



CRYPTOSPORIDIOSIS

WHAT IS CRYPTOSPORIDIOSIS?

Cryptosporidiosis (crypto) is an infection caused by the parasite *Cryptosporidium parvum*. A parasite gets its nutrients from another living organism (the host). Your body is the host when you have this infection. Crypto mainly affects the intestines and causes diarrhea.

Crypto is easily spread by contaminated food or water, or direct contact with an infected person or animal. About 15% to 20% of people with AIDS are infected with crypto. Only some of these infections lead to serious disease.

Crypto causes diarrhea, nausea, vomiting, and stomach cramps. In people with healthy immune systems, these symptoms do not last more than about a week. See Fact Sheet 554 for more information on diarrhea.

However, crypto may continue for a long time if the immune system is damaged. This usually happens with CD4 cell counts below 300. If you have HIV, and crypto continues for 4 weeks or more, you have AIDS according to the guidelines of the Centers for Disease Control.

Diarrhea can interfere with the absorption of nutrients. If it continues for a long time, you can develop serious weight loss (wasting, see Fact Sheet 519).

Several diseases cause similar problems. To confirm a diagnosis, doctors usually check your stool (bowel movement) for parasites and their eggs. This is called an "O and P" or "ova and parasites" test.

CAN CRYPTO BE PREVENTED?

There is no medication that prevents crypto.

The best protection is cleanliness. Avoid contact with human or animal wastes. Wash your hands after using the bathroom, gardening, handling dirty laundry or animals, or changing diapers. Crypto can be transmitted through oral-anal sexual activity. Do not swallow water when swimming, since water may be contaminated with human or animal waste containing crypto. Raw oysters may carry crypto.

In some cities, the public water supply is contaminated with crypto. Check with your water department. If there is a problem, and your CD4 cell count is below 300, consider the following steps:

- Boil drinking or cooking water for one minute; or
- Drink bottled water; or
- Drink filtered water: Use a home filter labeled "1-micron filter" or "Meets National Science Foundation (NSF) standard number 53 for cyst removal;" or
- Drink distilled water. Bottled water may not be safe if it has not been boiled or filtered correctly.

For more information, see the CDC Prevention Guide at <http://www.cdc.gov/hiv/resources/brochures/crypto.htm>.

HOW IS CRYPTO TREATED?

There is no "cure" for crypto; however, antiretroviral medicines (ARVs) will decrease or get rid of crypto symptoms.

Several drugs approved for other uses are being tested against cryptosporidiosis. These include paromomycin (Humatin), azithromycin (Zithromax), latrazuril, and atovaquone (Mepron).

The most promising drug to fight crypto was nitazoxanide. It helped about half of the people who took it in a research study. Unfortunately, development of nitazoxanide was stopped after the FDA withheld approval of the drug. However, it was approved in 2002 for use in children.

We can't get rid of the crypto infection. However, there are ways to control the diarrhea it causes. These include Imodium, Kaopectate, and similar preparations. Serious, ongoing diarrhea is sometimes treated with Sandostatin.

Another product, bovine colostrum concentrate (Sporidin-G), is being tested for controlling diarrhea caused by crypto.

If you have diarrhea, it is important to drink plenty of fluids to avoid becoming dehydrated.

THE BOTTOM LINE

Cryptosporidium is a fairly common parasite. It is found in animals, humans, soil, and water. It can be transmitted easily.

In people with normal immune systems, crypto causes diarrhea and other stomach problems for about a week. In people with less than 300 CD4 cells, the diarrhea may continue.

The best way to prevent infection by crypto is frequent hand washing. If your local water supply is contaminated with crypto, use only boiled or filtered water for cooking and drinking.

Several drugs are being studied to fight crypto, but none are approved yet.

Chronic diarrhea due to crypto should be controlled in order to avoid more serious problems like wasting.

