



Talking Points

Zika Virus

(February 2, 2016)

- Zika is a virus of African origin that has spread worldwide during the past several years. It is the fourth mosquito-borne virus to emerge or reemerge in the Western Hemisphere in recent decades. Dengue has been present for centuries, but explosive epidemics have returned during the last 50 years. The others are West Nile virus and chikungunya virus.
- Zika was seen in recent years in South Asia and the Pacific and during the last year or so has spread to South and Central America and the Caribbean.
- Patients with locally transmitted Zika infection have been identified in the U.S. territory Puerto Rico and the U.S. Virgin Islands as of January 2016.
- CDC identified the first travel-associated Zika virus disease case among U.S. travelers in 2007 and such cases continue to be recognized. From 2007 to 2014, a total of 14 returning U.S. travelers had positive Zika virus testing performed at CDC. In 2015 and 2016, at least eight U.S. travelers have had positive Zika virus testing performed at CDC. The agency is still receiving specimens for Zika virus testing from returning U.S. travelers who became ill in 2015 or 2016.
- The mosquitos that spread Zika are the same as those that transmit dengue and chikungunya – Aedes mosquitos.
- Neither dengue nor chikungunya has seen widespread mosquito transmission in the U.S. in recent years. There have been small dengue outbreaks in Hawaii (one ongoing on the Big Island at this time) and Florida, and dengue has been present along the U.S.-Mexican border for many years. Fifteen cases of locally transmitted chikungunya were reported in Florida in 2014.
- The lack of substantial dengue and chikungunya epidemics in the U.S. is likely because, while the mosquitos that spread them are present across areas of the Southern U.S. development and living conditions, unlike in developing Latin America, are less conducive to extensive contact between the mosquitos and humans. It is reasonable to expect a similar pattern with Zika.
- Initially, Zika was thought to be a mild illness causing fever, rash, aches and pains and general malaise. There is evidence from the Pacific Islands that it, like many viral illnesses, may be associated with Guillain-Barré syndrome that causes (usually transient) paralysis. In Brazil, there are an increased number of cases of serious developmental abnormality called microcephaly that occurred during the

same time as Zika infection outbreaks. It is hypothesized that it is associated with infection of fetuses when a woman gets Zika during pregnancy. The World Health Organization declared an international health emergency on Feb. 1, 2016, in part because of these concerns about Zika infections.

- Both West Nile and dengue are (uncommonly) transmitted in transfused blood if a well person with the virus in their blood donates. It is biologically plausible that chikungunya and Zika can as well, but there are no published reports of this yet, despite the millions of mosquito-borne infections with the latter two recognized during their recent worldwide spread. A credible case of alleged transfusion-transmitted Zika is under investigation in Brazil.
- Donors must be well on the day of the donation, and are encouraged to report any illness occurring in the days after a donation to their blood center, so that their donation can be quarantined if there is a possibility they had an asymptomatic infection on the day they gave.
- There is no donor screening test for Zika, and whether one will be needed is not clear.
- The blood community in the U.S. is monitoring developments in the U.S. with Zika closely and AABB issued an [Association Bulletin](#) recommending self-deferral by donors who have traveled in the Americas outside of the U.S. and Canada. The Food and Drug Administration and CDC provided input to the [Association Bulletin](#), and the FDA is drafting guidance.

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