SURVEILLANCE FOR ZIKA

Early Detection of Local Transmission Can Reduce Widespread Transmission

Develop a Local Approach for Enhanced* Surveillance

*Enhanced Surveillance includes active surveillance around travelers with Zika, investigating unexplained clusters of rash illness, and in some areas, expanding Zika testing to include non-travelers with clinically compatible illness.

Considerations for your area include:

Are there Aedes aegypti or Aedes albopictus mosquitoes in your area?

- Areas with Aedes aegypti are at greater risk for local transmission.
- Enhanced surveillance for local transmission should be considered in areas with *Aedes aegypti* and may be considered in areas with *Aedes albopictus*.

Have you had local mosquito-borne transmission of dengue or chikungunya virus?

- These areas are likely at increased risk for local mosquito-borne transmission of Zika virus.
- Healthcare providers in the area may recognize suspect cases of Zika virus because of prior experience with other mosquito-borne diseases.

Have you identified travel-associated cases?

- Local transmission may first be identified in an area with a recent travel-associated case.
- Areas with a population that travels frequently to and from areas with ongoing Zika virus transmission should consider increasing surveillance activities around travel-associated cases.

Does your public health laboratory perform Zika virus testing?

- PCR testing should be performed in suspect cases who have had symptom onset within the past 7 days. PCR testing can be performed more quickly and results are more specific than serology. However, a negative PCR test does not rule out infection.
- IgM antibody testing takes longer and cross-reactivity can occur with other flaviviruses (e.g., dengue, West Nile, and yellow fever viruses).



Strategies for Enhanced Surveillance to Identify Possible Local Transmission during Mosquito Season

Surveillance around travel-associated cases

- Household members of travel-associated cases should be interviewed about symptoms suggestive of Zika virus infection during the case investigation.
- Household members and sexual partners of travel-associated cases should be told to contact the local health department if they develop symptoms after the initial case investigation is complete.
- Household members and sexual partners with symptoms consistent with Zika virus infection should be tested for Zika virus infection.

Investigation of unusual clusters of rash illness

- Outreach to healthcare providers helps increase awareness and recognition of unusual clusters of rash illness which may indicate local transmission of Zika virus in areas with Aedes aegypti or Aedes albopictus mosquito activity.
- If clusters of rash illness are detected, testing for Zika virus infection should be considered, especially if there is a constellation of symptoms, including acute fever, joint pain, or conjunctivitis in the cases.

Expanded testing for Zika virus among people with no known exposure

- Suspected cases of Zika virus disease may include patients with acute fever and rash, with or without
 joint pain or conjunctivitis; when feasible, patients should be tested for Zika virus within 7 days of
 symptom onset.
- Educate healthcare providers to consider testing people with clinically compatible disease for Zika virus, even with no known Zika virus exposure.
- In areas without previously confirmed cases of Zika virus disease, some states may wish to expand testing to include clinically compatible cases who have no travel history, in order to help find the "first cases of local transmission". In these cases, if testing capacity is limited, states could consider prioritizing enhanced surveillance to target people older than 10 years old, as older age groups are less likely to have common rash illnesses compared to young children.
- When feasible, test suspect cases using PCR for Zika virus if they have symptoms for less than 7 days. Serologic testing should be done in persons who with symptoms longer than 7 days.

Implement vector control around cases

- During mosquito season, recommend all cases stay in air-conditioned/screened accommodations and use personal precautions to reduce mosquito bites.
- For local mosquito-transmitted cases, implement targeted control efforts including intensified larval and adult mosquito control in a 150 yard radius (or other boundary as deemed appropriate) around the home.
- Consider adding community-based vector control measures in a community with 2 or more cases of local mosquito-borne transmission in separate locations.

Communicate with Healthcare Providers and CDC

- Cases of Zika virus disease should be reported to state and local health departments by healthcare providers.
- Quickly inform CDC, healthcare providers, and communities about possible local transmission