

Microbe of the Month

Zika Virus

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Transmission

The Zika virus is a (+) ssRNA Flavivirus surrounded by an envelope. It was named after the Zika forest in Uganda where it was discovered in 1947. The mosquito vector for the Zika virus is active during the day and can also transmit the dengue fever virus. When an infected person is bitten by a female *Aedes* mosquito, the Zika virus is ingested in the blood. Infected mosquitos can then spread the virus to other humans. The Zika virus can also be transmitted via semen. Of particular concern, this virus can cross the placenta of an infected pregnant woman and infect the fetus. The mother may infect the newborn at the time of birth but there are no reports of infant infection due to breastfeeding.

The warm water and white sands of the Caribbean are beckoning to you for a spring break vacation but you have heard of a Zika virus outbreak in the area.

Is it safe? Current active transmission concerns center around the Americas including Mexico, Caribbean islands, Central and South America. In 2015, the World Health Organization (WHO) declared Zika virus a public health emergency of international concern.

Treatment/ Prevention:

There is no vaccine for Zika virus. Medications only treat the symptoms. Prevent mosquito bites using insect repellent. Use condoms. If you are pregnant or planning to become pregnant, check the CDC's traveler's health website to see if the area is safe and postpone travel to areas with Zika virus.

Signs/ Symptoms:



Most symptoms are mild such as fever, rash, conjunctivitis, and joint aches which occur about 3-7 days after being bitten. It is rarely fatal and many people don't even know they are infected.

Serious birth defects such as microcephaly have occurred in infants of infected pregnant mothers. Microcephaly means the infant has a smaller head size than is normal. This occurs if a baby's brain stops growing during pregnancy or after birth. Severe microcephaly is fatal. Small brain size may result in hearing or vision loss, seizures, developmental delays and intellectual disabilities.



It is not known how likely it is that Zika will pass to the fetus or cause birth defects. Once the virus is removed from the blood, future pregnancies should be unaffected.

For further questions or concerns, please see your physician.

Reference: www.cdc.gov

Debra Hanson, Assistant Professor

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