Benefits of linking Zika test results & Travel screening with pregnancy episodes:

- Improved ascertainment of the population at risk
- Improved uptake of testing of pregnant women
- Easier reporting for local, state health departments and the CDC

Which pregnant women should be tested for ZIKV?

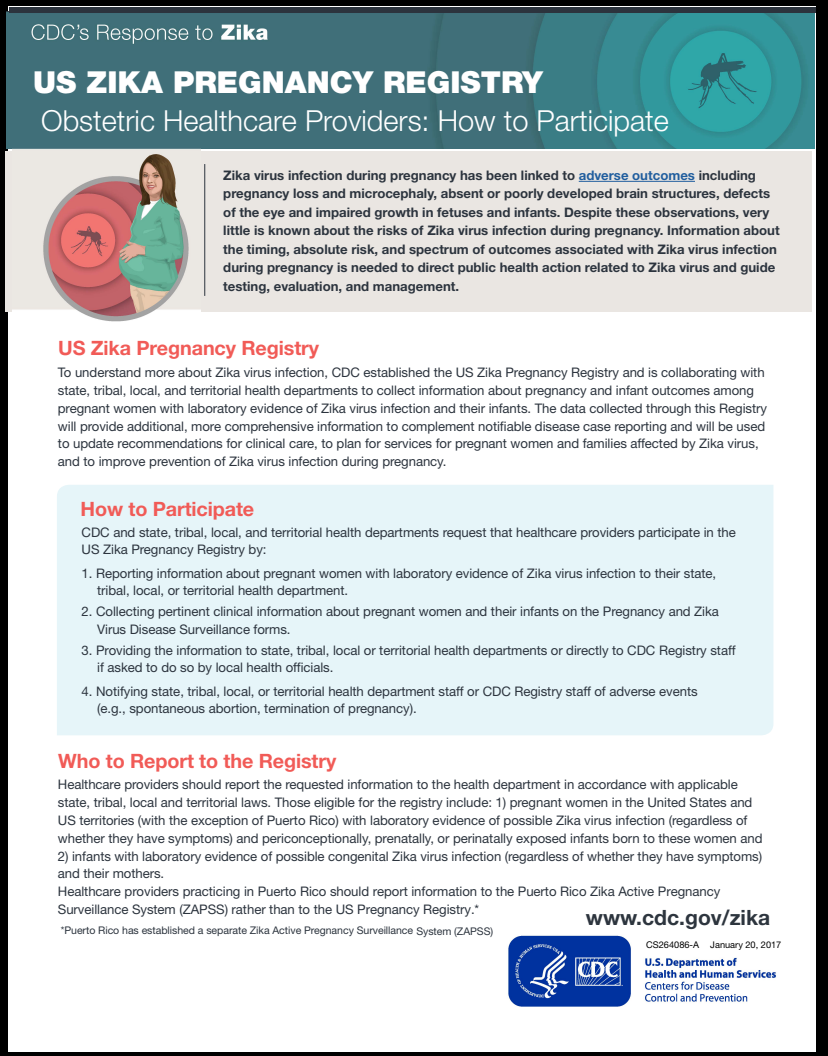
Pregnant women with either:

- A personal history of travel to or residing in an endemic area inclusive of 8 weeks prior to conception through any point in pregnancy
- Sexual contact with a partner bearing the same exposure risk

Pregnancy Episode + Positive Travel Screen → Zika testing Best Practice Alert

Reporting of Positive Cases

- Who to report:
  - Pregnant women with laboratory evidence of ZIKV
  - Infants born to these women
- How to report :
  - Report to your local, state or territorial health department (or the CDC directly if asked by your health department)
- Contact information:
  - CDC's Emergency Operations Center watch desk at 770-488-7100
  - email ZikaPregnancy@cdc.gov
  - fax 404-718-2200



CDC's Response to **Zika**

US ZIKA PREGNANCY REGISTRY

Obstetric Healthcare Providers: How to Participate

Zika virus infection during pregnancy has been linked to adverse outcomes including pregnancy loss and microcephaly, absent or poorly developed brain structures, defects of the eye and impaired growth in fetuses and infants. Despite these observations, very little is known about the risks of Zika virus infection during pregnancy. Information about the timing, absolute risk, and spectrum of outcomes associated with Zika virus infection during pregnancy is needed to direct public health action related to Zika virus and guide testing, evaluation, and management.

US Zika Pregnancy Registry

To understand more about Zika virus infection, CDC established the US Zika Pregnancy Registry and is collaborating with state, tribal, local, and territorial health departments to collect information about pregnancy and infant outcomes among pregnant women with laboratory evidence of Zika virus infection and their infants. The data collected through this Registry will provide additional, more comprehensive information to complement notifiable disease case reporting and will be used to update recommendations for clinical care, to plan for services for pregnant women and families affected by Zika virus, and to improve prevention of Zika virus infection during pregnancy.

How to Participate

CDC and state, tribal, local, and territorial health departments request that healthcare providers participate in the US Zika Pregnancy Registry by:

1. Reporting information about pregnant women with laboratory evidence of Zika virus infection to their state, tribal, local, or territorial health department.
2. Collecting pertinent clinical information about pregnant women and their infants on the Pregnancy and Zika Virus Disease Surveillance forms.
3. Providing the information to state, tribal, local or territorial health departments or directly to CDC Registry staff if asked to do so by local health officials.
4. Notifying state, tribal, local, or territorial health department staff or CDC Registry staff of adverse events (e.g., spontaneous abortion, termination of pregnancy).

Who to Report to the Registry

Healthcare providers should report the requested information to the health department in accordance with applicable state, tribal, local and territorial laws. Those eligible for the registry include: 1) pregnant women in the United States and US territories (with the exception of Puerto Rico) with laboratory evidence of possible Zika virus infection (regardless of whether they have symptoms) and periconceptionally, prenatally, or perinatally exposed infants born to these women and 2) infants with laboratory evidence of possible congenital Zika virus infection (regardless of whether they have symptoms) and their mothers.

Healthcare providers practicing in Puerto Rico should report information to the Puerto Rico Zika Active Pregnancy Surveillance System (ZAPSS) rather than to the US Pregnancy Registry.*

*Puerto Rico has established a separate Zika Active Pregnancy Surveillance System (ZAPSS)

www.cdc.gov/zika

CS264086-A January 20, 2017

U.S. Department of Health and Human Services
Centers for Disease Control and Prevention

What We Don't Know Today

- What is the true attributable risk estimates for fetal infection or CNS abnormalities by gestational age of exposure?
- What is the prognostic implication for prolonged maternal viremia and/or viruria?
- What are the long term consequences of congenital Zika infection? *Need longer term follow up studies*

Table 1. Available ZIKV testing modalities

Test Category		Specimen sources	Timing of first positive[1]	Duration of positive test[1]	Limitations	Interpretations of positive tests
Viral Serology	IgM	Serum CSF	4 days in symptomatic 7-14 days weeks in asymptomatic Unknown	12 weeks Unknown	• Cross-reactivity with other flaviviruses • High false-positive rates • Risk for false-negative due to delayed seroconversion or titer waning	PRNT is needed as follow up test • False positive • Recent ZIKV infection • Acute other flavivirus infection (cross reactivity)
	IgG	Serum	7-14 days[2]	>12 weeks	• Currently not available for clinical use	• Other flavivirus infection >12 weeks (cross-reactivity) • ZIKV Infection >2 weeks, if IgM negative then likely >12 weeks
	PRNT	Serum	With positive serologic testing		• Only available through the CDC • Long turn around time	See **Table 2**
Viral Nucleic Acid Testing (NAT)	rRT-PCR	Serum Blood Urine CSF Tissue Amniotic fluid	0-7 days 0-7 days 0-14 days unknown unknown unknown	5-14 days* 5-14 days* 14 days* unknown unknown unknown *Prolonged viremia and viruria noted in pregnant women and neonates	• Prolonged viremia possible and poorly understood	Recent Zika infection
Ultrasound		Amniotic fluid Biometry Neurologic Extremities	Variable	Once present, appears progressive	• Poor specificity of findings in isolation or in constellation	When performed in isolation, cannot distinguish anomaly cause. When performed in conjunction with amniocentesis with chromosomal microarray (CMA) or other infectious pathogen testing, improved specificity; see Table 3

[1]Based on current information
[2]Extrapolated from West Nile IgG (24,25)