

# THE ZIKA VIRUS EMERGES

Brazil where there were 2782 cases of microcephaly reported in 2015 while there were less than two hundred reported cases in each of the two previous years. The rise in microcephaly seems to follow the 2015 outbreak of Zika in Brazil that led to increasing numbers of pregnant women being infected. It will remain to be seen how the 2016 Summer Olympic Games in Brazil affects the international spread of Zika.

(6) Many countries infected with Zika have warned women to postpone getting pregnant until the outbreak of the virus can be contained. The CDC (Centers for Disease Control and Prevention) in the United States along with many other countries have issued

travel warnings advising pregnant women against traveling to Brazil and other infected areas. Effective vaccines currently exist for some flaviviruses, like the yellow fever virus, and now scientists are intensely focusing on developing a vaccine for Zika as well.

(7) Currently, few Europeans and North Americans report Zika infections because the type of mosquitoes that carry Zika are not found where they live. However, there might be evidence that once a person is infected, they may be able to transmit the virus through sexual intercourse. The evidence for this is currently supported by only a few cases, but as more research is done, sexually transmitted Zika may become confirmed.

## Article Questions

- 1) Zika is a type of arbovirus. What is an arbovirus?  
An arbovirus is a virus that is transmitted by arthropod vectors like mosquitoes. (1)
- 2) List some of the symptoms of Zika fever.  
Fever, rash, conjunctivitis (red eyes) and joint pain. Sometimes headaches and muscle pain can also occur. (2)
- 3) What is the treatment for Zika fever?  
Rest and fluids and acetaminophen (e.g. Tylenol) for the aches and pains. (2)
- 4) What is microcephaly and what are some of the symptoms of microcephaly?  
Microcephaly is a neurodevelopmental birth defect that results in a small head size. It also means that the brain will be smaller which leads to intellectual and physical impairments, seizures and decreased life expectancy. (4)
- 5) Why should health officials around the world be worried about the 2016 Summer Olympic Games in Brazil?  
Since there will be a lot of international travel to Brazil for the Olympics, many travellers may get infected in Brazil and then take the infection back to their home countries and spread it to their own native populations. (3)
- 6) Why has the Zika virus not made much of an impact in Europe and North America thus far?  
The type of mosquito, the *Aedes aegypti*, that is the main vector for the Zika virus, is not normally found in Europe and North America. (7)
- 7) Why have pregnant women specifically been warned to stay away from countries currently experiencing a Zika outbreak?  
There has been a growing concern that becoming infected with Zika while pregnant can lead to giving birth to a baby with microcephaly. (6)
- 8) What are two potential ways that a human can contract the Zika virus?
  - 1) They get bitten by a mosquito carrying the Zika virus. (1)
  - 2) They may be able to contract the Zika virus through sex with an infected individual. (7)