

## c Zika virus update

Two confirmed cases of Zika virus disease (ZVD) were detected in South African travellers by the National Institute for Communicable Diseases in June 2016:

1. A non-pregnant 43-year-old female from Durban, KwaZulu-Natal Province had travelled to Panama for ten days. Upon returning to South Africa she developed a flu-like illness with documented fever. A blood sample collected on day four after illness onset tested positive for Zika by RT-PCR.
2. A 50-year-old male travelled to the Venezuelan capital, Caracas. Upon returning the patient developed a fever, sore throat and shoulder pain. A blood sample collected on day four after onset tested positive by Zika RT-PCR. Confirmatory serological testing on convalescent blood samples from both patients are pending submission of follow-up specimens.

As of 13 July 2016 62 countries and territories have reported evidence of mosquito-borne Zika virus (ZIKV) transmission to the World Health Organization since 2015. Eleven countries have reported human-to-human transmission likely by the sexual route. A total of 13 countries has reported microcephaly and other central nervous system malformations potentially associated with ZIKV infection. The WHO states that, based on the research to date there is scientific consensus that ZIKV infection is a cause of microcephaly and Guillain-Barré syndrome.

South African travellers to the Olympic Games in Brazil 2016 should follow the advice given in the June 2016 edition of the NICD Communiqué. The NICD offers the following tests for ZVD: 1) RT-PCR testing (clotted blood/serum) and 2) virus culture

(clotted blood/serum), which are both useful during the transient viraemic stage of infection (1 – 5 days post-onset); and 3) paired serological testing (clotted blood/serum taken up to 14 days apart). A ZIKV-specific IgM and IgG ELISA and a viral neutralisation test are available. Interpretation of serology results is complicated by cross-reactivity with other flaviviruses, including dengue and yellow fever; therefore paired serological testing is essential. Specimens submitted for Zika should also be tested for dengue and chikungunya because of overlapping clinical presentations and should be requested as such by the referring clinician. Serology for ZIKV may not provide conclusive results.

On request, the NICD will offer testing for Zika to returned travellers from a Zika-endemic area who present with rash, fever, headache or arthralgia within 14 days of return, and to asymptomatic pregnant women with a recent travel history to an active Zika-transmission area. Clinicians requesting testing should complete the Zika case investigation form ([www.nicd.ac.za](http://www.nicd.ac.za)) and submit the specimen to the Arbovirus Reference Laboratory, Centre for Emerging and Zoonotic Diseases, National Institute for Communicable Diseases, for testing. Clinicians should call or email the laboratory to notify them of incoming specimens at 011 386 6391 / 011 386 6353 / 082 908 8045 or [cezd@nicd.ac.za](mailto:cezd@nicd.ac.za); [petrusv@nicd.ac.za](mailto:petrusv@nicd.ac.za). Samples should be kept cold (on ice or cold packs) during transport. Testing will not be done after hours.

**Source:** Centre for Emerging and Zoonotic Diseases, NICD-NHLS; ([januszp@nicd.ac.za](mailto:januszp@nicd.ac.za))