

## ZIKA INVESTIGATION OVERVIEW

Zika virus is a flavivirus that is primarily transmitted through the bite of an infected *Aedes* species mosquito. Intrauterine, perinatal, sexual, laboratory, and transfusion-associated transmission have also been reported.

Most people infected with Zika virus have asymptomatic infections or mild clinical disease. Hospitalization and death are uncommon. Guillain-Barré syndrome, encephalopathy, meningoencephalitis, myelitis, uveitis, and severe thrombocytopenia rarely occur. Transmission of the virus to the unborn child during pregnancy can lead to congenital Zika virus infection and may cause serious birth defects of the brain and eyes.

[CDC webpage for Zika Virus](#)

For additional support, consult the NC Communicable Disease Branch at (919) 733-3419.

## BASIC STEPS OF A ZIKA INVESTIGATION

1. Review Lab Information	<ul style="list-style-type: none"><li>• Lab is required for disease to meet case definition. Review laboratory criteria in case definition.<ul style="list-style-type: none"><li>• If lab does not meet criteria do NOT create an NCEDSS event</li></ul></li><li>• Clinical criteria are required for the Zika case definition. Laboratory evidence alone is not sufficient to meet case definition.</li><li>• Symptoms of Zika are very similar to Dengue and Chikungunya. Query the clinician to determine if alternative diagnoses have been considered. Additional testing may be indicated.</li></ul>
2. Verify County of Residence	<ul style="list-style-type: none"><li>• If out of state, update address in the person profile, then assign to the state Disease Registrar as “Does not meet”.<ul style="list-style-type: none"><li>• CDB will ensure Out of State notifications are complete.</li></ul></li><li>• If resident of another county reassign to that county in the Administrative Package</li></ul>
3. Collect clinical information	<ul style="list-style-type: none"><li>• Zika is currently not endemic in North Carolina. For a clinician to suspect disease there must be travel history to an area where the disease is endemic, or, although less likely, recent recipient of organ, blood or tissue.</li><li>• Zika can be passed from a pregnant woman to her fetus.</li><li>• Zika can be passed through sex from a person who has Zika to his/her sex partners.</li><li>• Use information collected from medical records and speak with the case.</li><li>• If lost to follow up per local health department policy, enter note on the dashboard.</li><li>• Attempt to identify epidemiologic linkages to similarly ill persons. For Zika, this is most likely to be travel companions.</li><li>• Two or more cases may be identified as an outbreak based on the situation, discuss with state epi.</li></ul>
4. Identify Source of Exposure	<ul style="list-style-type: none"><li>• Review clinical records for potential source(s) of exposure.</li><li>• Determine specific dates and locations of travel in the 14 days prior to illness onset.</li><li>• Is the patient a recent (within 30 days) 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>5. Implement Control Measures</p>	<ul style="list-style-type: none"> <li>• Utilize the control measures contained in the Control of Communicable Diseases Manual, 21<sup>st</sup> edition, pp 727- 728, under 9. Prevention.</li> <li>• If evidence or risk of viremia, assess evidence or risk of local transmission: <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, testing, and adult mosquito control 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 wear EPA-approved repellants if they must be outside.</li> </ul> </li> </ul>
<p>6. Special Considerations</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>

**CRITICAL ELEMENTS FOR NCDSS**

- Administrative Package
  - Disease Report Information, please select appropriate answer for Disease Category and Primary clinical syndrome
- Clinical Package
  - “General Diagnostic Information- Date that best reflects the earliest date of illness identification”
    - Best choice is always the date of illness onset (signs and symptoms), 2<sup>nd</sup> best is date of lab
- Risk History Package
  - Travel- Country traveled to and dates traveled are necessary for reporting.
  - Other Exposure Information as directed in the package question.

➤ Resources – <https://www.cdc.gov/zika/index.html>