

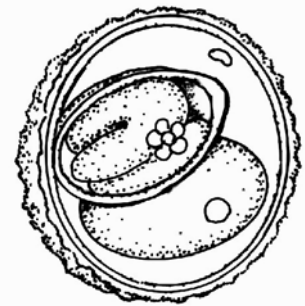
Cyclospora

What is *Cyclospora*?

Cyclospora cayentanensis (SIGH-clo-SPORE-uh KYE-uh-tuh-NEN-sis) is a unicellular parasite previously known as *cyanobacterium*-like or *coccidia*-like body (CLB). The first known human cases of infection with this parasite were reported in the medical literature in 1979. Cases have been reported with increased frequency from various countries since the mid 1980's, in part because of the availability of better techniques for detecting the parasite in stool specimens.

How is *Cyclospora* transmitted?

Infected persons excrete the oocyst stage of *Cyclospora* in their feces. Oocysts do not become infectious (i.e. sporulate) until days to weeks after excretion. Therefore, transmission of *Cyclospora* directly from an infected person to someone else is unlikely. However, indirect transmission can occur if an infected person contaminates the environment and oocysts have sufficient time, under appropriate conditions, to become infectious. For example, *Cyclospora* may be transmitted by ingestion of water or food contaminated with oocysts. In 1996, a large outbreak of *Cyclospora* infection in the United States and Canada was associated with consumption of imported raspberries. How common the various modes of transmission and sources of infection are not yet known, nor is it known whether animals can be infected and serve as sources of infection for humans.



Cyclospora Oocysts

Who is at risk for infection?

Persons of all ages are at risk for infection. Persons living or traveling in developing countries may be at increased risk, but infection can be acquired worldwide. In the United States, most cases of *Cyclospora* infection are detected April through August.

What are the symptoms of infection?

The incubation period between acquisition of infection and onset of symptoms averages one week. *Cyclospora* infects the small intestine and typically causes watery diarrhea, with frequent, sometimes explosive stools. Other symptoms can include loss of appetite, substantial loss of weight, bloating, increased flatus, stomach cramps, nausea, vomiting, muscle aches, low-grade fever, and fatigue. If untreated, illness may last for a few days to a month or longer, and may follow a remitting-relapsing course. Some infected people are asymptomatic.

How is infection diagnosed?

Identification of this parasite in stool requires special laboratory tests that are not routinely done. A single negative stool specimen does not rule out the diagnosis; three or more specimens may be required. Stool specimens should also be checked for other microbes that can cause similar illness.

How is infection prevented?

Based on currently available information, avoiding food or water that may be contaminated with stool is the best way to prevent infection. Reinfection can occur.

References:

- (1) CDC, Update: Outbreaks of *Cyclospora cayetanensis* Infection – United States and Canada, 1996. MMWR 1996; 45:611-2.
- (2) Hoge CW, et al. Placebo-controlled trial of co-trimoxazole for cyclospora infections among travellers and foreign residents in Nepal, Lancet 1995; 345:691-3
- (3) CDC Fact Sheet. www.cdc.gov April 19, 2004.

For more information, please contact your nearest Environmental Public Health Services office.

Edmonton Main Office	(780) 413-7928	Spruce Grove	(780) 962-7509
Capital Health Centre – South Tower	(780) 735-1400	Leduc	(780) 980-4644
Strathcona	(780) 467-5571	St. Albert	(780) 459-6671

EPHD-07-001
Created: mmm/yy
Revised: Jan/05
Updated: Jun/08