

# Zika virus

Zika is a primarily mosquito-borne viral infection caused by a *Flavivirus* (related to West Nile, dengue and yellow fever viruses). Zika virus was first discovered in 1947. Before 2015, sporadic outbreaks were reported in Africa, Southeast Asia and the Pacific Islands. In spring 2015, Brazil reported an outbreak, resulting in the rapid spread of Zika in the Western hemisphere. Zika infection subsequently spread to other countries in the Americas and Asia as well as some parts of the United States.

From the most recent outbreak, scientists discovered that infection can be spread through sexual transmission and blood transfusions. Additionally, a pregnant woman can pass Zika virus to her fetus during pregnancy.

In Oregon, there is no evidence of mosquito transmission; the typical vectors, *Aedes albopictus* and *Aedes aegypti*, are not native to Oregon. However, these mosquitoes do live just over the border in California.

Before the recent emergence in Brazil, Zika infection was considered a mild, self-limiting illness with the most common symptoms reported as fever, rash, headache, joint pain and conjunctivitis. Four of five individuals are asymptomatic. However, reports from Brazil and subsequent research found that Zika infection during pregnancy can cause birth defects, including microcephaly and other neurological abnormalities. Initial reports also identified an increased risk of developing Guillain-Barré syndrome, a neurological disorder that can cause muscle weakness and paralysis. Treatment for Zika infection is supportive; no vaccine exists.

In early 2016, due to the increasing spread of Zika and the heightened concern of the virus's effects on pregnant women and their infants, the Centers for Disease Control and Prevention (CDC) activated its Emergency Operations Center in response to the outbreak. The World Health Organization declared the Zika virus outbreak a Public Health Emergency of International Concern. Due to the concerns of birth defects among infants born to Zika-infected mothers, the CDC expanded its surveillance and testing capabilities and recommended testing pregnant women who do not have symptoms. The CDC also established the U.S. Zika Pregnancy Registry to monitor Zika-infected pregnant women and their infants for the first year of life.

Forty-nine cases of Zika virus disease were reported among Oregon residents in 2016. Due to testing of pregnant women, five additional individuals were identified who had laboratory evidence of Zika virus but did not present with any Zika-compatible symptoms. All cases or their sexual partners reported foreign travel. The majority of cases traveled to areas with active Zika transmission in the Americas, including Latin America, the Caribbean, Mexico and Puerto Rico.

Zika virus by area of exposure: 2016

