

**IN THIS ISSUE: Zika Virus Series #4: Zika Update (4) – New Test Available & Suspect Zika Case Intake Form**

**Zika Update (4) – New Tests Available Now**

**INTRODUCTION**

Between January 1, 2015 and July 13, 2016, there were 1,306 cases of Zika Virus Disease (ZVD) reported in the US States and 2,916 cases in the US Territories. No cases of locally acquired mosquito-borne ZVD have been reported in the US states as yet, although the majority of cases in the US territories are locally acquired. Approximately one quarter of US cases are among pregnant women and 14 cases (1%) were sexually transmitted. Nine confirmed cases have been reported in Nevada as of July 7 and two of them are Washoe County residents. All of them were travel associated. To date, 23 individuals in Washoe County have been approved for testing. This issue of Epi-News will focus on new tests available at the Nevada State Public Health Laboratory.

**DEFINITIONS**

- **Zika virus infection:** Laboratory-confirmation of Zika virus, including asymptomatic persons.
- **Zika virus disease (ZVD):** Having at least one of the following signs or symptoms: acute onset of **fever, rash, arthralgia, conjunctivitis** and laboratory-confirmation of Zika virus infection.

**NEW TESTS NOW AVAILABLE AT THE STATE LAB**

On July 13, the Nevada State Public Health Laboratory (NSPHL) announced that the following tests are now available:

- Zika IgM MAC ELISA – only asymptomatic pregnant women (2-12 weeks post travel to affected countries and territories).
- Arbovirus (Zika, Chikungunya, Dengue) IgM ELISA (≥ 4 days post symptom onset)
- Arbovirus (Zika, Chikungunya, Dengue) Serum PCR (≤ 7 days post symptom onset)

- Arbovirus (Zika only) urine PCR (≤ 14 days post symptom onset)

**Healthcare providers (HCPs) wishing to arrange testing for Zika virus need to complete the form on page 2 and contact WCHD at 775-328-2447 for a consultation and approval. The NSPHL will NOT perform tests without WCHD’s authorization.**

**CRITERIA FOR TESTING**

**Asymptomatic pregnant women (Zika IgM Serology Only):**

- Pregnant women with a history of travel to an endemic area within the previous 12 weeks **OR**
- Pregnant women with a history of living in an endemic area within the previous 12 weeks **OR**
- Pregnant women with a history of unprotected sex with a symptomatic male who traveled to an endemic area within two weeks of his return.

**Symptomatic patient (Arbovirus PCR and/or Serology)**

- Symptomatic traveler within 7 days of symptom onset (serum for Zika, Dengue, and Chikungunya PCR and serology) **or** within 14 days of symptom onset (urine for Zika only and serum for serology) **and/or** within 12 weeks of returning from an endemic country (Serology only). **It is important to note that a serum sample (for PCR and/or IgM) must accompany a urine specimen. Testing can NOT be performed if only urine is collected.**
- Symptomatic sexual contact who had unprotected sex with a symptomatic male who traveled to an endemic area.

It is highly recommended that you check the CDC’s website <http://www.cdc.gov/zika/geo/active-countries.html> to obtain the most current list of Zika affected countries and territories.

Appropriate Clinical Specimens for Laboratory Testing of Suspected Cases* (Source: NSPHL, July 13, 2016)					
	Symptomatic Suspect Cases				Asymptomatic Pregnant Women
	Serum	Urine**	CSF / Amniotic Fluid	Other*	Serum only
RT-PCR**	YES	YES	On approval	On approval	NO
Serology: IgM with PRNT confirmation†	YES	NO	On approval	On approval	YES

\*CDC will consider testing other specimen types (e.g., saliva, placental tissue, umbilical cord, fetal and other tissues) on a case by case basis \*\*RT-PCR is the preferred method and urine is the preferred specimen for confirming an acute case. †PRNT (plaque-reduction neutralization test) may confirm cross-reactive IgM tests by measuring virus-specific neutralizing antibodies. All presumptive positive and equivocal IgM samples will be forwarded to CDC for PRNT.



**WASHOE COUNTY HEALTH DISTRICT**  
***Suspect Zika Case Testing***  
***Intake Form***

WCHD CD Program Staff use only  
Patient ID# \_\_\_\_\_  
Met criteria for testing Y N  
Authorized by \_\_\_\_\_  
Date \_\_\_\_/\_\_\_\_/\_\_\_\_

**BACKGROUND**

Last Name: \_\_\_\_\_ First: \_\_\_\_\_  
DOB: \_\_\_\_/\_\_\_\_/\_\_\_\_ Age: \_\_\_\_ Y Sex: M F U  
Address: \_\_\_\_\_ City: \_\_\_\_\_  
State: NV Zip: 89 Phone: (H) \_\_\_\_\_ (W / C) \_\_\_\_\_  
PREGNANT? Y N U If patient PREGNANT, how many weeks? \_\_\_\_\_  
Has the case ever been vaccinated against yellow fever before Y N U  
If YES, date of vaccination? \_\_\_\_/\_\_\_\_/\_\_\_\_

**Race:**  
 American Indian/Alaskan Native  
 Asian/Pacific Islander  
 Black  
 White  
 Other: \_\_\_\_\_  
 Unknown  
**Ethnicity:**  
 Hispanic  
 Non-Hispanic  
 Unknown

**CLINICAL AND DIAGNOSTIC INFORMATION**

Does the person have symptoms? Y N U  
**Signs and Symptoms:** (check all that apply)  
 Fever > 37.8C (100F) \_\_\_\_\_ T max  
 Feverish but temperature not taken  
 Myalgia (Muscle aches / muscle pain)  
 Conjunctivitis (pink eye)  
 Arthralgia (joint pain)  
 Rash  
 Other, specify: \_\_\_\_\_

**Rash details**  
(location, itchy, how long did it last)

**EPIDEMIOLOGIC RISK FACTORS**

Did the patient recent travel (list all the countries visited and dates)?  
Y N U  
**Which country/countries? Dates from: to:**  
1. \_\_\_\_\_ /\_\_\_\_/\_\_\_\_ /\_\_\_\_/\_\_\_\_  
2. \_\_\_\_\_ /\_\_\_\_/\_\_\_\_ /\_\_\_\_/\_\_\_\_  
3. \_\_\_\_\_ /\_\_\_\_/\_\_\_\_ /\_\_\_\_/\_\_\_\_  
4. \_\_\_\_\_ /\_\_\_\_/\_\_\_\_ /\_\_\_\_/\_\_\_\_  
5. \_\_\_\_\_ /\_\_\_\_/\_\_\_\_ /\_\_\_\_/\_\_\_\_

Did the patient experience mosquito bites during travel?  
Y N U  
Did the patient have unprotected sex with a male who become symptomatic with 14 days of returning from endemic country?  
Y N U  
If YES, when (date(s)) did the exposure occur?

**LABORATORY TEST**

**Date and Time of Collection:** Date: \_\_\_\_/\_\_\_\_/\_\_\_\_ Time: \_\_\_\_:\_\_\_\_ AM/PM  
Specimen Type(s): Serum Urine Other, specify: \_\_\_\_\_  
Ordering Clinician : \_\_\_\_\_ Institution Name: \_\_\_\_\_  
Phone: \_\_\_\_\_ Fax: \_\_\_\_\_

**Test Order Based on Risk Assessment Algorithm (mark all that apply)**  
 Zika IgM MAC ELISA – only asymptomatic pregnant women (2-12 weeks post travel)  
 Arbovirus (Zika, Chikungunya, Dengue) IgM ELISA (≥ 4 days post symptom onset)  
 Arbovirus (Zika, Chikungunya, Dengue) Serum PCR (≤ 7 days post symptom onset)  
 Arbovirus (Zika only) Urine PCR (≤ 14 days post symptom onset)