

Zika virus disease: epidemiological facts

Editorial

Zika virus disease is a disease caused by Zika virus leads to symptoms such as fever, skin rash, joint pain and conjunctivitis (red eyes).¹ The virus belongs to the genus Flavi virus, and is transmitted to people through the bite of mosquitoes of the genus *Aedes*, especially *Aedes aegypti* in the tropical areas, which considered the same causative agents for transmission of dengue fever, chikungunya fever and yellow fever.²

The virus was discovered for the first time in Uganda in 1947 in rhesus monkeys,³ and then later discovered in humans in 1952 in Uganda and the United Republic of Tanzania. According to the reports of World Health Organization (WHO).⁴ Out breaks of Zika virus was recorded in Africa, Americas and Asia. Reports indicate the existence of a possible link between the virus and pregnant women's which having children suffering from congenital deformity "Microcephaly", a small head. Currently, there is no treatment or vaccines for Zika virus.

The reports of Pan American Health Organization "PAHO" revealed that the number of countries and regions in the Americas, which announced the cases of Zika virus which is mosquito-borne, was increased.⁵

The disease usually is not severe, but the "PAHO" said that the virus may be linked births in Brazil causing small skull and brain damage (microcephaly). In the northeast of Brazil observed a significant increase in the incidence of babies infected by small heads and brains. The Brazilian Ministry of Health stated that the incidence of suspected babies with microcephaly was increased to 3893 case until January 16, 2016.

Brazil has the highest rate of Zika virus infection, followed by Colombia. There were also reports of an outbreak of the virus in Ecuador, El Salvador, Guatemala, Haiti, Honduras, Mexico, Panama, Paraguay and Puerto Rico, Suriname, Venezuela and other countries (Figure 1).⁵

Ministry of Health in Colombia said that Zika virus infect 13,500 people in the country, and can testify that this year's seven hundred thousand cases.⁶ President of Colombia Juan Manuel Santos said that it is estimated that five hundred births will catch microcephaly. The Ministry of Health in Colombia advised the women to delay pregnancy between six and eight months to avoid relevant Zika potential risks.

Ministry of Health in Jamaica advised women to postpone pregnancy between six months and a year. While El Salvador has advised its women to delay pregnancy until 2018. The US Centers for Disease Control and Prevention (CDC) was advising the pregnant women to avoid the travelling to 14 countries and regions in Latin America and the Caribbean, where cases of the virus warned.^{1,6}

Symptoms of the disease appear only on one out of every four people affected with disease and cannot monitor a large number of cases, which is difficult to know the true extent of the outbreak in the Americas. The virus usually is relatively acute and its symptoms

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was itchy skin, fever, joints and muscles pain which lasts about a week, and there is a need for people with virus infection to be transported to the hospital for treatment. Currently, there is no treatment or vaccines for ZIKV.⁶

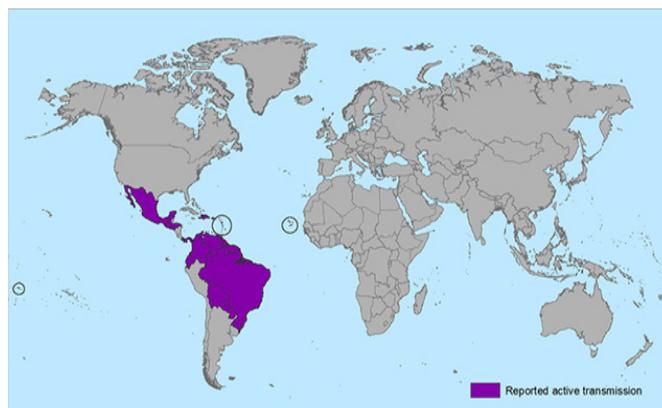


Figure 1 Geographical distribution of active Zika virus infection.

WHO reported there was no evidence so far that the Zika virus is transmitted to babies through breast feeding. Also it was revealed that Zika virus was isolated in human sperms, as there is a possible case of infection from one person to another through sexual intercourse. But there is a need for more evidence to confirm that the sexual contact is a method of transmission.

According to the reports of PAHO, there is no evidence that the virus can lead to death in the Americas, but there were reports of sporadic cases of serious complications in people suffering from diseases or other cases lead to death.

About the possibility of creating a drug to treat the Zika virus. Some US officials determined the end of 2016 to the beginning of clinical trials on humans but are expected to take few years before going out to the light.

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Conflict of interest

Author declares that there is no conflict of interest.

References

1. CDC. Zika virus. *US Department of Health and Human Services*. CDC, Atlanta, Georgia USA; 2016.
2. Faye O, Freire CC, Iamarino A, et al. Molecular evolution of Zika virus during its emergence in the 20th century. *PLoS Negl Trop Dis*. 2014.
3. Hayes EB. Zika virus outside Africa. *Emerg Infect Dis*. 2009;15(9):1347–1350.
4. Dick GWA, Kitchen SF, Haddock AJ. Zika virus (I). Isolations and serological specificity. *Trans R Soc Trop Med Hyg*. 1952;46(5):509–520.
5. Zanolini C, de Melo VC, Mosimann AL, et al. First report of autochthonous transmission of Zika virus in Brazil. *Mem Inst Oswaldo Cruz*. 2015;110(4):569–572.
6. European Centre for Disease Prevention and Control. *Zika virus epidemic in the Americas: potential association with microcephaly and Guillain-Barré syndrome*. Stockholm, Sweden: European Centre for Disease Prevention and Control; 2015.