

Characteristics of reported symptoms among confirmed and suspect cases of Zika virus in Georgia, 2016

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Background: In May 2015, Zika virus was detected in Brazil. The virus has since spread through several countries in the Americas. Knowledge of the major symptoms of Zika virus infection was based on historic data from two previous outbreaks in the Pacific Islands. Currently-known Zika-specific symptoms include rash, conjunctivitis, arthralgia, and fever. Epidemiologists at the Georgia Department of Public Health (GDPH) began surveillance for travel-related Zika virus infections in January 2016. Surveillance data from GDPH contributes to better characterization of the current Zika clinical picture and more efficient triage of suspect cases for laboratory testing and prevention measures.

Methods: For each patient approved for Zika testing, GDPH epidemiologists created an entry in the Zika Active Monitoring System (ZAMS) within the State Electronic Notifiable Disease Surveillance System (SendSS). Patients are categorized as “asymptomatic” or “symptomatic” and reported symptoms are noted. For symptomatic patients, clinical data are compared to determine differences in the distribution of symptoms in Zika negative and positive patients.

Results: GDPH has approved testing for 383 symptomatic suspect Zika patients as of October 19, 2016; 88 (23%) were confirmed Zika infections. Among symptomatic positive patients, the most common Zika-specific symptom was maculopapular rash (95%); other common symptoms were headache and myalgia (27%). Among symptomatic Zika-negative patients, the most common Zika specific symptom was fever (62%), and the most common non-Zika specific symptom was headache (19%).

Conclusions: Maculopapular rash is the most suggestive symptom of a true Zika virus infection, with 95% of symptomatic Zika positive patients in Georgia exhibiting the symptom. These data can be taken into consideration when updating the testing criteria for Zika virus. GDPH currently does not approve a patient for testing based on fever or non-Zika specific symptoms alone, and that guideline is reaffirmed by these results.

Key words: Zika, case management, preparedness, laboratory testing, epidemiology

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