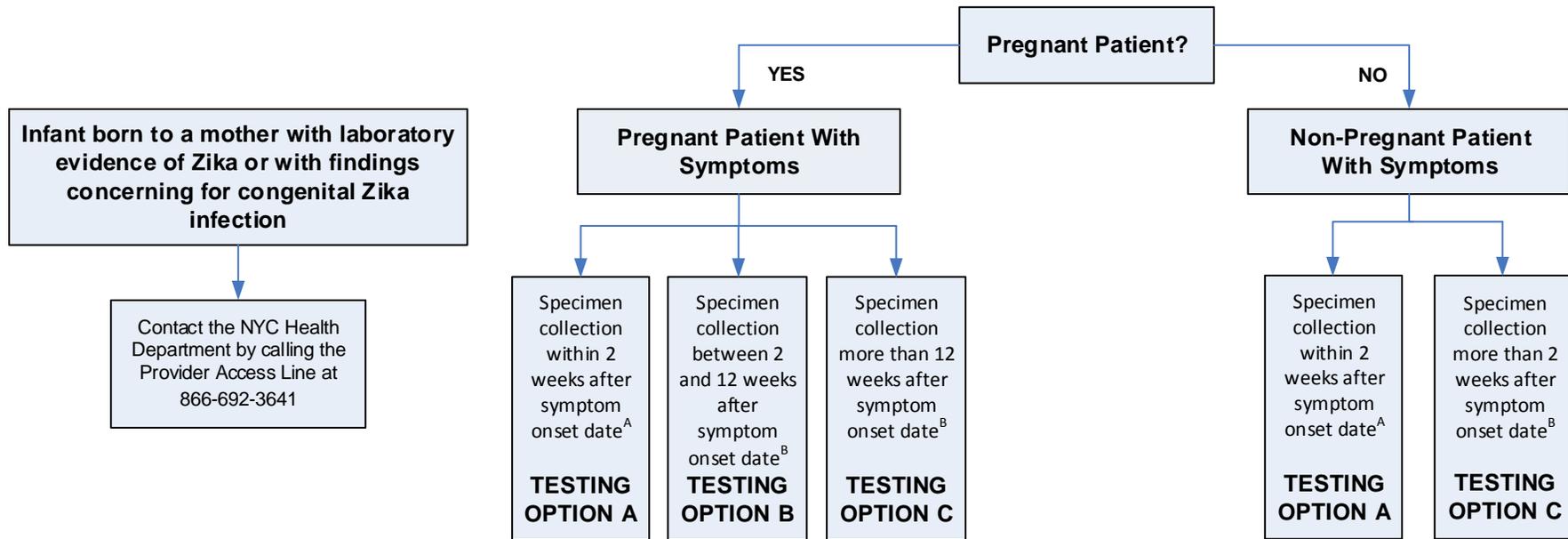


ZIKA TESTING GUIDANCE FOR PROVIDERS

- Deciding which tests to order should be based on the patient's pregnancy status and date of illness onset.
- For guidance on pregnant patients with ongoing Zika virus exposure (e.g., living in or recurrent travel to an area with ongoing transmission), please see: www.cdc.gov/mmwr/volumes/66/wr/pdfs/mm6641a1.pdf.
- Zika IgM specimens with a positive test result must be confirmed by plaque reduction neutralization testing at Wadsworth Center, do not base decisions about managing pregnant women on positive IgM testing alone.
- For guidance on which tests to order, where to obtain testing, and interpretation of test results, please see: www.nyc.gov/zika/provider.
- Zika virus testing is not routinely recommended for pregnant women with a previous diagnosis of laboratory confirmed Zika virus infection by either NAAT or serology (positive/equivocal Zika virus or dengue virus IgM and Zika virus PRNT ≥ 10 and dengue virus PRNT < 10 results).



TESTING OPTION A

1. Zika virus RNA detection serum and urine (NAAT)^E
2. Zika virus IgM (serology) followed by PRNT if positive
3. Dengue virus RNA detection serum (NAAT)^{C,F}
4. Dengue virus IgM/IgG (serology)^D
5. Chikungunya virus RNA detection serum (NAAT)^{C,E}
6. Chikungunya virus IgM/IgG (serology)^C

TESTING OPTION B

1. Zika virus RNA detection serum and urine (NAAT)^E
2. Zika virus IgM (serology) followed by PRNT if positive
3. Dengue virus IgM/IgG (serology)^D
4. Chikungunya virus IgM/IgG (serology)^C

TESTING OPTION C

1. Zika virus IgM (serology) followed by PRNT if positive
2. Dengue virus IgM/IgG (serology)^D
3. Chikungunya virus IgM/IgG (serology)^C

* Exposure is defined as travel to an area with active transmission of Zika virus or unprotected sexual encounter with a partner who traveled to an area with active transmission of Zika virus; exposure may also include a blood or organ transfusion.

^A Patients for whom specimens were collected fewer than 8 days after symptom onset may not have mounted a detectable IgM response. If all tests are negative, consider repeating the IgM to rule out infection.

^B The expected duration of Zika IgM antibodies in serum is 12 weeks or more following infection, however IgM antibodies might be detected for months after infection, limiting the ability to determine whether infection occurred before or during the current pregnancy. Conversely, in a small proportion of persons with a previous dengue or other flavivirus infection, there may be a muted IgM response (i.e., duration of antibodies is shorter and/or the titers diminished). For pregnant women with negative IgM but whose fetus or infant has microcephaly or another concerning abnormality, please call the NYC Health Department at 866-692-3641 to discuss the case and to pursue additional testing.

^C Only indicated for symptomatic infections where mosquito transmission is suspected. Sexual transmission not considered a primary route of transmission for dengue or chikungunya.

^D Dengue serologic testing may be helpful for interpreting complicated serologic results for those persons with a recent Zika infection but who have a history of previous dengue infection, or, those persons for whom dengue is the cause of the acute infection.

^E Zika virus RNA is typically detected in serum for up to 7 days and in urine up to 14 days following infection; however, viral persistence in serum may be prolonged for several weeks after symptom onset in some pregnant women. Zika virus RNA is detected through the use of nucleic acid amplification testing (NAAT) such as real time reverse transcriptase-polymerase chain reaction (rRT-PCR), and transcription-mediated amplification (TMA) testing. The duration of detectable ZIKA virus in pregnant women following infection is not known.