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Zika Virus and Pregnancy

DENISE STAGG
HELEN M. HURST

Pregnancy can be an exciting time in a woman's life but may also be a vulnerable period for a woman and her fetus. News has been rapidly evolving about outbreaks of Zika virus and potential links to microcephaly in newborns, causing concern around the world, especially among women who are pregnant or planning to become pregnant. At the time of this writing (mid-March 2016), there have not been documented outbreaks originating in the United States; however, cases of Zika virus infection have been reported in U.S. residents who have traveled abroad. It is vital that nurses and other clinicians remain current with the rapidly emerging information to appropriately inform women who are pregnant or planning to become pregnant of preventive measures and to accurately assess those who may be at risk.

History and Prevalence of Zika Virus

Zika virus was first discovered in the blood of rhesus monkeys in 1947 by a scientist at the

Abstract Recent outbreaks of Zika virus and reports linking infection in pregnant women with microcephaly in newborns have caused concern worldwide. Information has been evolving rapidly. Nurses and other clinicians, especially those who work with women of childbearing age, play a pivotal role in disseminating accurate information and identifying potential cases of Zika virus infection. http://cx.doi.org/10.1016/j.nwh.2016.03.001

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Uganda Virus Research Institute (Green, 2016). The virus is associated with *Aedes* species mosquitos and is transmitted to humans through the bite of an infected mosquito (Centers for Disease Control and Prevention [CDC], 2016g; World Health Organization [WHO], 2016b). This type of mosquito also carries other infectious diseases such as chikungunya and dengue fever and is known for its daytime biting (CDC, 2016c). As opposed to other types of mosquitos found in the United States, these mosquitos often hide indoors in shaded areas and feed during daytime hours. Zika virus is primarily found in countries and regions with tropical climates, such as the Caribbean, Africa, Southeast Asia, and South America. However, the presence of *Aedes* species mosquitos in the United States poses a potential threat, because these mosquitos are found on the U.S. mainland and in its territories (e.g., Puerto Rico, Guam, U.S. Virgin Islands, etc.). In 2014, there were 11 cases of chikungunya reported in Florida that were believed to have been contracted locally (CDC, 2016c). In 2009, 27 cases of dengue fever were documented in Key West, Florida (CDC, 2010). At the time of this writing, there have been no reports of documented, diagnosed cases of Zika virus that were contracted in the United States via a mosquito bite (CDC, 2016e). Although it is believed the U.S. *Aedes* species mosquitos do not currently carry Zika virus, the potential for them to do so is a concern.

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Belluz, Zarracina, and Moore (2016) stated that only 14 or 15 cases of Zika virus infection were documented before 2007, when an outbreak occurred in Micronesia. Since then, periodic outbreaks have been seen in various countries around the world. According to the CDC (2016a), Zika has been found in 31 countries. As of March 2016, there were 258 cases of travel-associated Zika virus infections confirmed in U.S. citizens who had traveled to Central and South America (CDC, 2016a). There are currently 283 reported cases in U.S. territories that were locally contracted in Puerto Rico, the U.S. Virgin Islands, and American Samoa. Travel alerts have been issued by the CDC for multiple areas and regions in an effort to protect people from potential infection.

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Denise Stagg, PhD, MSN, CNE, RN, is an instructor. Helen Hurst, DNP, RNC-OB, APRN-CNM, is an associate professor. Both authors are at the University of Louisiana at Lafayette in Lafayette, LA. The authors report no conflicts of interest or relevant financial relationships. Address correspondence to: dns1874@louisiana.edu.