

# What is the Zika virus? <sup>[1]</sup>

Submitted by [Francis Heber Gonzalez](#) <sup>[2]</sup> on 15 May 2016 - 8:08pm



<sup>[2]</sup>



After the first Zika-related death, and more recently the first case of Zika-linked microcephaly on the island, we share some information about how to protect yourself from being infected by the virus.

By *Natalia Rodríguez Jockovich*.

Zika is a mosquito-borne virus that is known to circulate in tropical climates and has caused disease outbreaks in Africa, Asia and the Pacific, and most recently in the Americas. The symptoms of Zika are similar to those of dengue and chikungunya, diseases spread through the same mosquitoes that transmit Zika, and usually include low fever or rash, conjunctivitis, muscle and joint pain, appearing a few days after a person has been infected by an infected mosquito or after sexual intercourse with an infected person. Zika is generally a mild disease and most people with the virus will not even experience symptoms.



### So why are people so worried?

The first Zika virus outbreak in the Americas was reported in Brazil in May 2015. The rise in the spread of Zika virus in Brazil was accompanied by an unexpected rise in the number of children being born with unusually small heads and underdeveloped brains — a condition known as **microcephaly** [3]. In addition, several countries, including Brazil, reported an increase in **Guillain-Barré syndrome** [4] (GBS)—a neurological disorder that could lead to paralysis and death. In February 2016, the World Health Organization (WHO) declared that the association of Zika infection with clusters of microcephaly and other neurological disorders constituted a Public Health Emergency of International Concern. Based on a growing body of **research** [5], there is now scientific consensus that **Zika virus is in fact a cause of microcephaly and GBS** [6].

### What is the current situation?

Currently, a total of 57 countries have reported outbreaks of Zika virus, 13 countries have reported an increased incidence of GBS, and 6 countries have reported an increase in microcephaly and other fetal malformations.

Puerto Rico reported its first confirmed case of locally acquired Zika infection in December 2015, and has now reported 683 confirmed cases, 65 pregnant women with Zika, 17 patients requiring hospitalization, 5 cases with suspected GBS, and 1 Zika-related death caused by a very rare immune reaction to the infection. As of May 16th, there has been only one reported case of Zika-linked microcephaly on the island.

There is no specific treatment or vaccine currently available for Zika.

## What can I do to prevent Zika?

### 1. Protect yourself from mosquito bites.

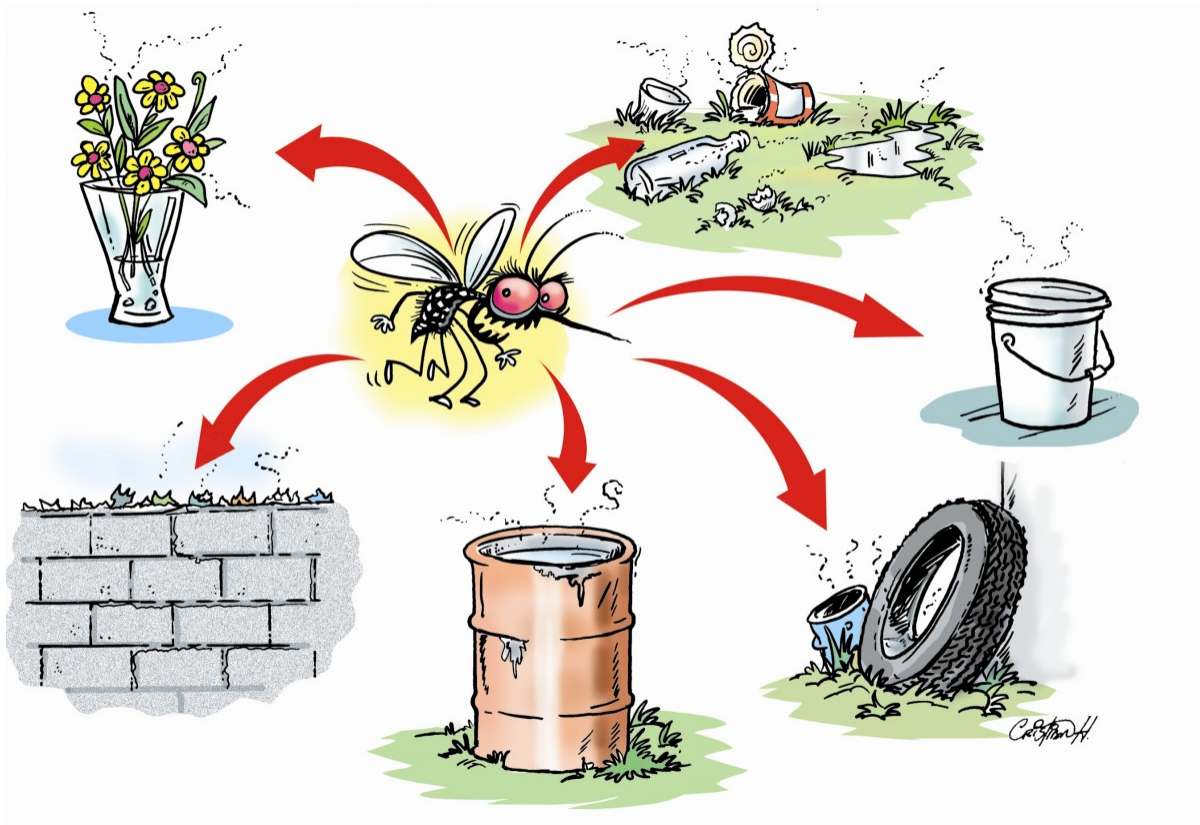
Zika virus (as well as dengue, chikungunya, and yellow fever) is primarily transmitted to people through the bite of an infected mosquito. Furthermore, an uninfected mosquito can bite an infected person and become a carrier of the virus, thus even people who already have Zika should take extra precautions to avoid mosquito bites in order to prevent spreading the virus.

- Wear light-colored long-sleeved shirts and pants that cover as much of the body as possible
- Use insect repellent regularly (any that contain DEET, IR 3535 or Icaridin). *Pregnant and breastfeeding women can use all **EPA-registered insect repellents** <sup>[7]</sup>, including DEET, according to the product label. Most repellents, including DEET, can be used on children older than 2 months.*
- Install window and door screens, keep doors closed, and sleep under mosquito bed nets if additional protection is needed. *Mosquito netting can be used to cover babies younger than 2 months old in cribs, strollers, or carriers to protect them from mosquito bites.*

### 2. Keep your community safe by eliminating and preventing mosquito breeding sites.

It is extremely important to remove and prevent the formation of mosquito breeding sites, which generally form in or around sources of still water.

- Empty, clean, cover and seal containers regularly that can store water, such as tanks, buckets, drums, pots, etc.
- Safely dispose of any unused containers and objects that can accumulate water such as flower pots, tires, and empty bottles.
- Turn over containers that cannot be thrown away and protect them from rain.
- Change the water in flower vases at least once a week.
- Change the water in pet bowls at least once a week.
- Keep swimming pools adequately treated with recommended products and frequency.
- Clean all drains and gutters.
- Keep grass short and weed-free and keep your patio clean.



### 3. Practice safe sex.

Zika virus has been found in semen and can be spread during sex by a man infected with Zika to his partners, even if he does not have symptoms. It is unknown how long the virus can stay in the semen of men who have Zika. It is unknown whether a woman can spread Zika to her sex partners. It is unknown whether Zika can be spread through oral sex.

- Use condoms.
- Because Zika can cause severe fetal brain defects, women should consider practicing protected sex and **other forms of contraception** [8] to avoid unintended pregnancy. Pregnant women should take extra precautions to prevent infection by using a condom every time or abstaining from sex during pregnancy.

### 4. Stay informed and spread the word.

The most effective way to prevent disease is to educate oneself! Stay updated on the latest news and information on Zika, microcephaly, and other suspected complications, and follow the international response to Zika by visiting the following websites: [Puerto Rico Health Department](#) [9], [Centers for Disease Control and Prevention](#) [10], [Pan American Health Organization](#) [11], [World Health Organization](#) [12], or by downloading the [WHO Zika app](#) [13]. Keep your community informed by spreading the word, creating awareness of the disease and best practices to prevent the virus.

## Other questions?

Check out the [WHO Zika virus Q&A](#) <sup>[14]</sup> or ask @WHO on twitter using #AskZika in your tweet.

*Written by Natalia Rodríguez Jockovich. The author holds a Ph.D. in Biomedical Engineering and is an intern at the World Health Organization in Geneva, Switzerland.*

## References:

1. WHO Zika Virus Factsheet. Retrieved on 04 May 2016. <http://www.who.int/mediacentre/factsheets/zika/en/> <sup>[15]</sup>
2. Kindhauser, Mary Kay, Tomas Allen, Veronika Frank, Ravi Shankar Santhana, and Christopher Dye. "Zika: the origin and spread of a mosquito-borne virus." *Bulletin of the World Health Organization* 171082 (2016).
3. Rasmussen, Sonja A., Denise J. Jamieson, Margaret A. Honein, and Lyle R. Petersen. "Zika virus and birth defects—reviewing the evidence for causality." *New England Journal of Medicine* (2016).
4. CDC Newsroom Media Statement: CDC Concludes Zika Causes Microcephaly and Other Birth Defects. Retrieved on 04 May 2016. <http://www.cdc.gov/media/releases/2016/s0413-zika-microcephaly.html> <sup>[6]</sup>
5. WHO Zika Situation Report, 05 May 2016. Retrieved on 06 May 2016. <http://www.who.int/emergencies/zika-virus/situation-report/5-may-2016/en/> <sup>[16]</sup>
6. CDC MMWR Update: Ongoing Zika Virus Transmission — Puerto Rico, November 1, 2015–April 14, 2016. Retrieved on 04 May 2016. [http://www.cdc.gov/mmwr/volumes/65/wr/mm6517e2.htm?s\\_cid=mm6517e2\\_w](http://www.cdc.gov/mmwr/volumes/65/wr/mm6517e2.htm?s_cid=mm6517e2_w) <sup>[17]</sup>
7. CDC on Zika and Sexual Transmission. Retrieved on 04 May 2016. <http://www.cdc.gov/zika/transmission/sexual-transmission.html> <sup>[18]</sup>
8. Dengue desafía seguridad sanitaria del país. Retrieved image 16 May 2016. <http://elnacional.com.do/dengue-desafia-seguridad-sanitaria-del-pais/> <sup>[19]</sup>
9. UW-Madison researchers find Zika virus in Colombia, look for ways to stop it. Image retrieved 16 May 2016. <http://news.wisc.edu/uw-madison-researchers-find-zika-virus-in-colombia-look-for-ways-to-stop-it/> <sup>[20]</sup>
10. Pan American Health Organization. Image retrieved 16 May 2016. <http://www.paho.org/hq/> <sup>[21]</sup>

## Tags:

- [zika](#) <sup>[22]</sup>
- [WHO](#) <sup>[23]</sup>
- [PAHO](#) <sup>[24]</sup>
- [microcephaly](#) <sup>[25]</sup>
- [Organización Mundial de la Salud](#) <sup>[26]</sup>
- [CDC](#) <sup>[27]</sup>

**Source URL:**<https://www.cienciapr.org/en/blogs/conocimiento-tu-salud/what-zika-virus?language=es>

#### Links

[1] <https://www.cienciapr.org/en/blogs/conocimiento-tu-salud/what-zika-virus?language=es> [2]  
<https://www.cienciapr.org/en/user/francis8?language=es> [3]  
<http://www.who.int/mediacentre/factsheets/microcephaly/en/> [4]  
<http://www.who.int/mediacentre/factsheets/guillain-barre-syndrome/en/> [5]  
<http://www.nejm.org/doi/full/10.1056/NEJMSr1604338> [6] <http://www.cdc.gov/media/releases/2016/s0413-zika-microcephaly.html> [7] <https://www.epa.gov/insect-repellents/find-insect-repellent-right-you> [8]  
[http://www.who.int/reproductivehealth/topics/family\\_planning/en/](http://www.who.int/reproductivehealth/topics/family_planning/en/) [9] <http://www.salud.gov.pr/Sobre-tu-Salud/Pages/Condiciones/Zika.aspx> [10] <http://www.cdc.gov/zika/> [11]  
[http://www.paho.org/hq/index.php?option=com\\_content&view=article&id=11585&Itemid=41688&language=es](http://www.paho.org/hq/index.php?option=com_content&view=article&id=11585&Itemid=41688&language=es) [12] <http://www.who.int/topics/zika/en/> [13] <http://www.who.int/risk-communication/zika-virus/app/en/> [14]  
<http://www.who.int/features/qa/zika/en/> [15] <http://www.who.int/mediacentre/factsheets/zika/en/> [16]  
<http://www.who.int/emergencies/zika-virus/situation-report/5-may-2016/en/> [17]  
[http://www.cdc.gov/mmwr/volumes/65/wr/mm6517e2.htm?s\\_cid=mm6517e2\\_w](http://www.cdc.gov/mmwr/volumes/65/wr/mm6517e2.htm?s_cid=mm6517e2_w) [18]  
<http://www.cdc.gov/zika/transmission/sexual-transmission.html> [19] <http://elnacional.com.do/dengue-desafia-seguridad-sanitaria-del-pais/> [20] <http://news.wisc.edu/uw-madison-researchers-find-zika-virus-in-colombia-look-for-ways-to-stop-it/> [21] <http://www.paho.org/hq/> [22] <https://www.cienciapr.org/en/tags/zika?language=es> [23] <https://www.cienciapr.org/en/tags/who?language=es> [24]  
<https://www.cienciapr.org/en/tags/paho?language=es> [25]  
<https://www.cienciapr.org/en/tags/microcephaly?language=es> [26]  
<https://www.cienciapr.org/en/tags/organizacion-mundial-de-la-salud?language=es> [27]  
<https://www.cienciapr.org/en/tags/cdc?language=es>