

e Cluster of Sindbis cases in northern Johannesburg, January-February 2017

Predominantly adult cases presenting with a generalised maculopapular rash were reported by several dermatologists from the northern suburbs of Johannesburg starting late January 2017. Additional clinical signs may include a mild fever, arthralgia, headache, nausea, myalgia and/ or severe fatigue. An outbreak investigation was initiated by the Outbreak Response Unit (ORU) of the National Institute for Communicable Diseases (NICD). Several viral agents could be implicated in such a clinical presentation. Differential laboratory diagnosis concerned hand, foot-and-mouth disease (caused by a Coxsackie virus) and arthropod-borne virus (arbovirus) infections. Laboratory testing performed at the Arbovirus Reference Laboratory, Center for Emerging and Zoonotic Diseases, NICD confirmed infection with Sindbis virus in middle February. A total of 29 suspected cases has been subjected to laboratory testing, of which 9 have been confirmed by serological results as Sindbis virus infection. Further analysis and molecular testing are underway. The viremia caused by Sindbis virus infection is low and transient, necessitating rather the testing of paired patient samples (collected 14 days apart) by serological assays in most suspected cases. The disease caused by Sindbis virus is generally self-limiting and mild in nature. Sindbis virus transmission has most probably increased due to an increase in the mosquito population after the heavy rains received during November to January after the 2016 drought.

The affected area is suburban with numerous green areas and water sources.

West Nile virus was confirmed by PCR and serology in a farmer's wife, resident on a farm in the Northern Cape Province, who presented with fever, myalgia, arthralgia and a diffuse maculopapular rash. The patient made an uneventful recovery. Cases of West Nile fever are well described in South Africa and are typically mild and self-limiting, with only rare cases of encephalitis reported.

Sindbis and West Nile fever are commonly reported simultaneously since the viruses are transmitted by the same mosquitoes.

There is no specific treatment for these arbovirus infections and patients are managed symptomatically. Prevention hinges on the use of insect repellents particularly to avoid daytime exposures.

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