

Preventing Cryptosporidiosis in People who are Immunocompromised

What does 'immunocompromised' mean?

'Immunocompromised' means the immune system is weakened and the body is less able to fight off infectious diseases. People who might be immunocompromised include those with HIV/AIDS, cancer, or diabetes, those who have had a transplant, those taking certain drugs that can suppress the immune system, and those with conditions they were born with that affect the immune system.

What is cryptosporidiosis?

Cryptosporidiosis is a diarrheal disease caused by a parasite called *Cryptosporidium parvum* (also referred to as "Crypto"). The parasite can live in the intestine of humans and animals and is passed in the feces (stool) of an infected person or animal.

Do the cryptosporidiosis prevention measures listed for persons with healthy immune systems apply to me?

Yes. See the VDH [Cryptosporidiosis Fact Sheet](#) for information about steps anyone can take to prevent this disease. This fact sheet provides information about additional precautions that might be necessary for people who are HIV positive, undergoing chemotherapy, taking drugs that suppress the immune system (e.g., corticosteroids) or are otherwise immunocompromised. Additional steps to take to prevent cryptosporidiosis for immunocompromised persons include:

- Wash your hands often with soap and water. Alcohol-based hand rubs do not effectively kill Crypto. Be extra careful about hand washing, especially after using the toilet, changing diapers, before eating or preparing food, and after touching pets or other animals or working with soil.
- Be extra careful about what you eat and drink. Fresh vegetables and fruits can be contaminated with Crypto. Wash vegetables and fruits that will be eaten raw, and be careful not to let raw foods contaminate other foods.
- Be sure milk and juices have been pasteurized and water has been properly treated before drinking them. Other dairy products, such as cheese, should also be pasteurized.
- Avoid swallowing water from lakes, rivers, swimming pools, and when using hot tubs.
- Avoid touching farm animals.
- Follow safer-sex guidelines.
- Take extra care when travelling, especially to developing countries where food and water might be contaminated with *Cryptosporidium* or other pathogens.

What about my drinking water?

If you obtain drinking water from a public water system that is properly operated, no additional precautions may be needed. Check with your local health department and water utility to see if any special steps are needed. You may want to discuss the need for protective measures with your healthcare provider because:

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- Drinking water that is considered safe for persons with healthy immune systems may contain some *Cryptosporidium* oocysts (the egg-like form of the organism).
- No one knows whether a few oocysts could create a risk for someone who is immunocompromised.
- *Cryptosporidium* oocysts ingested while you are healthy can remain in your body until your immune system is severely depressed and then cause serious illness.

What are some options for safer beverages?

Bring tap water to a full boil for one minute before using.

- This will kill all organisms including Crypto.
- To avoid burning yourself, allow water to cool before pouring into clean, dry containers. Store in the refrigerator.
- Use the boiled water for ice cubes, tooth brushing and mixing with concentrates. You do not need to use boiled water for food that will be cooked before eating.

Use a point-of-use (personal-use, end-of-tap, or under sink) filter that will remove particles 1 micron or less in diameter. Filters in this category include:

- Those that use reverse osmosis
- Those labeled as “Absolute 1 micron” filters
- Those labeled as meeting NSF (National Sanitation Foundation) Standard #53 or Standard #58 for “Cyst Removal or Reduction”. (Note: The “Nominal” 1 micron filter rating is not standardized and these filters may not remove *Cryptosporidium* oocysts).
- Follow directions for filter use and replace the filters according to manufacturer’s directions.
- Wear disposable gloves when changing filter cartridges. More information on filters is available at http://www.cdc.gov/parasites/crypto/gen_info/filters.html.

Use commercially-bottled beverages if they have been processed in a way that will remove *Cryptosporidium* oocysts.

- Bottled water does not have to meet the same standards as water coming from a treatment plant.
- Bottled water that has been distilled or passed through filters that remove particles 1 micron or less in size or that has undergone reverse osmosis prior to bottling will not have *Cryptosporidium* oocysts.
- Commercially bottled soft drinks and seltzers are generally safe.
- Bottled juices are safe if they have been pasteurized and do not require refrigeration before opening.
- Avoid fountain drinks, fruit drinks from frozen concentrate or made with fresh fruit, and iced tea/coffee made from untreated water.

How can I get more information about cryptosporidiosis?

- If you have concerns about cryptosporidiosis, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at

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<https://www.vdh.virginia.gov/local-health-districts/>.

- Visit the Centers for Disease Control and Prevention website at <http://www.cdc.gov/parasites/crypto/ic/index.html> or https://www.cdc.gov/parasites/crypto/gen_info/infect_ic.html.

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