubation period is 1 week, and illness may be protracted (from days to weeks), with frequent, watery stools and other gastrointestinal symptoms; symptoms may remit and relapse. Oocysts can be identified in the stool by examination of wet mounts under phase microscopy, use of modified acid-fast stains, or demonstration of autofluorescence with ultraviolet epifluorescence microscopy. However, these procedures are not routine for most clinical laboratories and therefore confirmation by an experienced reference laboratory is recommended. Infection can be treated with trimethoprim-sulfamethoxazole.

The specific sources or modes of transmission have not been identified, and the complex distribution routes and handling of seasonal produce complicates tracing. As always, raw produce should be washed thoroughly before eating. Cases should be reported to local and state health departments.

FROM: Centers for Disease Control and Prevention. Outbreaks of *Cyclospora cayetanensis* infection—United States, 1996. *MMWR* 1996;45(25):549-551.