

ENTRE TODOS















Ministerio de Salud de la Provincia de Córdoba - Círculo Médico de Córdoba Sociedad deInfectología de Córdoba - Sociedad de Epidemiología de Córdoba Sociedad de Ginecología y Obstetricia de Córdoba Comité deInfectología – Sociedad Argentina de Pediatría, Filial Córdoba

### Zika virus infection

# Recommendations for the management of pregnant women or women of reproductive age

**Updated 03/10/16** 

The recommendations for health personnel attending pregnant women and of reproductive age are described below. They have been developed based on the information made available by reference organisms worldwide and taking into consideration the different scenarios. Because it is a new virus in the Americas and the situation is dynamic, these recommendations are temporary in nature and will be updated with each new information.



**Virus data:** it belongs to the Flaviviridae family, which is also composed of other viruses such as Dengue and Yellow Fever, among others.

**Transmission:** the Aedes aegypti mosquito is primarily responsible for the transmission of *Zika virus*. It is also vector of other viruses such as Dengue, Yellow Fever and Chikungunya.

Other most common forms of transmission include maternal-fetal, transfusion and sexual transmission. While this virus can also be detected in breast milk, saliva and urine, there were no reports of transmission through these channels so far.

**Clinical features:** only 25% of people who become infected with the **Zika** *virus* are symptomatic. Hospitalization for a severe form is rare and fatality rates are low.

Symptoms usually appear between the 2nd and the 12th day after suffering the bite of a mosquito infected with the virus. The disease is usually mild and symptoms resolve between 2 and 7 days. Symptoms and signs include onset of acute low grade fever (37.8 to 38.5 ° C), maculopapular rash, pain of the small joints of the hands and feet, and non purulent conjunctivitis. The clinical diagnosis of **Zika virus** infection would be held with the presence of 2 or more of these clinical features, jointly with the epidemiological context of virus circulation.

Due to the recently demonstrated relationship between **Zika virus** infection and complications in the development of the fetus, is that it acquired greater medical significance.



#### **SCENARIOS IN A REGION**

#### WITHOUT VIRAL CIRCULATION

✓ Pregnant woman considering traveling to an area with *Zika virus* circulation:

#### Recommendations:

- Postpone the trip until the end of gestation.
- In situations when the trip can not be postponed, it must strictly fulfill with all recommendations to reduce or avoid mosquito stings. (\*)
- ✓ Pregnant woman returning from an area of Zika virus circulation and she is asymptomatic:

#### Recommendations:

- It is suggested to perform serological tests needed for diagnosis between the 2nd and 12th weeks after return. (\*\*)
- ✓ Pregnant woman returning from an area with *Zika virus* circulation and has a clinical picture compatible with *Zika virus* infection within 2 weeks of her return: (\*\*\*)

#### Recommendations:

- It is suggested to perform serological tests necessary for diagnosis.
- ✓ Pregnant woman who did not travel to a circulation zone of *Zika* virus and has a fever:

#### Recommendations:



- Consider Dengue or other agent, since there is no circulation of Zika virus in the province of Cordoba to date.
- ✓ Pregnant woman who didn't make a trip, she is asymptomatic and consults for information about the *Zika virus*:

#### Recommendations:

- Provide information about care to avoid bites and mosquito breeding.
   (\*)
- ✓ Woman who wants to get pregnant and her partner recently returned from a circulation zone of Zika virus:

#### Recommendations:

 Because the virus can persist in semen for several weeks to months, it is recommended to postpone seeking pregnancy. Use barrier methods of contraception.

#### (\*)Recommendations to avoid or reduce mosquito bites and breeding:

#### Housing elements:

Mechanical barrier: use nets on cribs and beds if housing does not have mosquito nets on openings (windows and exterior doors).

<u>Chemicals:</u> environmental insect repellent (pyrethroid) not less than 1.5 meters from where the baby is.

<u>Water containers:</u> remove from your residence all types of container that can hold stagnant water.

#### Personal items:

<u>Clothing:</u> wear long sleeves long pants and light colored clothes when you are in an outdoor place to cover the exposed areas.

<u>Insect repellent:</u> it is considered that DEET (N, N-diethyl-m-toluamide) offers the best protection against mosquito stings. It is contraindicated in children



less than two months old. Those with a concentration of 10% protects you for 2-3 hours and with a concentration of 25% about 6 hours average.

# (\*\*) Recommendations for requesting serological tests for asymptomatic women:

Request IgM, depending on availability in Argentina, to **Zika virus** between 2 and 12 weeks after their return. A negative result obtained from 2 to 12 weeks after the trip suggests that didn't occur a recent infection and could avoid the need for serial ultrasounds. A positive result is difficult to interpret because there are cross reactions with other Flavivirus. See scenario (\*\*\*).

(\*\*\*)Compatible clinical picture: includes two or more of the following signs or symptoms: sudden appearance of fever, maculopapular rash, arthralgia, or conjunctivitis during or within 2 weeks of the trip.

Request: ≤5 days of symptoms: PCR-RT; >5 days of evolution: IgM(depending on availability). Interpretation:

PCR-RT→Negative: Discard Zika - Positive: Confirm Zika.

**Negative IgM:** high probability of not being infected. **Does not rule out.** Make ultrasound to rule out microcephaly and cerebral calcifications.

**Positive IgM:** high probability of being infected. **No confirmed.** Make ultrasound to rule out microcephaly and cerebral calcifications. Confirmwith a plaque neutralization test.

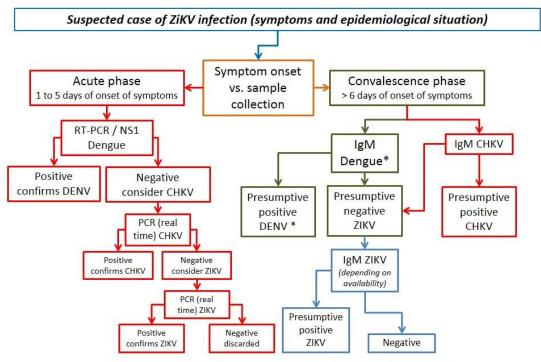


## Differential diagnosis:

| SIGN / SYMPTOM         | DENGUE  | ZIKA  | CHIKUNGUNYA                           |
|------------------------|---|---|---------------------------------------|
| Fever                  | >38°C<br>(4 to 7 days)                                | No fever or low grade<br>fever<br>(1 to 2 days) | High fever>38°C<br>(2 to 3 days)      |
| Rush                   | In 30% to 50% it<br>appears on the 4th<br>day forward | In 90% to 100% it arises in the 1st or 2nd day  | 50% arises from the<br>2nd to 5th day |
| Myalgia                | (+++/+++)   | (++/+++)  | (+/+++)                               |
| Arthralgia             | (+/+++)   | (++/+++)  | (+++/+++)                             |
| Arthralgiaintensity    | Mild  | Mildtomoderate                                  | Moderatetosevere                      |
| Arthritis              | Rare  | Frequentlymild                                  | Frequent moderateto intense           |
| Conjunctivitis         | Rare  | 50% to 90% of the cases                         | 30% of thecases                       |
| Pruritus               | Mild  | Severe  | Moderate                              |
| Lymphadenopathy        | Mild  | Severe  | Moderate                              |
| Bleeds                 | Moderate  | Missing   | Mild                                  |
| Neurologicalcompromise | Rare  | Frequent  | Rare<br>(RN predominant)              |

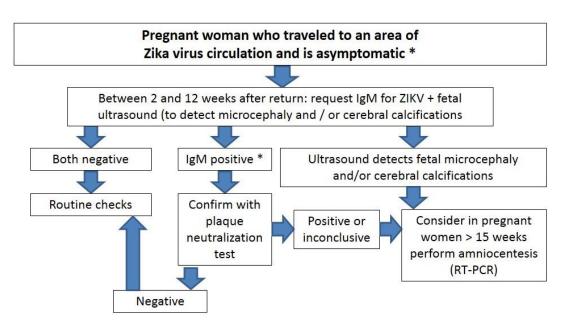


#### Algorithm for Detection of ZIKA (WHO/PAHO)



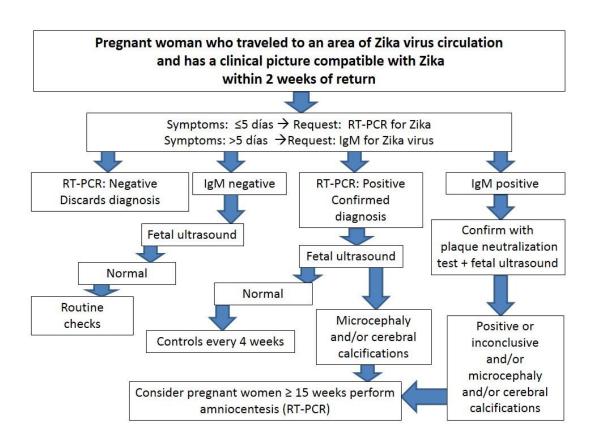
The assay for IgM for DENV can be positive in patients with ZIKV. The molecular detection
in acute phase samples should be prioritized.

#### Diagnostic algorithms



<sup>\*</sup> In this scenario only: IgM for ZIKV is not available yet in Argentina





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