

Cryptosporidium

Epidemiology

Source: Oocysts in food/water

Anatomical source

Feces

Transmission

- Person-to-person via stool
- Ingestion of contaminated water or food
- Animal (mammals, birds, reptiles)-to-human

Incubation

7 days
(2-14 days)

Asymptomatic carriers

Clinical case definition

- Frequent, non-bloody, watery diarrhea
- Abdominal cramps
- Fatigue
- Vomiting
- Weight loss
- Dehydration

Complications in immunocompromised (HIV)

- Chronic, severe diarrhea
- Malnutrition
- Dehydration
- Death

Oocysts in stools -> 2 weeks after symptoms resolve

Epi Profile:

- Sporadic cases
- Outbreaks in water (Municipal water supply, recreational water areas, swimming pools)
- Childcare centers
- # 10,000 cases /year in LA.

Diagnosis

Microbiology: *Cryptosporidium* species are oocyst-forming coccidian protozoa. *Cryptosporidium hominis* only infects humans, while *Cryptosporidium parvum* can infect humans, cattle and other mammals.

Probable: Clinically compatible case that is epidemiologically linked to a confirmed case or has *Cryptosporidium* antigen

Lab Diagnosis

- Microscopic detection of oocysts in stool sample
 - Examine at least 3 stool specimens on separate days before considering test results to be negative. Shedding can be intermittent.
- Polymerase Chain Reaction- used to identify the species of *Cryptosporidium*
- These tests must be specifically requested by the healthcare provider. They are not part of routine laboratory examination.

Confirmed: Clinically compatible case with detection of *Cryptosporidium* organisms or DNA in stool

Treatment

Treatment

- Most people who are not immunocompromised recover within two weeks without treatment
 - Drink plenty of fluids to prevent dehydration due to diarrhea or vomiting
- Diarrhea can be controlled by a 3-day course of **nitazoxanide** oral suspension- available by prescription for adults and children over 12 months of age.

Standard Precautions

Control

Report case to OPH

1-Hand washing

- Before preparing or eating food
- After using toilet
- After handling animals
- After changing diapers

2-Avoid contaminated water

- Avoid swallowing water while swimming
- Boil questionable or unfiltered water for at least 1 minute before ingesting
- Chlorination does NOT kill *Cryptosporidium*
- Do not swim in recreational water areas for at least 2 weeks after *Cryptosporidium* symptoms cease

School: Exclude children from child-care facilities while symptoms persist