CDC's Response to **Zika**

# ZIKA SCREENING TOOL FOR PREGNANT WOMEN

***(To be administered by nurse, check-in receptionist, or other healthcare provider)***

All pregnant women should be assessed for possible Zika virus exposure[1] at each prenatal care visit. Use this tool to evaluate pregnant women for exposure to Zika virus and for signs and symptoms of Zika virus disease to determine whether testing is indicated.

**NOTE:** If your pregnant patient has questions about Zika testing, educational factsheets are available on CDC's website: http://www.cdc.gov/zika/hc-providers/pregnant-woman.html

## Assess for Possible Exposure[1] to Zika Virus Infection

*(See references on back for more information.)*

*Circle response:*

| | |
|---|---|
| Do you live in or do you frequently travel (daily or weekly) to an area with active Zika virus transmission[2]? | **YES** \| **NO** |
| Have you traveled to an area with Zika[2] during pregnancy or just before you became pregnant [8 weeks before conception or 6 weeks before your last menstrual period]? | **YES** \| **NO** |
| Have you had sex (vaginal, anal, or oral sex) without a condom or shared sex toys with a partner(s) who lives in or has traveled to an area with Zika[2]? | **YES** \| **NO** |

➡ If your pregnant patient answered **"NO"** to ALL questions, she is at low risk for exposure to Zika.

## If Pregnant Patient Answered "Yes" to Any Question, Assess for Signs and Symptoms of Zika Virus Disease

*Circle response:*

| | |
|---|---|
| Do you currently have or have you had (in the last 12 weeks) fever, rash, joint pain, or conjunctivitis (red eyes)? | **YES** \| **NO** |

➡ If your pregnant patient answered **"YES"** to having any of these signs or symptoms, she might have symptomatic Zika virus infection. Test in accordance with CDC guidance for symptomatic persons[3].

➡ If your pregnant patient answered **"NO"** to having any signs or symptoms, she has been exposed and might have an asymptomatic Zika virus infection. Test in accordance with CDC guidance for asymptomatic pregnant women[3].

**References:**


1. Possible exposure to Zika virus that warrants testing includes one or more of the following:
   a. Living in an area with active transmission
   b. Travel to an area with active transmission
   c. Sex (vaginal, anal, and oral sex) without a condom or the sharing of sex toys with a person who traveled to or lives in an area with Zika.
2. Visit CDC's website to see areas with active Zika transmission: http://www.cdc.gov/zika/geo/index.html
3. **Please see the algorithm on the back from CDC's Updated Interim Guidance for Health Care Providers Caring for Pregnant Women with Possible Zika Virus Exposure to guide testing and interpretation of results.** (http://www.cdc.gov/mmwr/volumes/65/wr/mm6529e1.htm?s_cid=mm6529e1_e)



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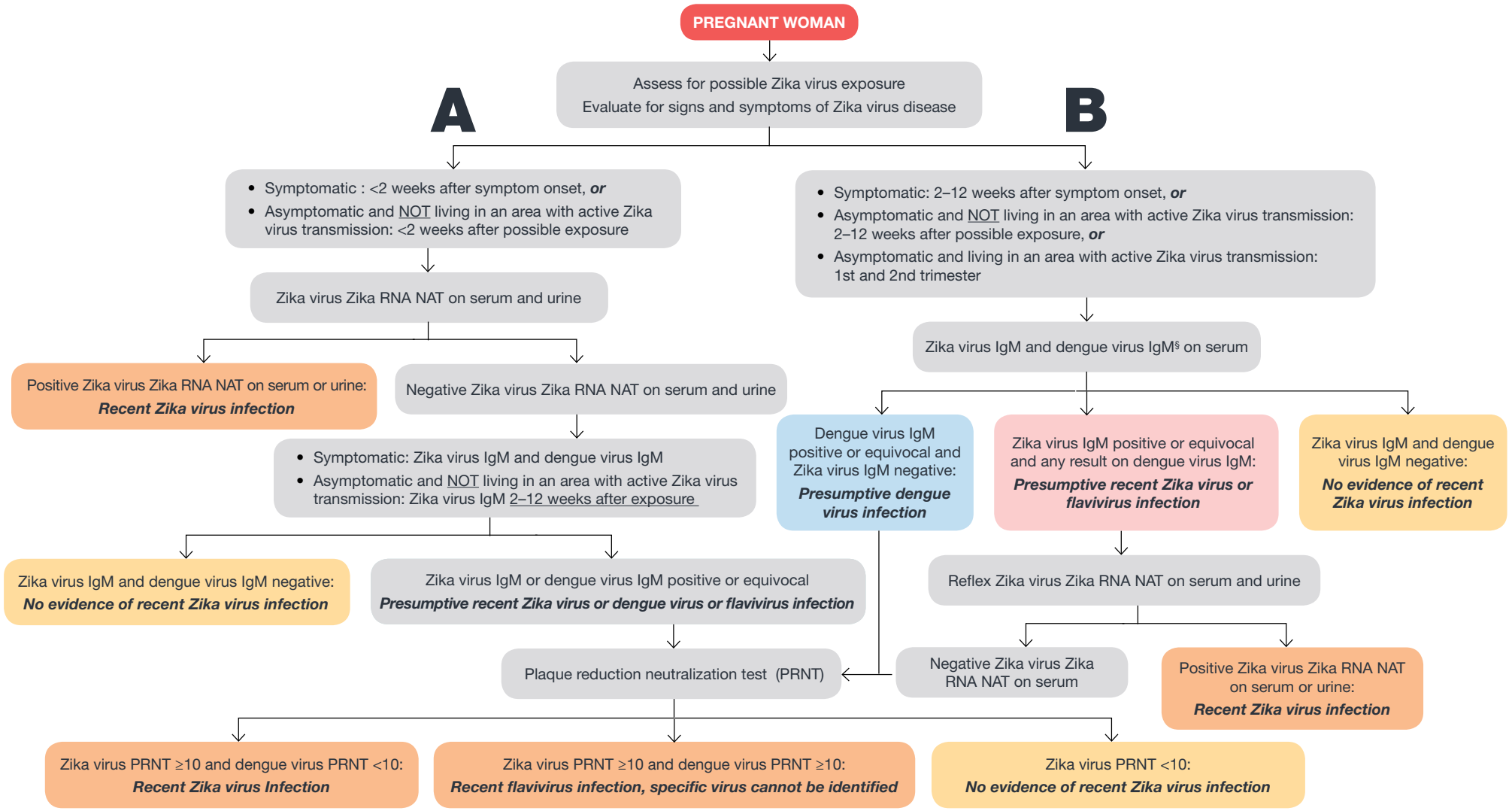
# **UPDATED** INTERIM PREGNANCY GUIDANCE:

**Testing and interpretation recommendations[*,†,§,¶] for a pregnant woman with possible exposure to Zika virus[**] — United States (including U.S. territories)**




**Abbreviations:** IgM = immunoglobulin M; PRNT = plaque reduction neutralization test; Zika RNA NAT = nucleic acid test.

* A pregnant woman is considered symptomatic if one or more signs or symptoms (fever, rash, arthralgia, or conjunctivitis) consistent with Zika virus disease is reported whereas a pregnant woman is considered asymptomatic if symptoms are NOT reported.

† Testing includes Zika virus Zika RNA NAT on serum and urine samples, Zika virus and dengue virus Immunoglobulin M (IgM), and plaque reduction neutralization test (PRNT) on serum samples. PRNT results that indicate recent flavivirus infection should be interpreted in the context of the currently circulating flaviviruses. Refer to the laboratory guidance for updated testing recommendations (http://www.cdc.gov/zika/laboratories/lab-guidance.html). Because of the overlap of symptoms in areas where other viral illness are endemic, evaluate for possible dengue or chikungunya virus infection.

§ Dengue IgM antibody testing is recommended only for symptomatic pregnant women.

¶ If Zika virus Zika RNA NAT testing is requested from laboratories without IgM antibody testing capacity or a process to forward specimens to another testing laboratory, storing of additional serum samples is recommended for IgM antibody testing in the event of a Zika RNA NAT negative result.

** Possible exposure to Zika virus includes travel to or residence in an area with active Zika virus transmission (http://wwwnc.cdc.gov/travel/notices/), or sex (vaginal sex (penis-to-vagina sex), anal sex (penis-to-anus sex), oral sex (mouth-to-penis sex or mouth-to-vagina sex), and the sharing of sex toys) without a barrier method to prevent infection (male or female condoms for vaginal or anal sex, male condoms for oral sex (mouth-to-penis), and male condoms cut to create a flat barrier or dental dams for oral sex (mouth-to-vagina) with a partner who traveled to, or lives in an area with active Zika virus transmission.

# Clinical management of a pregnant woman with suspected Zika virus infection

| Interpretation of Laboratory Results* | Prenatal Management | Postnatal Management |
|---|---|---|
| **Recent Zika virus infection** | • Consider serial ultrasounds every 3–4 weeks to assess fetal anatomy and growth†<br>• Decisions regarding amniocentesis should be individualized for each clinical circumstance§ | **LIVE BIRTHS:**<br>• Infant serum and infant urine should be tested for Zika virus Zika RNA NAT. Infant serum should be tested for Zika IgM. If CSF is obtained for other reasons, it can also be tested.**<br>• Zika virus Zika RNA NAT and IHC staining of umbilical cord and placenta is recommended.¶<br>**FETAL LOSSES:**<br>• Zika virus Zika RNA NAT and IHC staining of fetal tissues is recommended.¶ |
| **Recent flavivirus infection; specific virus cannot be identified** | | |
| **Presumptive recent Zika virus infection*** ** | • Consider serial ultrasounds every 3–4 weeks to assess fetal anatomy and growth†<br>• Amniocentesis might be considered; decision should be individualized for each clinical circumstance § | **LIVE BIRTHS:**<br>• Infant serum and infant urine should be tested for Zika virus Zika RNA NAT. Infant serum should be tested for Zika IgM. If CSF is obtained for other reasons, it can also be tested. **<br>• Zika virus Zika RNA NAT and IHC staining of umbilical cord and placenta should be considered.¶<br>**FETAL LOSSES:**<br>• Zika virus Zika RNA NAT and IHC staining of fetal tissues should be considered.¶ |
| **Presumptive recent flavivirus infection*** ** | | |
| **Recent dengue virus infection** | • Clinical management in accordance with existing guidelines (http://apps.who.int/iris/bitstream/10665/44188/1/9789241547871_eng.pdf). | |
| **No evidence of Zika virus or dengue virus infection** | • Prenatal ultrasound to evaluate for fetal abnormalities consistent with congenital Zika virus syndrome.†<br>◆ Fetal abnormalities present: repeat Zika virus Zika RNA NAT and IgM test; base clinical management on corresponding laboratory results.<br>◆ Fetal abnormalities absent: base obstetric care on the ongoing risk of Zika virus exposure to the pregnant woman. | |

**Abbreviations:** CSF = cerebrospinal fluid; IgM = immunoglobulin M; IHC = immunohistochemical; PRNT = plaque reduction neutralization test; Zika RNA NAT = nucleic acid test.

* Refer to the previously published guidance for testing interpretation (http://www.cdc.gov/mmwr/volumes/65/wr/mm6521e1.htm).

† Fetal abnormalities consistent with congenital Zika virus syndrome include microcephaly, intracranial calcifications, ventriculomegaly, arthrogryposis, and abnormalities of the corpus callosum, cerebrum, cerebellum, and eyes.

§ Health care providers should discuss risks and benefits of amniocentesis with their patients. It is not known how sensitive or specific Zika RNA NAT testing of amniotic fluid is for congenital Zika virus infection, whether a positive result is predictive of a subsequent fetal abnormality, and if it is predictive, what proportion of infants born after infection will have abnormalities.

¶ Refer to pathology guidance for collection and submission of fetal tissues for Zika virus testing for detailed information on recommended specimen types (http://www.cdc.gov/zika/laboratories/test-specimens-tissues.html).

** Refer to the previously published guidance for evaluation and management of infants with possible congenital Zika virus infection (http://www.cdc.gov/mmwr/volumes/65/wr/mm6533e2.htm?s_cid=mmv6533e2_w)

*** Zika RNA NAT or PRNT should be performed for positive or equivocal IgM results as indicated. PRNT results that indicate recent flavivirus infection should be interpreted in the context of the currently circulating flaviviruses. Refer to the laboratory guidance for updated testing recommendations (http://www.cdc.gov/zika/laboratories/ lab-guidance.html). Because of the overlap of symptoms and areas where other viral illnesses are endemic, evaluate for possible dengue or chikungunya virus infection.

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