



**CABINET FOR HEALTH AND FAMILY SERVICES
DEPARTMENT FOR PUBLIC HEALTH**

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Dear Clinicians:

The Kentucky Department for Public Health (KDPH) has seen an increase in diarrheal illness this year caused by the microscopic parasite *Cryptosporidium*. Over 270 cases have been confirmed statewide. Reports are particularly high around the central Kentucky area. KDPH wants you to be aware of this increase so that you can properly test, treat and report patients with diarrheal illness in your practice.

Cryptosporidium, or "Crypto," is one of the leading causes of waterborne disease among humans in the United States. It is spread via the fecal-oral route. People become ill after eating or drinking contaminated food or water or by touching a contaminated surface and then touching their mouths. The time it takes from ingestion of the parasite until symptoms begin can be from two to 10 days. Cryptosporidiosis symptoms may last up to 10 days and can include watery diarrhea, nausea, vomiting, fever, loss of appetite, and abdominal pain. Asymptomatic infections can occur and be a source of infection to others. For patients with a compromised immune system, Crypto can be serious and lead to severe nutritional deficiencies or even life-threatening illness.

Cryptosporidiosis cases typically peak during August and September in Kentucky. Outbreaks are common in childcare centers and recreational water venues. Contact with farm animals, especially cattle and goats, or drinking raw or unpasteurized milk or unpasteurized apple cider can be sources of Crypto infection.

Diagnosis:

Cryptosporidiosis is diagnosed via stool sample but can be difficult to detect. Patients may need to submit stool specimens over several days. Most often, stool specimens are examined microscopically using acid-fast staining, direct fluorescent antibody [DFA], and/or enzyme immunoassays for detection of *Cryptosporidium* sp. antigens. Polymerase chain reaction (PCR) testing is used more often now in reference diagnostic labs. Tests for *Cryptosporidium* are not routinely done in most laboratories so healthcare providers should specifically request testing for this parasite, along with standard the GI panel to assess other possible etiologies.

Treatment:

Alleviation of symptoms and improving immune response are important factors in treating cryptosporidium infections. Treatment modalities include:

- **Anti-parasitic drugs** – Nitazoxanide has FDA-approval for treatment of diarrhea caused by Cryptosporidium for patients ≥ 1 year of age. Effectiveness in immunosuppressed individuals is unclear.
- **Anti-motility agents** – Medications, such as Imodium A-D, Imotil, Pepto Bismol, or others, can be effective at slowing or eliminating diarrhea from cryptosporidium while taken.
- **Fluid replacement** – Important in all diarrheal illnesses.
- **Antiretroviral therapies** – Patients with HIV/AIDS, may benefit from antiretroviral therapy, which can decrease or eliminate symptoms. However, cryptosporidiosis may not be eliminated and symptoms may return if immune status worsens.

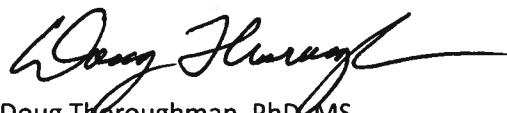
Recommendations:

To prevent the spread of the disease, everyone should thoroughly wash their hands after using the bathroom or changing diapers, and before preparing or eating food. Because Crypto can be spread so easily through water, persons affected with crypto should avoid swimming while having diarrhea and for 2 weeks after the diarrhea or symptoms stop. Swimming should be avoided even if the pool is properly chlorinated because Crypto is highly resistant to chlorine.

If you encounter any person confirmed with Cryptosporidiosis, please report the case to your local health department using the standard EPID 200 Disease Report form. Through case reporting and disease investigation, we may identify specific sources of risk, such as swimming pools or other point sources, providing the opportunity to intervene and reduce transmission to others.

Your assistance in identifying Cryptosporidium cases in light of the current increase we are seeing in Kentucky is greatly appreciated. If you have concerns or questions, please do not hesitate to contact Stacy Davidson, our Cryptosporidium Reportable Disease Nurse, at 502-564-3261, ext 4238.

Thank you for your attention to this guidance!



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