# LOCAL HEALTH DEPARTMENT DISEASE INVESTIGATION STEPS

<table>
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<tr>
<th>NC REPORTABLE DISEASE/CONDITION</th>
<th>INFECTIOUS AGENT (S)</th>
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<tr>
<td><strong>DENGUE FEVER</strong></td>
<td><em>DEN-1, DEN-2, DEN-3, and DEN-4, of the genus Flavivirus</em></td>
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## PREPARING FOR INVESTIGATION

**KNOW THE DISEASE/CONDITION**
- Read about Dengue Fever in the CD Manual.
- See the case definition for Dengue Fever in the CD Manual.
- Print and review reporting forms:
  - Part 1: Confidential Disease Report (DHHS 2124)
  - Part 2: Dengue Fever (DHHS/EPI #7)

## CONDUCTING INVESTIGATION

**COLLECT CLINICAL INFORMATION**
- If patient hospitalized for this disease, obtain medical record (admission note, progress note, other lab report(s), and discharge summary).
- Obtain healthcare provider clinical notes from date(s) of service for this disease/condition.
- Look for evidence in the medical record that supports clinical findings described in the case definition. Travel to an area where dengue is currently occurring is an important factor.

**REVIEW LABORATORY INFORMATION**
- Review laboratory report(s) specific to this disease. If convalescent serum is drawn it should be done 6 days or more after onset of illness, but not after 6 weeks.
- Evaluate laboratory results to determine if requirements of the case definition are satisfied.
- Further testing by public health professionals would be indicated in high profile cases to confirm the diagnosis, or to investigate a cluster of dengue-like illnesses.

**APPLY THE CASE DEFINITION**
- Use the case definition to determine if the clinical and laboratory findings meet the case definition criteria.
### IMPLEMENTING CONTROL MEASURES

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<th>ATTEMPT TO IDENTIFY SOURCE OF EXPOSURE</th>
<th>• Interview client to obtain a travel history for the 2 weeks prior to symptom onset. Travel to an area of active dengue fever is a crucial element of exposure.</th>
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| IMPLEMENT CONTROL MEASURES TO PREVENT DISEASE AND ADDITIONAL EXPOSURES | • Use the CDC website [www.cdc.gov](http://www.cdc.gov) to teach at risk people about the disease.  
• Although dengue is not transmitted from person to person, the remote possibility that a mosquito biting an infected person during the viremic state could become infected and transmit dengue to other individuals exists.  
• Persons during acute disease should be protected from mosquito bites. |

### REPORTING INVESTIGATION

| REPORT TO NC COMMUNICABLE DISEASE BRANCH (CD) | • Enter Part 1 and Part 2 Communicable Disease Reports into NC EDSS as a new event, or update the existing event if already entered.  
• Assign event to State Disease Registrar when case investigation complete. |

### CASE FINDING

| • During the course of the investigation, look for symptoms of the disease in other exposed individuals with similar travel history.  
• Refer symptomatic individuals to healthcare provider for evaluation.  
• If two or more cases are epidemiologically linked, report as an outbreak of Dengue Fever.  
• If indicated, submit outbreak summary report within 30 days from close of outbreak. |

### SPECIAL CONSIDERATIONS

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<th>STATE LABORATORY OF PUBLIC HEALTH (SLPH) TESTING</th>
<th>• Consider verifying the laboratory test results by sending specimen(s) to the SLPH for reference testing.</th>
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| RISK COMMUNICATION | • NC DHHS Public Information Office (919) 733-9190 is available to assist local health departments as needed.  
• Consider using risk communication tools conservatively. Travel associated cases are not uncommon. |
| ADDITIONAL INFORMATION | • Aspirin is contraindicated due to its hemorrhagic potential. |