

# LOCAL HEALTH DEPARTMENT DISEASE INVESTIGATION STEPS

NC REPORTABLE DISEASE/CONDITION	INFECTIOUS AGENT (S)
<b>ZIKA VIRUS</b>	<b><i>Zika Virus, flavivirus genus</i></b>
<b>PREPARING FOR INVESTIGATION</b>	
<b>KNOW THE DISEASE/CONDITION</b>	<ul style="list-style-type: none"> <li>• Read about Zika Infection on the CDC website, <a href="http://www.cdc.gov/zika/index.html">http://www.cdc.gov/zika/index.html</a> .</li> <li>• See the case definition for Zika Virus in the CD Manual</li> <li>• Study APHA <i>Control of Communicable Diseases Manual</i>, 20<sup>th</sup> ed., pp 27-32, Arboviral Fevers.</li> <li>• Print and review reporting forms: <i>Part 1: Confidential Disease Report (DHHS 2124)</i> <i>Part 2: North Carolina Zika Virus Case Report Form</i></li> </ul>
<b>BIOTERRORISM POTENTIAL</b>  <b>CATEGORY A</b>	<b><i>Not suspected of being a bioterrorist agent.</i></b>
<b>CONDUCTING INVESTIGATION</b>	
<b>COLLECT CLINICAL INFORMATION</b>	<ul style="list-style-type: none"> <li>• The disease is currently not endemic in North Carolina. For a clinician to suspect the disease there must be a travel history to an area where the disease is endemic, or, although less likely, recent receipt of organ, blood, or tissue.</li> <li>• 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>• If symptoms and exposure risk support a diagnosis of Zika, and there is a belief that the illness was acquired in North Carolina, contact state public health officials at 919-733-3419 and ensure control measures are implemented immediately. Do not wait for confirmation of diagnosis.</li> <li>• Interview the patient to obtain travel history or other possible exposure source.</li> <li>• Determine specific dates and location of travel in the two weeks prior to illness onset.</li> </ul>

<p><b>REVIEW LABORATORY INFORMATION</b></p>	<ul style="list-style-type: none"> <li>• Symptoms of Zika are very similar to Dengue and Chikungunya. Query the clinician to determine if alternative diagnoses have been considered.</li> <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 the healthcare provider if further testing of the patient is indicated.</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>
<p><b>IMPLEMENTING CONTROL MEASURES</b></p>	
<p><b>ATTEMPT TO IDENTIFY SOURCE OF EXPOSURE</b></p>	<ul style="list-style-type: none"> <li>• Review clinical records for potential source(s) of exposure.</li> <li>• Determine specific dates and location of travel in the two weeks prior to illness onset.</li> <li>• Is patient a recent organ, tissue, or blood donor recipient</li> <li>• If there is no travel history or receipt of donated blood, organs or tissues, and it seems likely the disease was locally acquired, contact the CD branch epi on call immediately at (919) 733-3419.</li> </ul>
<p><b>IMPLEMENT CONTROL MEASURES TO PREVENT DISEASE AND ADDITIONAL EXPOSURES</b></p>	<ul style="list-style-type: none"> <li>• Utilize the control measures contained in the <i>Control of Communicable Diseases Manual</i>, pp 31-32, under 9. Prevention</li> <li>• If evidence or risk of viremia, assess evidence or risk of local transmission: Viremia not fully characterized but believed to be similar to chikungunya. <ul style="list-style-type: none"> <li>○ Consult with CDB or vector control agencies, to assess whether <i>Aedes aegypti</i> or <i>Ae. albopictus</i> mosquitoes are likely present and active in the local area, and determine if mosquito trapping and testing should be considered in the area around the case</li> <li>○ Search for reports of illness in people with similar illnesses in the community</li> <li>○ Recommend the case-patient stay in air conditioned or screened accommodations during the first week of illness and reduce mosquito breeding sites in and around the patient's home</li> </ul> </li> </ul>
<p><b>PREGNANCY CONSIDERATIONS</b></p>	<ul style="list-style-type: none"> <li>• Call CD Branch at 919-733-3419 if have a pregnant woman or infant with anomalies.</li> <li>• Refer to CDC website on Zika Virus and Pregnancy: <a href="http://www.cdc.gov/zika/pregnancy/index.html">http://www.cdc.gov/zika/pregnancy/index.html</a></li> <li>• Provide prenatal follow-up recommendations in accordance to CDC guidance:</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>• Complete case report form</li> <li>• Once available: <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> </li> </ul>
<p><b>CASE FINDING</b></p>	<ul style="list-style-type: none"> <li>• During the course of the investigation, determine if other fellow travelers or persons living within a four block radius of the residence of the case are experiencing similar symptoms.</li> <li>• Refer symptomatic individuals to healthcare provider for evaluation.</li> <li>• Regard those symptomatic individuals as suspect cases and begin a new investigation.</li> </ul>
<p><b>SPECIAL CONSIDERATIONS</b></p>	
<p><b>STATE LABORATORY OF PUBLIC HEALTH (SLPH) TESTING</b></p>	<ul style="list-style-type: none"> <li>• Zika Virus virus testing is currently available at CDC via NC SLPH.</li> <li>• Samples may be submitted using the NC SLPH submission form DHHS 3445 and can be found at, <a href="http://slph.state.nc.us/virology-serology/special-serology.asp">http://slph.state.nc.us/virology-serology/special-serology.asp</a> .</li> <li>• CDC Form must also be submitted: <a href="http://slph.ncpublichealth.com/forms.asp">http://slph.ncpublichealth.com/forms.asp</a> .</li> <li>• For specific specimen collection or packaging instructions please call NC SLPH Special Serology Laboratory at (919) 807-8623.</li> </ul>
<p><b>RISK COMMUNICATION</b></p>	<ul style="list-style-type: none"> <li>• Any locally-acquired case of this disease will pique interest among media, health professionals, government officials, and the public.</li> <li>• Outbreaks will need NC HAN alerts, EPI-X reports, MD alerts, and a press release. Communications should focus on public education, taking appropriate personal protective measures, and mosquito source reduction measures.</li> <li>• Immediately contact CD Branch at 919-733-3419 if a locally-acquired case or outbreak is suspected. The CD Branch and NC DHHS Public Information Office are available to assist local health departments as needed.</li> </ul>