

## ZIKA VIRUS INFECTION AMONG PREGNANT WOMEN IN CENTRAL BRAZIL - PRELIMINARY REPORT

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**Introduction:** Zika virus (ZIKV) infection outbreak was first reported in the Northeast Brazil in 2015, followed by an epidemic of microcephaly. ZIKV spread quickly to Central and Southeast Brazil and by September 2016, 200,465 suspected ZIKV cases were reported yielding an incidence rate of 98,1 cases/100,000 inhabitants. Since February 2016, pregnant women with exanthema must be reported to the national public health surveillance system for notifiable conditions, including dengue, chikungunya, and zika. Herein, we present the results of laboratory surveillance for pregnant women suspecting of having ZIKV infection in Goiás State, Central Brazil.

**Methods:** The study population included pregnant women with exanthema, suspected of having a ZIKV infection, reported to the national surveillance system, from March to October 2016, in Goiás State. For this analysis only pregnant women that had at least one sample of blood or urine sample for laboratory investigation were included. Laboratory-confirmed ZIKV infection was defined as positive serum or urine result for ZIKV RNA on RT-PCR assay, performed at Public Health Laboratory of Goiás (Lacen-GO). Samples with negative ZIKV RT-PCR results were tested for dengue virus by serological and molecular (RT-PCR assay) tests.

**Results:** Biological samples from 328 pregnant women suspecting of ZIKV infection were analyzed. Age of reported cases varied from 13 to 45 years old (median of 27 years). The specimens were collect from 0 to 35 days after the onset of symptoms (mean and median of 3 days). For 325 women, specimens were collected up to 9 days after the onset of symptoms and 192 (59.1% CI95% 53.7-64.3%) were positive on RT-PCR assay for ZIKV on serum and/or urine. Three pregnant women had samples collected after 9 days of symptoms and none of them were positive. According to gestational age, 25.5% of the ZIKV laboratory confirmed pregnant were on the first trimester; 45.8% on the second and 28.1% on the third trimester. 193 paired samples (serum and urine) collected at the same day were available, showing and overall agreement for ZIKV RT-PCR of 78.2%. Among the RT-PCR negative samples, 34 had positive results for dengue (21 RT-PCR detectable; 4 NS1Ag and 9 IgM positive results).

**Conclusion:** The study disclosed a high proportion of laboratory confirmed ZIKV infection among notified symptomatic pregnant women, in Central Brazil.