



Government of the District of Columbia
Department of Health



Center for Policy, Planning and Evaluation Administration
Division of Epidemiology–Disease Surveillance and Investigation

August 25, 2017

Health Notice for District of Columbia Health Care Providers
Updates on Zika Virus Disease and Testing

SUMMARY

To date, there have been 36 cases of laboratory-confirmed Zika virus disease (ZVD) in the District of Columbia (DC), all of which have been travel-associated or sexually transmitted. As of August 23, 2017, states had reported a total of 5,423 cases of ZVD to the Centers for Disease Control and Prevention (CDC). Of these, 5,150 were travel-associated, 224 were locally acquired mosquito-borne cases, 47 were sexually transmitted, 1 was laboratory acquired, and 1 was person-to-person through an unknown route. Locally acquired mosquito-borne transmission in the United States has only been documented in Florida and Texas. **In DC, ZVD spread by local "mosquitoes or through the use of blood or tissue products (e.g., blood transfusion, sperm donation) has not been reported.**

In this notice, we describe the DC Department of Health's (DC DOH) **updated approach to testing pregnant women** in response to [new recommendations from the CDC](#).

BACKGROUND

CDC has updated its testing recommendations based on knowledge gained from surveillance data on the global landscape of ZVD. The prevalence of ZVD is declining in the Americas, increasing the likelihood of false positives in asymptomatic pregnant women. In addition, current evidence suggests a prolonged IgM response after infection with the Zika virus, making infections that may have occurred during or before pregnancy difficult to distinguish. As Zika becomes endemic in the Americas, screening for Zika exposure and testing should be integrated as a part of **routine prenatal care**. Additionally, congenital Zika virus infection should be considered and **screened for in infants when evaluating birth defects** analogous with [Congenital Zika Syndrome](#).

Prevention of exposure to the Zika virus remains the only way to avoid infection. Pregnant women and women who wish to become pregnant should not travel to areas with the risk of Zika (outlined in the [June 30 Health Notice](#)). If travel is unavoidable, steps to prevent mosquito bites and sexual exposure should be strictly followed.

This health notice provides updated recommendations for testing, and guidance on what will be approved for testing through the DC Public Health Laboratory (PHL). Please note that testing is available through commercial laboratories for patients that are not eligible for testing through the PHL.

UPDATES ON ZIKA TESTING

- 1) **Recommendations have been updated for symptomatic and asymptomatic pregnant women** (*Figure 1*). Risk for ZVD is now differentiated for asymptomatic pregnant women with a single exposure versus ongoing exposure.

Symptomatic Pregnant Women

- Testing is still recommended for all symptomatic pregnant women and will be approved for testing through the DC PHL.

- **Simultaneous Zika NAT and IgM testing** is now recommended for samples collected 0-12 weeks after exposure; additional testing may be indicated if tested was performed within 2 weeks of exposure.
- As before, any symptomatic pregnant woman with exposure to Zika should be **tested as soon as possible**. Testing is only recommended on samples collected ≤ 12 weeks after symptom onset.
- Dengue IgM testing will no longer be performed through DC PHL, and should be done through a commercial laboratory if clinically indicated.

Asymptomatic Pregnant Women with a Single Exposure

- **Testing asymptomatic pregnant women with a single exposure to Zika is not routinely recommended.** This is consistent with current practices of DC DOH and DC PHL.
- If clinical judgment indicates that testing would enhance and inform the care of an asymptomatic pregnant woman with a single exposure, submit a test request on our [provider website](#).
- Please consider the following factors that impact an individual's risk of contracting Zika:
 - Type of travel and activities during travel
 - Length of exposure
 - Protective measures taken
 - Preferences or concerns
 - Intensity of Zika transmission in area of exposure (refer to the [June 30 Health Notice](#))
- Test requests for asymptomatic pregnant women with a single exposure will be evaluated on a case-by-case basis for to determine if testing is recommended. Approved testing will be performed through DC PHL.
- If testing is indicated, the testing algorithm for symptomatic pregnant women should be followed.

Asymptomatic Pregnant Women with Ongoing Exposure

- Women with asymptomatic ongoing exposure (more than a single, discrete travel or sexual exposure) should be tested using **NAT only on maternal serum and urine** samples.
- The initial test should be conducted at the first assessment of the patient. Up to two additional tests, for a **total of three**, should be conducted as exposure continues; ideally once per trimester. If a positive test result is received, no additional testing is necessary.

Testing at Delivery and for Infants (Figure 2)

- Placental testing for patients with a "*flavivirus unspecified*" result is no longer routinely indicated.
- DC DOH will notify the provider and the patient if testing is indicated at the time of delivery.
- Recommendations for testing of infants have not changed as of the date of this health notice.

2) **Diagnostic testing algorithms and interpretations** have also been updated (*Figure 3 and Figure 4*). Please note testing algorithms now take into account differing serum and urine results.

- Molecular testing will now be primarily referred to more broadly as nucleic acid testing (NAT) instead of polymerase chain reaction (PCR). As more research on Zika virus detection is conducted and new diagnostic tests are validated, different NAT may be recommended for optimal Zika testing.
- NAT testing is now recommended for **all samples collected ≤ 12 weeks** after symptoms or exposure (the previous recommendation in DC was 6 weeks).
- **The DC PHL Test Requisition Form has been updated.** The options are now:
 - Molecular Zika virus detection: Select this to order NAT testing when indicated.
 - Serology Zika virus (IgM detection): Select this to order IgM testing when indicated.
 - Zika virus detection panel: Select this to order NAT and IgM testing when indicated.

REVIEW OF EXISTING TESTING PROCEDURES

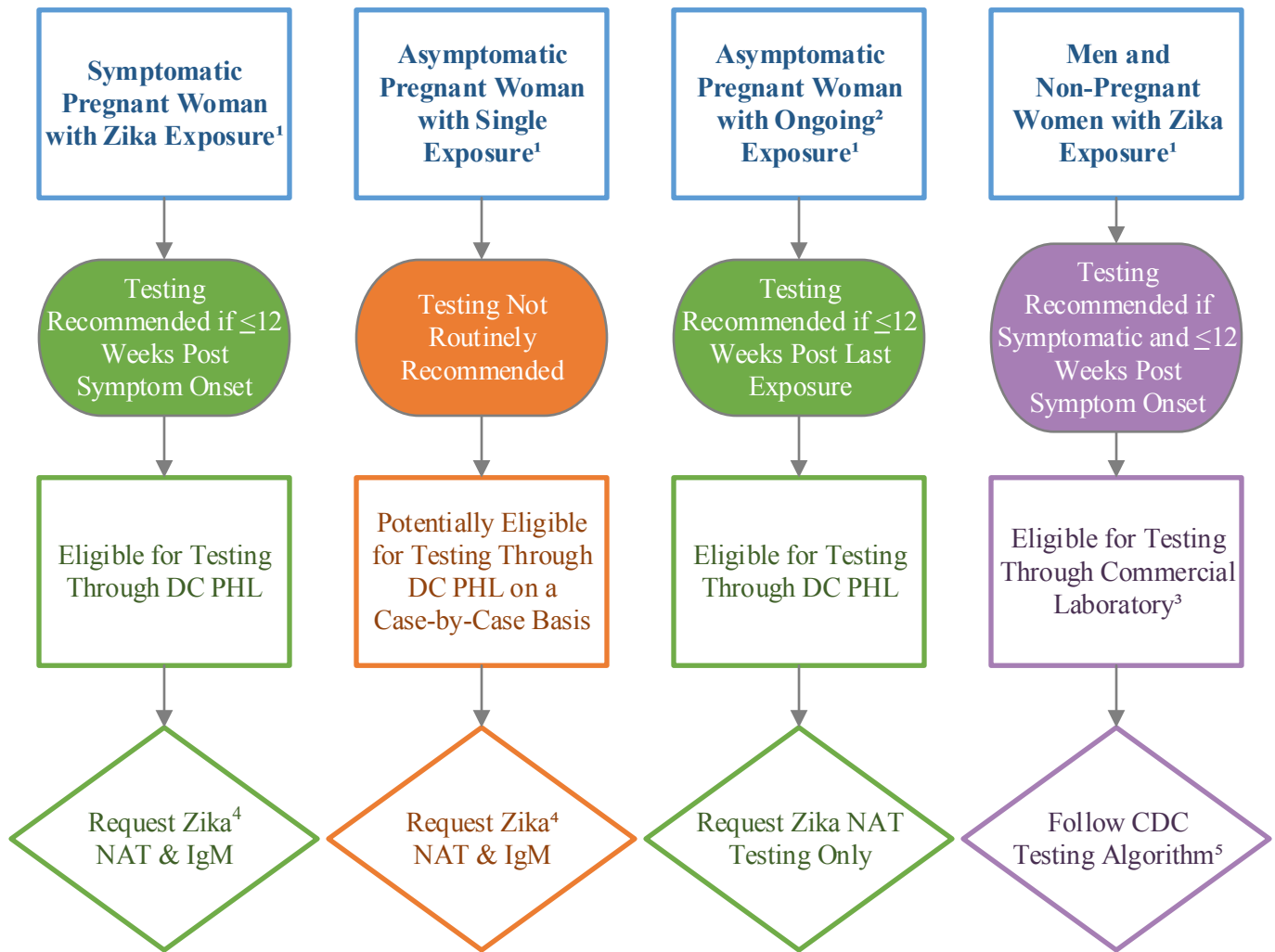
- **Zika test requests should be submitted online via DC Reporting and Surveillance Center (DCRC)** to DOH found on our [provider website](#).
- Faxed case report forms and Zika test requests are no longer preferred. However, if faxing is necessary, the most current form can be found on our [provider website](#).
- Patients with potential Zika exposure who are not eligible for testing through DC PHL can be tested at a commercial laboratory.
- **Any Zika positive result, regardless of where the testing was performed, is reportable to DC DOH.**
- Facilities are required to complete the following two forms (available on the website) when ordering Zika testing from the DC Public Health Laboratory (DC PHL):
 - [PHL Test Requisition Form](#)
 - [PHL Chain of Custody Form](#)
 - **Samples without these two forms will NOT be accepted by the courier.**
- Final laboratory test results will be sent to your facility by secure fax **ONLY**. Please ensure your secure fax number is always included on paperwork submitted to DC PHL. Please allow 3 weeks for final results. If the sample needs additional testing at CDC, additional time will be required, however the DC PHL results will be reported to the provider.
- Sample collection instructions can be found on our [provider website](#).

REVIEW OF ZVD SYMPTOMS AND SELECTED RECOMMENDATIONS

- Clinical illness is consistent with ZVD if a patient has one or more of the following symptoms: **acute onset of fever, rash, arthralgia, or conjunctivitis**.
- CDC recommends that pregnant women avoid travel to any area with risk for Zika virus transmission.
- Pregnant women should use barriers or abstain from sexual contact with sexual partners who have travelled to areas with ongoing ZVD transmission for the **duration of the pregnancy, regardless of test results**.
- The CDC recommends that **women possibly exposed to Zika wait 8 weeks to conceive, and that possibly exposed men wait 6 months before trying to conceive**, regardless of their symptom status or Zika test results. This includes couples undergoing fertility treatments.
- **Returning travelers** from an area with active Zika transmission should wear insect repellent and avoid mosquito bites for **three weeks** to prevent local transmission, even if they are not sick.

Please contact the DC DOH Division of Epidemiology–Disease Surveillance and Investigation at:
Phone: 202-442-8141 (8:15am-4:45pm) | 844-493-2652 (after-hours calls)
Fax: 202-442-8060 | Email: zika.registry@dc.gov

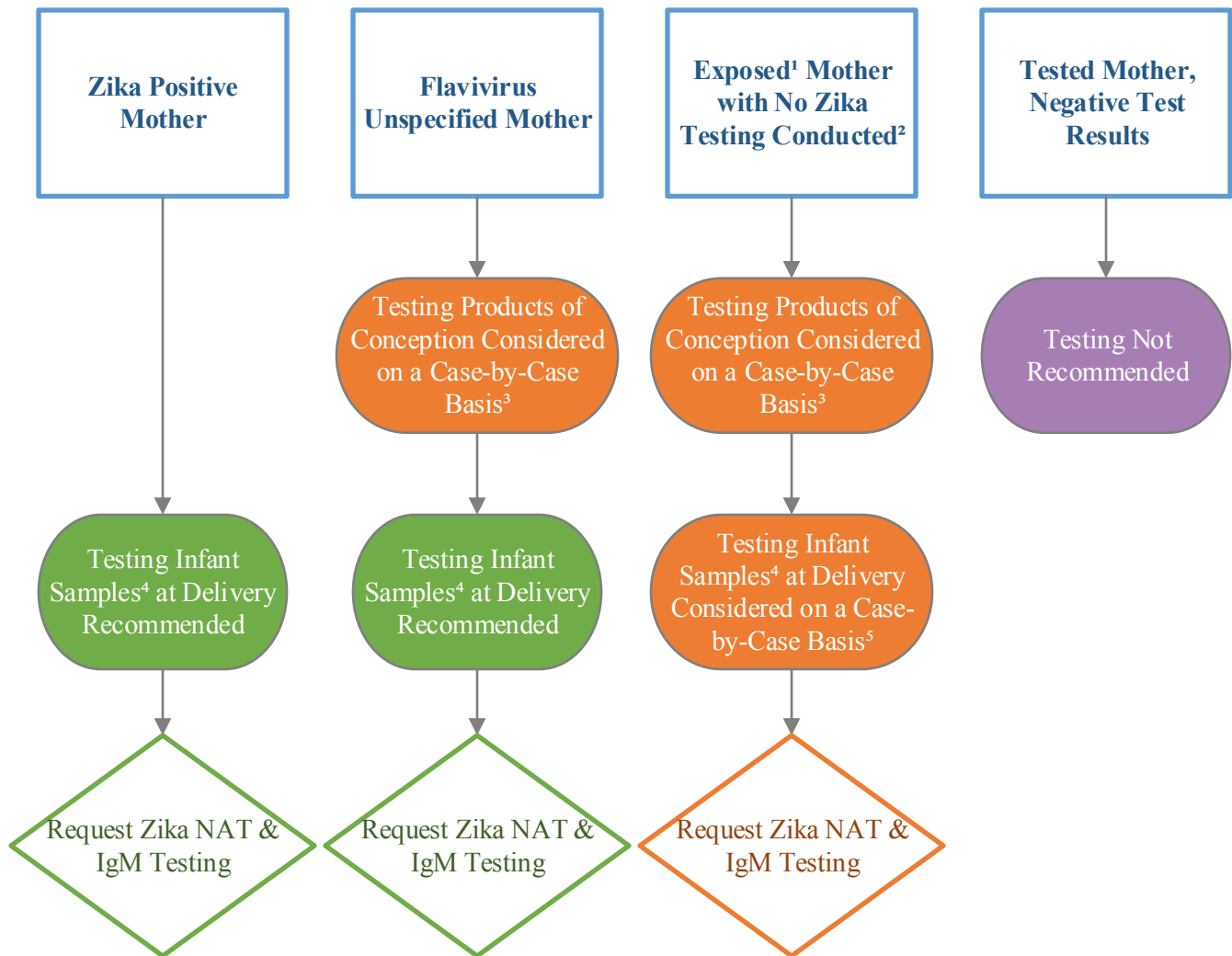
Figure 1: Zika Testing Recommendations for Pregnant Women



Any individual with suspected ZVD and concern for local transmission or complicated illness should be reported immediately to DC DOH for testing through DC PHL.

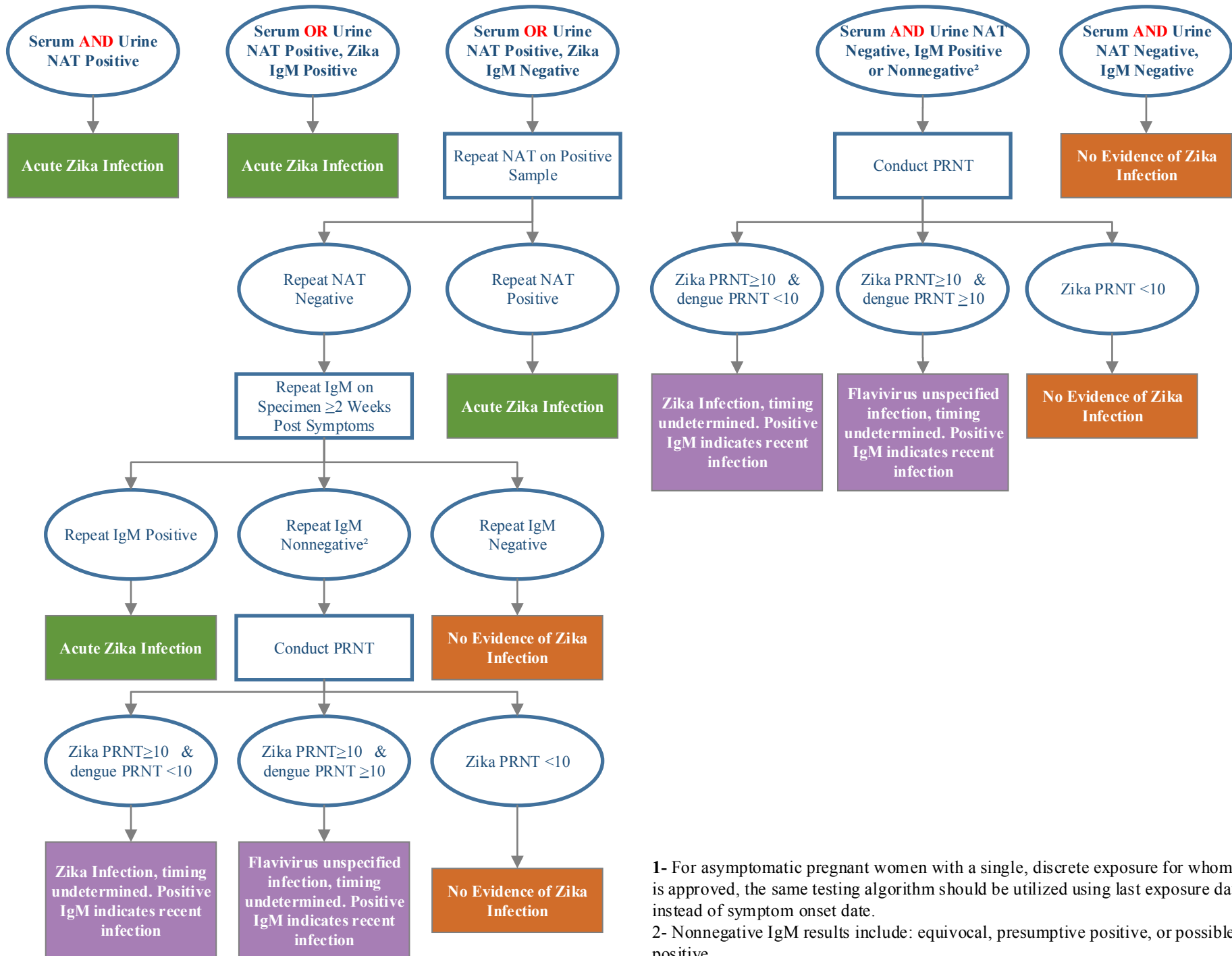
- 1- Exposure is defined as travel to or unprotected sexual contact with an individual who traveled to a country with the risk of Zika as defined in the [June 30 Health Notice](#).
- 2- Ongoing exposure is defined as residence in, or daily/weekly travel to an area with risk for Zika virus transmission as defined in the [June 30 Health Notice](#).
- 3- Men and non-pregnant women who are suspected cases of local transmission and/or who develop complicated illness will be eligible for testing through the Public Health Laboratory.
- 4- If dengue testing is clinically indicated, please request serology testing through a private laboratory.
- 5- CDC's testing algorithm for non-pregnant symptomatic individuals can be found [here](#).

Figure 2: Zika Testing Recommendations at Delivery and for Infants



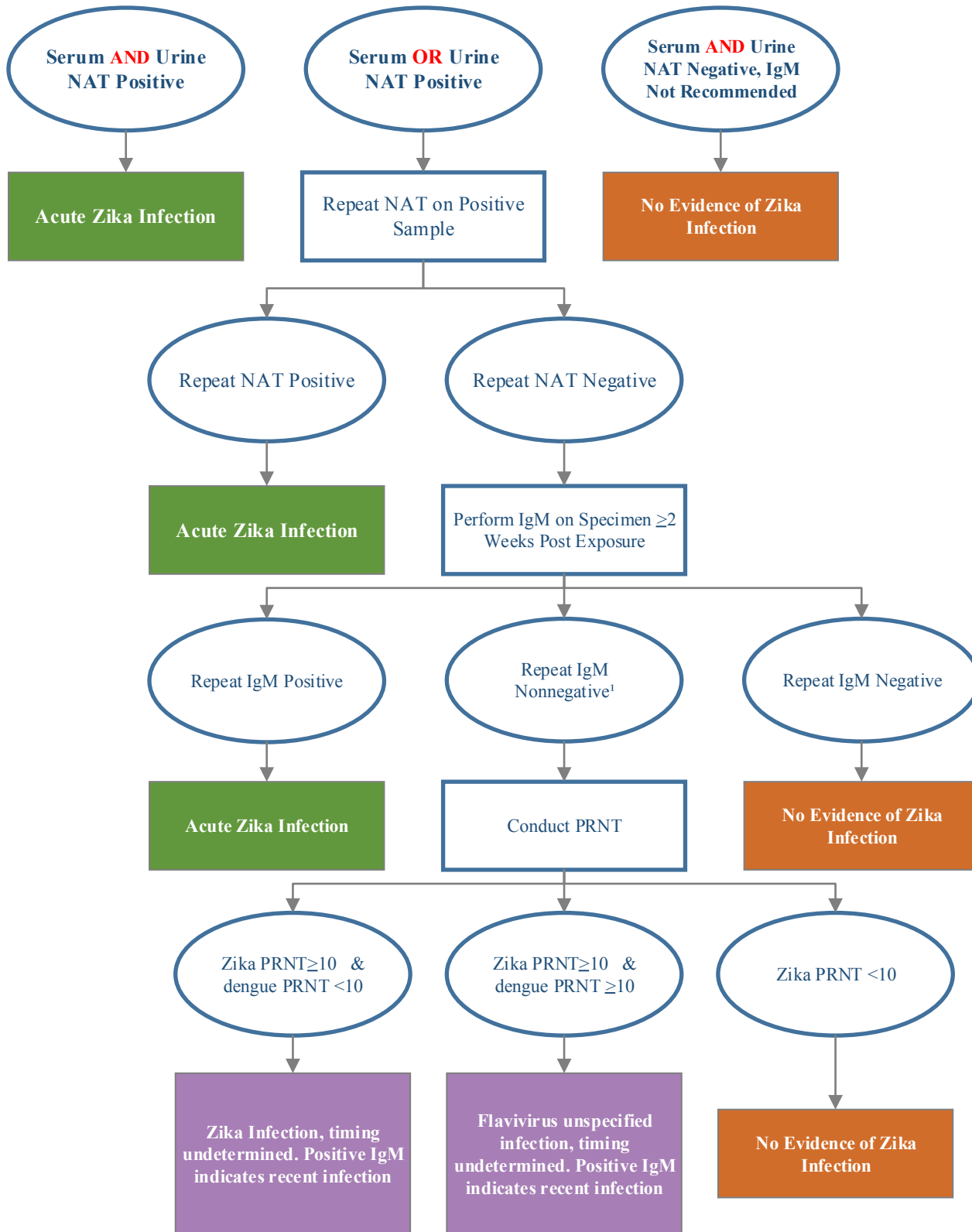
- 1- Exposure is defined as travel to or unprotected sexual contact with an individual who traveled to a country with the risk of Zika as defined in the [June 30 Health Notice](#). Factors including extent of travel, location of travel, timing of travel with respect to pregnancy, and maternal symptoms will be considered.
- 2- For testing of infants born to mothers who have been tested but for whom results are not yet available, please consult with DC DOH by emailing zika.registry@dc.gov
- 3- Pre-approval for testing of products of conception is required. Please contact DC DOH at zika.registry@dc.gov prior to the delivery to request approval and coordinate sample collection if recommended.
- 4- Infant serum and urine samples should be collected within the first 48 hours of life.
- 5- Please contact DC DOH at zika.registry@dc.gov to request testing of infants born to mothers exposed to Zika virus but not tested.

Figure 3: Diagnostic Testing and Interpretation Algorithm for Symptomatic¹ Pregnant Women with Zika Exposure



1- For asymptomatic pregnant women with a single, discrete exposure for whom testing is approved, the same testing algorithm should be utilized using last exposure date instead of symptom onset date.
 2- Nonnegative IgM results include: equivocal, presumptive positive, or possible positive.

Figure 4: Diagnostic Testing and Interpretation Algorithm for Asymptomatic Pregnant Women with Ongoing Zika Exposure



1- Nonnegative IgM results include: equivocal, presumptive positive, or possible positive.