

# LOCAL HEALTH DEPARTMENT DISEASE INVESTIGATION STEPS

NC REPORTABLE DISEASE/CONDITION		INFECTIOUS AGENT (S)
<b>LYME DISEASE</b>		<b><i>Borrelia burgdorferi</i></b>
<b>PREPARING FOR INVESTIGATION</b>		
<b>KNOW THE DISEASE/CONDITION</b>	<ul style="list-style-type: none"> <li>• Read about Lyme Disease in the CD Manual.</li> <li>• See the case definition for Lyme Disease in the CD Manual.</li> <li>• Study APHA <i>Control of Communicable Diseases Manual</i>, 19<sup>th</sup> ed., pp 364 – 369.</li> <li>• Refer to CDC MMWR: <i>Notice to Readers: Caution Regarding Testing for Lyme Disease</i>. February 11, 2005; 54(05). Available from: <a href="http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5405a6.htm">http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5405a6.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: Lyme Disease (DHHS/EPI #51)</i></li> </ul> </li> </ul>	
<b>CONDUCTING INVESTIGATION</b>		
<b>COLLECT CLINICAL INFORMATION</b>	<ul style="list-style-type: none"> <li>• If patient hospitalized for this disease, obtain medical record (admission note, progress note, other lab report(s), and discharge summary).</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> <li>• At this time, physician diagnosed erythema migrans of greater than or equal to 5 cm is the best indicator of a reportable case.</li> </ul>	
<b>REVIEW LABORATORY INFORMATION</b>	<ul style="list-style-type: none"> <li>• Review laboratory report(s) specific to this disease.</li> <li>• Evaluate laboratory results to determine if requirements of the case definition are satisfied.</li> <li>• Contact healthcare provider if further testing of the patient is indicated.</li> </ul>	
<b>APPLY THE CASE DEFINITION</b>	<ul style="list-style-type: none"> <li>• Use case definition to determine if clinical and laboratory findings meet the case definition criteria. If you need assistance in applying the case definition, contact the on call epidemiologist for the Communicable Disease Branch.</li> <li>• If case definition is met, continue investigation by interviewing case, implementing control measures, and reporting the case to the state.</li> <li>• The clinical evaluation and laboratory testing of Lyme disease is challenging. Many reports are generated that do not meet case definition and may actually be other tick borne diseases.</li> </ul>	

	<ul style="list-style-type: none"> <li>• Provide literature such as MMWR copies or extracts about tick borne diseases to health care providers when possible to update them on diagnosis and case reporting.</li> <li>• Note: If patient meets clinical criteria of greater than or equal to 5 cm EM rash but has no travel history, contact CD Branch for further guidance.</li> </ul>
<b>IMPLEMENTING CONTROL MEASURES</b>	
<b>ATTEMPT TO IDENTIFY SOURCE OF EXPOSURE</b>	<ul style="list-style-type: none"> <li>• Review clinical records for potential source(s) of exposure (travel history).</li> <li>• If probable source of exposure is not evident in clinical information, interview patient to obtain additional information.</li> </ul>
<b>IMPLEMENT CONTROL MEASURES TO PREVENT DISEASE AND ADDITIONAL EXPOSURES</b>	<ul style="list-style-type: none"> <li>• Use the CDC websites <a href="http://www.cdc.gov">www.cdc.gov</a> and <a href="http://www.epi.state.nc.us/epi/tick">www.epi.state.nc.us/epi/tick</a> to teach at risk people about tick-borne disease and methods of prevention.</li> </ul>
<b>REPORTING INVESTIGATION</b>	
<b>REPORT TO NC COMMUNICABLE DISEASE BRANCH (CD)</b>	<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 if already entered.</li> <li>• Assign event to State Disease Registrar when case investigation complete.</li> </ul>
<b>SPECIAL CONSIDERATIONS</b>	
<b>RISK COMMUNICATION</b>	<ul style="list-style-type: none"> <li>• Consider risk communication messages to public and health professionals during the beginning of "tick season."</li> </ul>
<b>ADDITIONAL INFORMATION</b>	<ul style="list-style-type: none"> <li>• Lyme disease can occur concurrent with other tick-borne diseases.</li> </ul>