

# Cryptosporidiosis (Crypto)



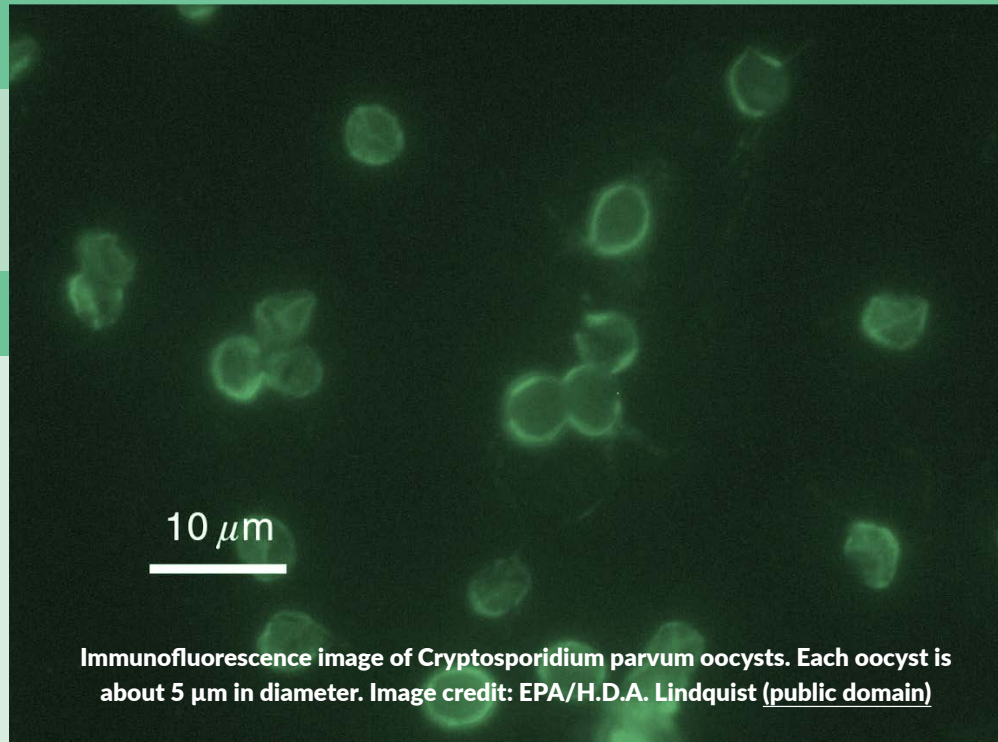
## Distribution

Found worldwide, cryptosporidiosis is one of the leading causes of severe diarrhea in young children (Checkley et al., 2015).



## Cause

Consuming food or water contaminated with the oocysts of *Cryptosporidium parvum* (protozoa). Oocysts enter the environment from people's feces due to poor sanitation and hygiene practices. They can survive in the environment for a long time. A person only needs to consume a few oocysts to become infected.



Immunofluorescence image of *Cryptosporidium parvum* oocysts. Each oocyst is about 5  $\mu\text{m}$  in diameter. Image credit: EPA/H.D.A. Lindquist (public domain)



## Symptoms

Symptoms usually begin two to ten days after infection. The most common symptom is large amounts of watery diarrhea. Other symptoms include stomach cramps, dehydration, nausea, and fever. Some people who are infected may not have any symptoms, but their feces can still make other people sick.

Young children, pregnant women, and people with weakened immune systems (for example, people living with HIV/AIDS) are more likely to experience severe symptoms.



## Prevention

- Treat and safely store all drinking water.
- Wash fruits and vegetables in safe drinking water; cook food thoroughly.
- Use improved latrines to keep feces from the environment.
- Use good hygiene, including handwashing with soap at all critical times.

### HOUSEHOLD WATER TREATMENT OPTIONS

- Filters that are rated "very effective" for protozoa.
- Boiling can inactivate *Cryptosporidium* oocysts.
- Note: Oocysts are resistant to chlorine and somewhat resistant to solar disinfection (SODIS).



## Treatment

Most people can recover in one or two weeks without treatment, unless they become severely dehydrated.

If dehydrated from diarrhea, drink oral rehydration solution. In severe cases, intravenous fluids may be needed.

People with healthy immune systems can take nitazoxanide (antibiotic) to treat *Cryptosporidium*.

References: Centers for Disease Control and Prevention. (2015). Cryptosporidiosis - Disease. Retrieved March 9, 2018, from <https://www.cdc.gov/parasites/crypto/illness.html>  
Checkley, W. et al. (2015). A review of the global burden, novel diagnostics, therapeutics, and vaccine targets for cryptosporidium. *The Lancet. Infectious Diseases*, 15(1), 85–94. [https://doi.org/10.1016/S1473-3099\(14\)70772-8](https://doi.org/10.1016/S1473-3099(14)70772-8)

This resource is open content and licensed under a Creative Commons Attribution-ShareAlike 4.0 International License. Refer to CAWST's guidelines for distributing, translating, adapting, or referencing CAWST resources ([resources.cawst.org/cc](https://resources.cawst.org/cc)).