

# LOCAL HEALTH DEPARTMENT DISEASE INVESTIGATION STEPS

NC REPORTABLE DISEASE/CONDITION	NC DISEASE CODE	INFECTIOUS AGENT (S)
<b>CRYPTOSPORIDIOSIS</b>	<b>56</b>	<b><i>Cryptosporidium parvum</i></b>
<b>PREPARING FOR INVESTIGATION</b>		
<p><b>KNOW THE DISEASE/CONDITION</b></p>	<ul style="list-style-type: none"> <li>• Read about Cryptosporidiosis in the CD Manual.</li> <li>• See the case definition for Cryptosporidiosis in the CD Manual.</li> <li>• Study APHA <i>Control of Communicable Diseases Manual</i>, 19<sup>th</sup> ed., pp 157 - 160.</li> <li>• Refer to CDC MMWR: Cryptosporidiosis Surveillance - United States, 2003 - 2005; September 7, 2007; 56(SS07); pp 1-10. Available from: <a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5607a1.htm">http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5607a1.htm</a></li> <li>• Print and review reporting forms: <ul style="list-style-type: none"> <li><i>Part 1: Confidential Disease Report (DHHS 2124)</i></li> <li><i>Part 2: Cryptosporidiosis (DHHS/EPI #56)</i></li> </ul> </li> </ul>	
<b>CONDUCTING INVESTIGATION</b>		
<p><b>COLLECT CLINICAL INFORMATION</b></p>	<ul style="list-style-type: none"> <li>• Obtain admission note, progress note and discharge summary if patient hospitalized for this disease/condition.</li> <li>• Obtain healthcare provider clinical notes from date(s) of service for this disease/condition.</li> <li>• Look for evidence in the medical record that supports clinical findings described in the case definition.</li> </ul>	
<p><b>REVIEW LABORATORY INFORMATION</b></p>	<ul style="list-style-type: none"> <li>• Obtain laboratory reports specific to this disease.</li> <li>• Evaluate laboratory results to determine if requirements of the case definition are satisfied.</li> </ul>	
<p><b>APPLY THE CASE DEFINITION</b></p>	<ul style="list-style-type: none"> <li>• Use the case definition to determine if the clinical and laboratory findings meet the case definition criteria.</li> </ul>	
<b>IMPLEMENTING CONTROL MEASURES</b>		
<p><b>ATTEMPT TO IDENTIFY SOURCE OF EXPOSURE</b></p>	<ul style="list-style-type: none"> <li>• Review clinical documentation and interview patient or other knowledgeable person for potential source(s) of exposure: <ul style="list-style-type: none"> <li>○ ingestion of potentially contaminated drinking water/recreational waters (both natural and man-made)</li> <li>○ ingestion of unpasteurized milk/dairy products, apple juice or other juices</li> <li>○ ingestion of shellfish (oysters, clams, and mussels)</li> <li>○ contact with animals</li> <li>○ close/intimate contact with a known case or individual(s) with similar symptoms</li> <li>○ contact with diapered child(ren) or adult(s)</li> </ul> </li> </ul>	

<p><b>IMPLEMENT CONTROL MEASURES TO PREVENT DISEASE AND ADDITIONAL EXPOSURES</b></p>	<ul style="list-style-type: none"> <li>• Use the CDC website <a href="http://www.cdc.gov">www.cdc.gov</a> to teach at risk people about the disease.</li> <li>• Contact your health department's environmental health section if recreational water source (pool) is suspected. They may want to recommend "super chlorination" of the pool and closure until treatment is completed.</li> <li>• If shellfish contamination is suspected, contact Environmental Health/Shellfish Sanitation Agency.</li> <li>• If unpasteurized milk/dairy products or juice is suspected, contact local agricultural extension agent, state public health veterinarian (919) 733-3419 and North Carolina Department of Agriculture (NCDA) for assistance.</li> <li>• Advise ill foodhandlers/child care/healthcare workers that they must not work until symptoms have resolved.</li> <li>• Exclude infected children from daycare facilities until diarrhea resolves. Consider the testing of other symptomatic contacts in the facility.</li> </ul>
<p><b>REPORTING INVESTIGATION</b></p>	
<p><b>REPORT TO NC COMMUNICABLE DISEASE BRANCH (CD)</b></p>	<ul style="list-style-type: none"> <li>• Enter Part 1 and Part 2 Communicable Disease Reports into NC EDSS as a new event, or update the existing event.</li> <li>• Assign event to State Disease Registrar when case investigation complete.</li> <li>• Do an "Event_Print" in NC EDSS after assigning to the state. Keep for one year along with any additional notes. Maintain as a surveillance file, not a medical record.</li> </ul>
<p><b>CASE FINDING</b></p>	<ul style="list-style-type: none"> <li>• During the course of the investigation, look for symptoms of the disease in other exposed individuals (diarrhea, abdominal cramping, fever, nausea, vomiting, and weight loss).</li> <li>• Refer symptomatic individuals to healthcare provider for evaluation.</li> <li>• Testing for cryptosporidiosis must be specifically ordered, it is not usually included in routine examination for ova and parasites.</li> <li>• If two or more cases are found that are epidemiologically linked, report as an outbreak of cryptosporidiosis.</li> <li>• If indicated, submit outbreak summary report within 30 days from close of outbreak.</li> </ul>
<p><b>SPECIAL CONSIDERATIONS</b></p>	
<p><b>IMMUNOCOMPROMISED</b></p>	<ul style="list-style-type: none"> <li>• Cryptosporidiosis may cause life-threatening illness in those who are immunocompromised.</li> <li>• Look for evidence of HIV/AIDS or immunocompromised state in medical record; query patient about this because cryptosporidiosis may be a recurrent disease in immunocompromised persons.</li> </ul>

<b>COMMUNICABILITY</b>	<ul style="list-style-type: none"> <li>• Waterborne cases/outbreaks may be associated with exposure to contaminated natural or man-made recreational water, including chlorinated recreational water. Contamination of recreational water and private or public water supplies by livestock waste should be evaluated when indicated from exposure history.</li> <li>• Oocysts may be excreted in stools for several weeks after symptoms have resolved. They may remain infective for 2–6 months outside the body in a moist environment. Good hygiene should be strongly encouraged.</li> </ul>
<b>FOODBORNE TRANSMISSION</b>	<ul style="list-style-type: none"> <li>• Foodborne cases/outbreaks are possible and have been linked to unpasteurized juices, apple cider, and shellfish.</li> </ul>
<b>RISK COMMUNICATION</b>	<ul style="list-style-type: none"> <li>• Consider using risk communication tools conservatively if this is a low profile, naturally-occurring case.</li> <li>• Outbreaks may need NC HAN alerts, EPI-X reports, MD alerts and probably a press release.</li> <li>• NC DHHS Public Information Office (919) 733-9190 is available to assist local health departments as needed.</li> </ul>