

TDH Recommendations for Local Response to Confirmed Case of Zika Virus Disease

When is a local response to a Zika case warranted?

- **For symptomatic individuals:** Local response should be conducted within 72 of receipt of laboratory evidence of Zika virus.
- **For asymptomatic pregnant patients:** Local response to laboratory evidence of Zika in an asymptomatic pregnant woman can be handled on a case by case basis.

What is a highly suspect case? Rash + 1

- When the person is authorized for Zika testing AND had rash and at least one other Zika symptom (fever, conjunctivitis, or arthralgia).

What should be done when a highly suspect case is identified?

- Remove any barriers to collecting and shipping specimens, to include a home visit for specimen collection if necessary and reasonable.
- As with all authorized Zika tests, share prevention messages about avoiding mosquitoes, reducing mosquito breeding grounds, and prevention of sexual transmission with the case/their healthcare provider.
- Notify others in your jurisdiction (as appropriate) that a local response may be necessary so that any additional planning can occur. Gather communication tools, review prevention messages, ensure that you have staff available to conduct door-to-door campaign.

When should we expect lab results?

- Expect Zika PCR results each Tuesday and Thursday from the Nashville, Knoxville, and Memphis laboratories. Expect IgM ELISA results on Tuesday and Friday from the Nashville laboratory.
- Don't call the lab to see if a specimen has arrived — email SHOC.Operations@tn.gov and someone can check STARLIMS if necessary.

Once we have lab confirmation, what do we do?

- Within 72 hours of receiving lab confirmation, conduct outreach/community education within the 200 yd defined risk area.
 - Educate community members (individuals who live or work within the 200 yd area) about mosquito avoidance and reducing mosquito breeding areas on their property.
 - Let them know that if they currently have three of four symptoms of Zika OR if they develop 3 of 4 symptoms within 8 weeks* of the confirmed case's symptom onset date that they will qualify for Zika virus testing.
 - If they are currently pregnant or learn they become pregnant within 8 weeks*, they should be tested at least once for Zika virus in coordination with their healthcare provider and public health.
 - Use the Fight the Bite cards (available in English and Spanish), and the flyer about Zika virus testing for this outreach.
- If you are planning any sort of public/media messaging about the confirmation of a case in your jurisdiction, please coordinate with Woody.McMillin@tn.gov in the Central Office.

What do we do after we conduct the local outreach/community education?

- Notify SHOC.Operations@tn.gov, abelardo.moncayo@tn.gov and jim.gibson@tn.gov if you are submitting specimens and an authorization form for someone identified as a potential case (without travel history) during local outreach.
- Enter information about your response into the REDCap instrument called "Zika Local Responses".

*Why 8 weeks?

The eight week time frame comes from a combination of intrinsic (human) and extrinsic (mosquito) incubation periods, the length of time humans are viremic, and the lifespan of a mosquito. All of these factors are ranges, and 8 weeks represents the total of the large end of those ranges, and thus is the longest possible period that we could reasonably expect one generation of local transmission of Zika.

Important Dates for Local Response

- **Day 0** - symptom onset date
- **Day 7 (1 week)** - earliest date mosquitoes infectious in TN (assumes (1) case was in TN on Day 0, (2) bitten by a mosquito in TN on Day 0, and (3) 7 day extrinsic incubation period)
- **Day 10 (1 week + 3 days)** - end of case's viremic period, and the earliest possible local case onset (3 days after 1st possible infectious mosquito in TN)
- **Day 38 (5 weeks + 3 days)** - estimated last possible infectious local mosquito (assumes (1) case is bitten on Day 10, (2) 7 day extrinsic incubation period, (3) that the mosquito survives and bites an additional 3 weeks)
- **Day 52 (7 weeks + 3 days)** - latest possible local case onset (2 weeks after last infectious local mosquito)