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Treatment Considerations
for Cyclosporiasis



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Treatment Considerations for Cyclosporiasis

By: Sarah Eickholt, Pharm.D.

Background: Cyclosporiasis is a gastrointestinal illness caused by the *Cyclospora cayetanensis* parasite found in infected human feces. Large outbreaks are usually documented in developing countries, where the parasite is endemic. However, the most recent and notable outbreak of cyclosporiasis occurred in the United States, with over 19,000 laboratory-confirmed cases between May and August 2026. This is a significant increase compared to around 1,000 cases annually in 2025. *Cyclospora* is primarily transmitted by ingesting food or water contaminated with the parasite and is most common in fresh produce with hard-to-clean ridges and crevices, like leafy greens, herbs, and raspberries. It can also be ingested through untreated drinking water or contaminated water in pools, lakes, or hot tubs. Direct person-to-person transmission through the fecal-oral route is unlikely. *Cyclospora* oocysts are shed in the stool and then need to mature in the environment to be infectious. The incubation period of a *Cyclospora* infection is 2-11 days, with symptoms usually presenting around 7 days after ingestion of the parasite. The most common symptom of cyclosporiasis is watery diarrhea. Other symptoms include loss of appetite, abdominal cramping, bloating, weight loss, flatulence, and fatigue. Cyclosporiasis is usually self-resolving in immunocompetent individuals; however, symptoms can persist or relapse without treatment.

Diagnosis and Treatment: Diagnosis is challenging because *Cyclospora* is not detected by routine ova and parasite examinations. Specialized stool sample testing like acid-fast staining, molecular polymerase chain reaction-based assays, or fluorescent microscopy identifies *Cyclospora* oocysts. However, multiple stool samples may need to be collected on different days for accurate detection of those oocysts. The estimated turnaround time for *Cyclospora* stool testing is 24 to 72 hours. There is currently no vaccine available for the prevention of cyclosporiasis. Antibiotics can be used to decrease the duration of illness and prevent relapse in patients with a confirmed infection. The drug of choice for cyclosporiasis is trimethoprim-sulfamethoxazole (TMP-SMX; Bactrim®). A highly effective alternative has not been identified for patients with a sulfonamide allergy or intolerance or in cases of severe drug interactions with TMP-SMX. Consultation with an allergist may be considered for possible desensitization to TMP-SMX, especially in immunocompromised patients. Ciprofloxacin and nitazoxanide, an anti-protozoal drug, may be possible alternative treatment options, but are less effective than TMP-SMX. The recommended dosing of TMP-SMX, ciprofloxacin, and nitazoxanide is summarized in Table 1. Of note, longer treatment durations are recommended for immunocompromised patients (e.g., TMP-SMX: 7 days for normal and 10 days for immunocompromised).

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Table 1: Treatment Options for Cyclosporiasis

	TMP-SMX (First-Line)	Ciprofloxacin	Nitazoxanide*^
Adults	160-800 mg (one DS tablet) twice a day for 7-10 days	500 mg twice a day for 7-10 days	500 mg twice a day for 3-7 days
Pediatrics	5 mg TMP/kg/dose twice a day for 7-10 days Max: 160 mg TMP/dose	15 mg/kg/dose twice a day for 7-10 days Max: 500 mg/dose	500 mg twice a day for 3-7 days No data for < 12 years old

* Nitazoxanide is supplied as a 500 mg tablet that cannot be split/crushed.

^ Insurance coverage and out-of-pocket costs may be a barrier to therapy.

TMP-SMX=Trimethoprim-Sulfamethoxazole DS=Double Strength

Use in Pregnancy and Lactation: Trimethoprim-sulfamethoxazole should be avoided in pregnant patients who are near term due to potential birth defects. Use of TMP-SMZ in the first trimester can cause neural tube birth defects due to its inhibition of folate metabolism, while third trimester use can cause kernicterus in the newborn. It is generally compatible with breastfeeding but should be avoided if the nursing infant is premature, jaundiced, ill, or has a glucose-6-phosphate dehydrogenase deficiency. Ciprofloxacin should be avoided in both pregnancy and lactation. Data on nitazoxanide in pregnancy and lactation have not been established, but animal data suggests low risk.

Prevention: Preventing cyclosporiasis involves reducing exposure to contaminated food or water. Caution should be used while traveling in the tropics/ subtropics or developing countries with poor sanitation and lack of clean water sources. Routine chemical disinfection and sanitation of food generally do not remove or inactivate the *Cyclospora* oocysts. Ways to reduce the risk of cyclosporiasis include exercising food safety practices like thoroughly washing fresh fruits and vegetables before consuming, cutting away any damaged or bruised areas on fresh produce, avoiding the consumption of certain fruits and vegetables (e.g., lettuce), and staying up to date on food safety alerts and food recalls.

Conclusion: Cyclosporiasis is a parasitic infection caused by ingesting contaminated food or water. Early detection and treatment of Cyclospora can lead to favorable outcomes. Trimethoprim-sulfamethoxazole is the most effective treatment option, but alternatives can be considered if there are concerns about sulfonamide allergy, intolerance, or drug interactions with TMP-SMX. The key to preventing cyclosporiasis is to avoid consuming contaminated foods and water and follow appropriate food safety practices.

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