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Zika Virus

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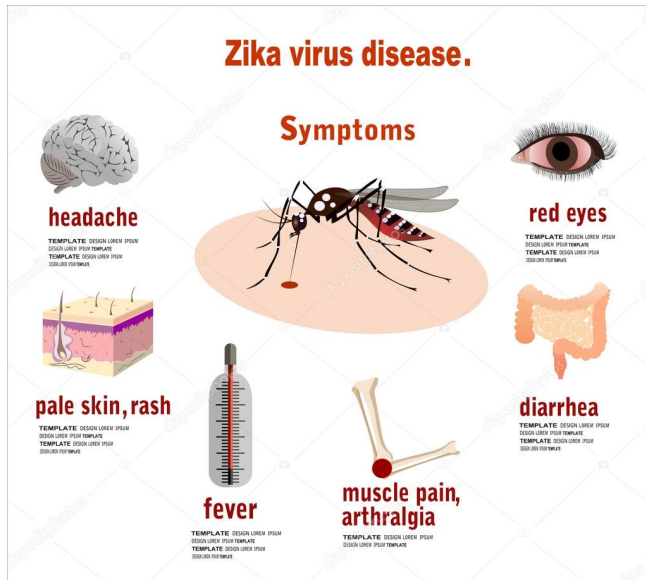
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What is Zika?

Zika is an infectious virus spread through the *Aedes* genus mosquito (Mustafa & Ramasethu, 2018). This virus is a specific pathogen where exposure conditions based on the environment can increase contact. The virus has been present in Africa, Asia, the Caribbean, Central America, North America, Pacific Islands, and South America (Khusro, Aarti, Barbabosa-Pilego, & Sanchez-Aparicio, 2018). People who live in affected areas and anyone travelling to these places where Zika has been present are at risk, especially pregnant women or women trying to conceive.



<https://depositphotos.com/101135796/stock-illustration-zika-virus-symptoms.html>

Epidemiology of Zika

Signs and/or symptoms of the Zika virus may include fever, rash, headache, joint pain, conjunctivitis (red eye), and or muscle pain (Noor & Ahmed, 2018). Zika virus is transmitted primarily through the bite of an infected *Aedes* genus mosquitos. These mosquitos typically lay their eggs near standing water in things like animal dishes, bowls, flower pots, or buckets. They also prefer to bite humans instead of animals. The mosquitos become infected when they feed on a person who is already infected with the virus. Then those infected mosquitos can spread the virus by biting more people. The virus may also spread from pregnant women to their fetuses, through sex, or blood transfusion (Lee & Ng, 2018).

To diagnose the Zika virus, your healthcare provider will ask about any symptoms or signs you may have. They will also ask about any recent travelling you have done. To confirm if you have the virus, a blood or urine test will be ordered. Pregnant women who contract the zika virus may have an infant with birth defects such as microcephaly, eye defects, hearing loss, impaired growth, or even loss of pregnancy (Lee & Ng, 2018).

The true prevalence of the Zika virus vary from country to country based on whether it is underdeveloped, developing, or developed. However, when researchers studied a group of sexually active men and women from 15 years to 65 years of age, they found that the rate of occurrence was higher in women than men (Coelho et al., 2016). The higher rate of occurrence could have been accounted for due to the fact that women went to the doctors more regularly which therefor accounted for the higher reports. The mortality rates associated with Zika for complete pregnancy loss are relatively low. The morbidity rates associated with Zika including eye defects, hearing loss, and impaired growth have a higher chance of occurring if the mother is

infected during the first trimester (Lee & Ng, 2018). While the risks are lower during the second trimester, they are still present.



<https://www.medindia.net/patients/patientinfo/zika-fever.htm>

Solutions for Zika

Since there is no vaccine available to protect against the virus, it is recommended that you use mosquito repellent, wear protective clothing and stay in airconditioned or well-screened housing. Some initiatives taken to reduce breeding areas for mosquitoes have been to eliminate standing water in and around houses and yards. Another is to keep mosquitoes out of homes by using screens on windows and doors, repairing any holes in screens, and using air conditioning when available. It is also recommended that you sleep under mosquito nets when sleeping outdoors or in a room that is not well screened. If you are traveling to other countries, consider taking a bed net if you will not be staying in an air-conditioned hotel. A major reason contributing to the absence of a cure is due to the lack of funding and knowledge about this virus. It is crucial to shed more light on the virus and not only when it affects the population within the United States. Just because the virus is not currently affecting the United States, it does not mean that it is not affecting anywhere else. Zika hits people in poverty the hardest because insect repellent, protective clothing, air-conditioning, and well-screened housing is a luxury for some people. The best way to combat Zika is to fight it together by shedding light on the issue, asking for more research funding, and helping supply those with items that can help limit the possibility of exposure.

Resources:

- Coelho, F. C., Durovni, B., Saraceni, V., Lemos, C., Codeco, C. T., Camargo, S., . . . Armstrong, M. (2016). Higher incidence of Zika in adult women than adult men in Rio de Janeiro suggests a significant contribution of sexual transmission from men to women. *International Journal of Infectious Diseases*, 51, 128-132. doi:10.1016/j.ijid.2016.08.023
- Khusro, A., Aarti, C., Barbabosa-Pilego, A., & Sánchez-Aparicio, P. (2018). Outbreak of Zika virus pathogenesis and quest of its vaccine development: Where do we stand now? *Microbial Pathogenesis*, 116, 289-295. doi:10.1016/j.micpath.2018.02.001
- Lee, C. Y., & Ng, L. F. (2018). Zika virus: From an obscurity to a priority. *Microbes and Infection*. pii: S12864579(18)30069-8. doi:10.1016/j.micinf.2018.02.009
- Mustafa, M., & Ramsethu, R. (2018). Zika: An enormous public health challenge for a miniscule virus. *Medical Journal Armed Forces India*, 74(1), 61-64. doi:10.1016/j.mjafi.2016.08.010
- Noor, R., & Ahmed, T. (2018). Zika virus: Epidemiological study and its association with public health risk. *Journal of Infection and Public Health*. doi:10.1016/j.jiph.2018.04.007