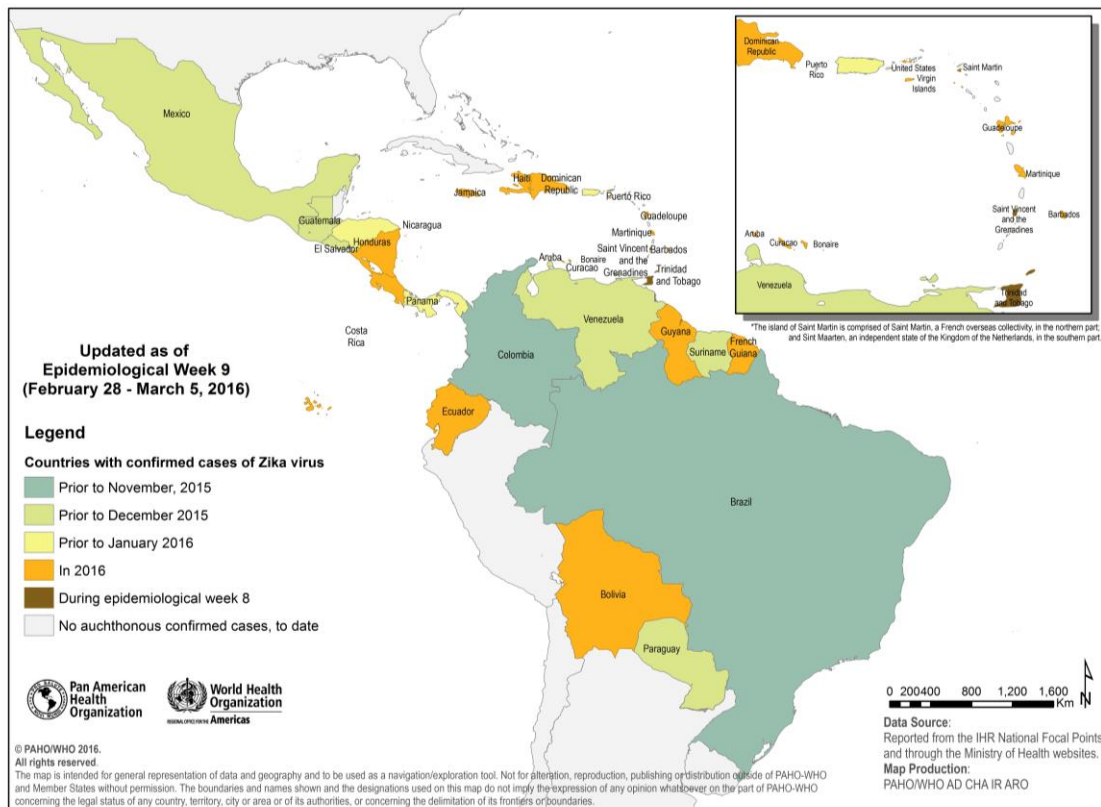


Zika virus (ZIKV) incidence and trends

Since last update (February 24, 2016), no additional countries/territories have reported autochthonous (locally acquired) confirmed cases of Zika virus (ZIKV) infection. Thirty-one countries / territories in the Americas have autochthonous confirmed cases of ZIKV infection.

Figure 1. Countries and territories in the Americas with autochthonous, confirmed Zika virus cases, 2015-2016 (as of 3 March 2016).



As the map illustrates, most continental countries/territories had confirmed local transmission of ZIKV by end of 2015, whereas many Caribbean countries/territories have detected transmission only since the beginning of 2016 (this is in contrast to the movement of the Chikungunya outbreak observed in 2014-2015).

Regionally, and in many countries, the epidemic appears to be increasing.

Suggested citation: Pan American Health Organization / World Health Organization. Zika Epidemiological Update, 3 March 2016. Washington, D.C.: PAHO/WHO; 2016

Sexual Transmission of ZIKV

During the past week, ZIKV cases of sexual transmission were reported in the United States of America, France, and Italy.

The United States reported 14 incidents of suspected sexual transmission identified during February 2016 and involving travel to various countries in the Region with ZIKV circulation among these two laboratory-confirmed cases and four probable cases of Zika virus disease have been identified among women whose only known risk factor was sexual contact with a symptomatic male partner with recent travel to an area with ongoing Zika virus transmission. Two instances have been excluded based on additional information, and six others are still under investigation. [See full report.](#)

Italy reported an incident identified via 2014 stored serum samples from 2014, involving travel to Thailand. [See full report.](#)

Argentina has reported a case of ZIKV infection in a woman with no travel history whose sexual partner had travelled to Colombia. The partner was symptomatic, upon return from travel, with fever, rash, headache, and joint pain. The event is still under investigation.

Reported increase of congenital microcephaly and other central nervous system disorders

Brazil

According to the Ministry of Health of Brazil, there have been reports of 5,909 suspected cases of microcephaly or other nervous system malformation among newborns across the country, from 22 October 2015 through 27 February 2016 (this includes 269 additional reported cases since the previous, 24 February 2016, PAHO Epidemiological Update).

Brazil Health authorities have reviewed 1,687 cases (29% of the total) and have identified 641 confirmed cases of microcephaly and/or other central nervous system (CNS) malformations with evidence suggestive of congenital infection (up from 583 confirmed cases in the previous PAHO Epidemiological Update). Meanwhile, 1,046 suspected microcephaly cases have been ruled out, and 4,222 reported microcephaly cases remain under investigation.

The 641 confirmed microcephaly cases occurred in 250 municipalities located in 15 Brazilian states: Alagoas, Bahia, Ceará, Maranhão, Paraíba, Pernambuco, Piauí, Rio Grande do Norte, Espírito Santo, Rio de Janeiro, Pará, Rondônia, Goiás, Mato Grosso South, and Rio Grande do Sul. The Northeast region accounts for 81% of reported cases. As noted in the last update, the trend in identifying microcephaly cases in the Northeast region appears to be slowing, while the trend is not yet clear in other regions.

There have been 139 deaths (including miscarriages or stillbirths) reported among reported microcephaly and / or CNS malformation cases. [See full report.](#)

United States – Pregnancy outcomes of women infected with ZIKV while traveling abroad

On 26 February, the United States Centers for Diseases Control and Prevention (U.S. CDC) published *Zika Virus Infection Among U.S. Pregnant Travelers – August 2015-February 2016* in the

Morbidity and Mortality Weekly Report (MMWR). The article reported nine women who had laboratory confirmed Zika virus infection during their pregnancy, after returning from areas with current local transmission of Zika virus. Six pregnant women acquired the infection during the first trimester of pregnancy, two during the second and one during the third trimester.

Among the six women who reported symptoms compatible with Zika virus disease during the first trimester, outcomes included two early pregnancy losses, two elective pregnancy terminations, and delivery of a live born infant with microcephaly. One pregnancy is continuing. Zika virus RNA was detected in both fetal remains from the women with early pregnancy loss. In one case of elective pregnancy termination, amniocentesis was performed and Zika virus RNA was detected by RT-PCR and a fetal ultrasound previous to the termination revealed absence of corpus callosum, ventriculo-megaly, and brain atrophy. In the baby born with microcephaly, Zika virus RNA was detected in the placenta by RT-PCR and immunohistochemistry.

Among two women who had symptoms during the second trimester of pregnancy, one apparently healthy infant has been born and one pregnancy is continuing. One pregnant woman reported symptoms of Zika virus infection in the third trimester of pregnancy, and she delivered a healthy infant.

In this small case series, Zika virus infection during pregnancy was associated with a range of outcomes, including early pregnancy losses, congenital microcephaly, and apparently healthy infants. [See full report.](#)

Brazil – congenital syndromes / anomalies other than microcephaly

A recently published case report indicated that in addition to a possible link with microcephaly, ZIKV may also be linked to hydrops fetalis and fetal demise. [See full report.](#)

Guillain-Barre syndrome (GBS) and other neurological disorders

To date, five countries/territories in the Region have reported an excess of GBS -- Brazil, Colombia, El Salvador, Suriname, and Venezuela – and Panama recently reported a case of GBS in a patient whose blood and urine samples were positive for ZIKV.

French Polynesia – Study of the relationship between ZIKV and GBS

The first case control study to investigate the relationship between ZIKV and GBS was published this week. It involved 42 cases of GBS from French Polynesia during the Zika virus outbreak in 2013-2014, all of whom had laboratory evidence of ZIKV infection. Case patients had a median of 6 days between febrile rash illness and the onset of neurological symptoms. No one died and recovery was faster than that often observed in patients with GBS.

All case patients had neutralizing antibodies against Zika virus, compared to only 54 (56%) of 98 patients in the control group 1 ($p < 0.0001$). Most case patients (93%) also had Zika virus IgM. Past dengue virus history did not differ significantly between cases and controls.

The authors report that this is the first study providing evidence for Zika virus infection causing Guillain-Barré syndrome. They suggest that, because Zika virus is spreading rapidly across the Americas, at risk countries need to prepare for adequate intensive care beds capacity to manage patients with Guillain-Barré syndrome. [See full report.](#)