

# Humanity, meet our newest nemesis!

A new threat to our health, and especially for the offspring of pregnant women, has made an official landfall this side of the world. The mosquito-borne Zika virus has been around for years but the first case of a human infected with the virus in the Americas was reported in Brazil in May 2015. Since then, outbreaks and cases have popped up in a number of countries, including Puerto Rico, which reported its first Zika patient in December 2015.

The Connecticut Department of Public Health advises that there are currently (as of February, 2016) no Zika virus reports in the state, but the Centers for Disease Control announced that Zika cases have been reported on a U.S. soil by travelers returning to the country. As of the writing of this article in February the only locally acquired cases reported in the United States were in Puerto Rico and the U.S. Virgin Islands. The number of reported travel associated cases was 82 and they were spread among 21 states and the District of Columbia.

At this time there is no vaccine or medicine against the Zika virus. For most people the illness itself is mild and has common symptoms – fever, rash, joint pain and conjunctivitis (red eyes). Serious cases requiring hospital stay or ones that cause death are rare, according to the CDC. This alone would've made Zika very low on the totem pole of viruses. However, the real horror comes from a possible link between a Zika virus infection during pregnancy and microcephaly and other birth defects in the offspring that scientists are investigating in Brazil.

Microcephaly is a condition where the head of the newborn is much smaller than normal. Since the skull grows as a result of the growing brain underneath, this means that babies with microcephaly often manifest smaller brains that might have

#### BEEN AROUND FOR SOME TIME:

First case of Zika in Brazil was reported in May 2015. Prior to this date Zika outbreaks have occurred in areas of Africa, Southeast Asia and the Pacific Islands, according to the CDC.

## COUNTRIES AND TERRITORIES IN THE AMERICAS WITH ACTIVE ZIKA VIRUS TRANSMISSION



Aruba  
Barbados  
Bolivia  
Bonaire  
Brazil  
Colombia  
Comm. of Puerto Rico, US territory  
Costa Rica  
Curacao  
Dominican Republic  
Ecuador  
El Salvador  
French Guiana  
Guadeloupe  
Guatemala  
Guyana  
Haiti  
Honduras

Jamaica  
Martinique  
Mexico  
Nicaragua  
Panama  
Paraguay  
Saint Martin  
Suriname  
U.S. Virgin Islands  
Venezuela

List and map: CDC  
\*data as of February 2016

failed to develop properly before or after birth. Because of this, these babies might have a number of problems, including seizures, developmental delay, intellectual disability and others. According to the CDC, microcephaly is very uncommon with 2-12 cases per 10,000 live births.

CDC recommends that pregnant women should consider postponing travel to affected areas. The travel alert (Level 2-Practice Enhanced Precautions) is for people traveling to Brazil, Colombia, El Salvador, French Guiana, Guatemala, Haiti, Honduras, Martinique, Mexico, Panama, Paraguay, Puerto Rico, Suriname, and Venezuela as of this February.

CT DPH Acting Commissioner Dr. Raul Pino concurred with the warning. "All people, especially pregnant women, who are traveling to areas where Zika virus is found, should take precautions to avoid mosquito bites to reduce their risk of infection of Zika virus as well as other mosquito-borne viruses such as dengue and

chikungunya," said Dr. Pino. "Travelers returning from areas with Zika activity should seek medical care if they experience a fever and symptoms of infection."

The Zika virus was first discovered in the Uganda in the Zika Forest in 1947. The virus was first isolated from a human in Nigeria in 1954. The first case outside of Africa and Southeast Asia was reported in Micronesia in 2007.

Zika is transmitted between people through mosquito bites and more specifically the Aedes family of mosquitoes which are usually found in the tropics. It is now known that Zika can be transmitted sexually as well, according to the CDC.

"The mosquito species that is primarily responsible for transmission of Zika virus to people is not found in Connecticut," said Dr. Phil Armstrong, Medical Entomologist with the Center for Vector Biology & Zoonotic Diseases, Connecticut Agricultural Experiment Station. "Closely related species are present in very low numbers and are unlikely to present a risk of Zika virus infection to people. If the virus spreads to the United

### WHAT WE KNOW ABOUT ZIKA

1. Transmitted primarily by the Aedes aegypti mosquitoes.
2. Only about 1 in 5 people infected with Zika have any symptoms
3. Can be transmitted sexually by a man to his partners (in one of the cases transmission happened before the man had any symptoms)
4. The virus is present in semen longer than in blood

### WHAT WE DON'T KNOW ABOUT ZIKA

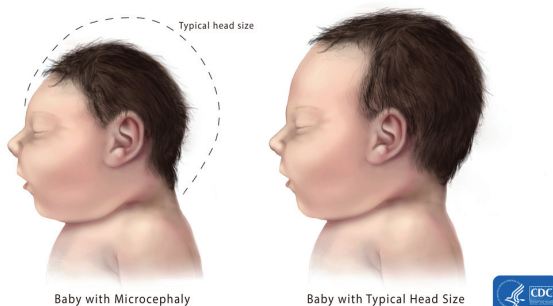
1. Is there really a link between Zika and microcephaly and other birth defects
2. How long the Zika virus stays in the semen in men who have had it
3. If a man who has Zika but never develops symptoms, can it spread through sexual contact

States mainland it will most likely be identified first in Florida or the gulf states."

Information on the Zika virus, travel alerts and other news around the outbreak are changing often so it's a good idea to check the website of the Connecticut Department of Public Health or the Centers for Disease Control or to contact your healthcare provider for the latest on the virus or if you have any questions or concerns.

So what exactly can you do to protect yourself from Zika?

It merits repeating that since currently there is no vaccine against the virus CDC recommends pregnant women to postpone their trip to affected areas. But whether staying put or traveling, avoiding mosquito bites is the best preventive measure you can take. And since the mosquito that transmits Zika likes to bite both outdoors and indoors, being especially aggressive indoors, bug repellents could come very handy when the mosquito season starts. CDC has a number of suggestions as well as other advise on how to avoid bug bites and ways to try to keep yourself safe so make sure to check out [www.cdc.gov](http://www.cdc.gov) for more information. And let's hope for a vaccine soon. ■



### DEVASTATING BIRTH DEFECTS:

Zika is suspected of having the potential to cause microcephaly in newborns if the mother got sick during pregnancy. Illustration: CDC