

Department of Defense
Armed Forces Health Surveillance Branch
Zika Virus in the Americas Surveillance Summary
(13 APR 2016)



Approved for Public Release

For questions or comments, please contact:

dha.ncr.health-surv.list.afhs-ib-alert-response@mail.mil



DEPARTMENT OF DEFENSE (AFHSB)

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13 APR 2016 (next report 20 APR 2016)



SURVEILLANCE: Updated guidelines for [Detecting and Reporting DoD Cases of Acute Zika Virus Disease](#) are available on the AFHSB web page. Confirmed and probable cases should be reported in DRSi as “Any Other Unusual Condition Not Listed,” with “Zika” entered in the comment field along with pertinent travel history and pregnancy status.

The CDC Zika IgM MAC-ELISA and CDC Zika Trioplex rRT-PCR Emergency Use Authorization (EUA) assays **have been distributed** to DoD laboratories. The IgM assay is currently being or has been distributed to six DoD labs, with one lab (NIDDL) having received approval to commence patient testing. The Trioplex EUA assay is currently being or has been distributed to 16 DoD labs; **10 (+2)** labs have received approval to start patient testing (**BAMC, CRDAMC, EAMC, LRMC, USAMRIID, WBAMC, MAMC, Brian Allgood ACH, NHRC, USAFSAM**).

[Strategy for Control of Zika Virus Transmitting Mosquitoes on Military Installations](#) is available from the Armed Forces Pest Management Board. The Armed Services Blood Program Office implemented the American Association of Blood Banks’ guidance for reducing the risk of Zika, dengue, and chikungunya virus transmission through blood products on 12 FEB.

CASE REPORT: From 1 MAY 2015 to **13 APR 2016**, confirmed autochthonous vector-borne transmission of ZIKV has been reported in **34 (+1, St. Lucia)** [countries and territories](#) in the Western Hemisphere and eight countries outside of the Western Hemisphere. CDC has issued Alert Level 2, Practice Enhanced Precautions travel notices for 41 of these [countries and territories](#) and for travelers to the [2016 Summer Olympics and Paralympics](#) in Rio de Janeiro. According to CDC, locations above 6,500 feet elevation in these countries and territories present minimal transmission risk. Additional countries with sporadic, likely vector-borne, transmission include **Belize**, the Philippines, Thailand, Vietnam, and Laos.

According to a study published on 12 APR in PLoS Neglected Tropical Diseases that describes the clinical, epidemiological, and viral aspects of the ZIKV outbreak in Rio De Janeiro, the virus has been circulating in Brazil since JAN 2015. The researchers found that the illness was characterized by rash and absent or low-grade and short-termed fever in the study population

Western Hemisphere Countries and Territories Reporting Autochthonous Zika Virus Infections as of 13 APR 2016



Text updated from the previous report will be printed in red; items in (+xx) represent the change in number from the previous AFHSB summary (6 APR 2016).

All information has been verified unless noted otherwise. Additional sources include: Pacific Public Health Surveillance Network

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CASE REPORT (cont'd): Six countries have reported locally-acquired infection in the absence of any known mosquito vectors, probably through sexual transmission (Argentina, Chile, France, Italy, New Zealand and the U.S.). Past vector-borne outbreaks have been reported from other areas of Africa, Southeast Asia, and the Pacific Islands, where sporadic transmission may continue to occur.

As of **13 APR**, CDC (ArboNet) and state health departments report **351 (+37)** travel-related and seven locally-acquired, non-vector-borne (sexually transmitted) ZIKV cases in 41 states and the District of Columbia since MAY 2015; no autochthonous vector-borne cases have been reported. There are **84 (+29)** confirmed or suspect cases in pregnant women, with **two (+1)** cases of microcephaly, two cases of intrauterine fetal demise, four terminations, **52 (+13)** ongoing pregnancies, **15 (+7)** healthy infants delivered, and **nine (+8)** cases under investigation. As of **25 MAR**, Puerto Rico DOH reports **436 (+64)** cases, including **60 (+16)** pregnant women. CDC has developed a [U.S. Pregnancy Registry](#) to identify and track the health of pregnant women with confirmed ZIKV infection, their pregnancy outcomes, and the health of their infants for one year.

ZIKA AND MICROCEPHALY: As of **9 APR**, Brazil is investigating **3,836 (-210)** suspected microcephaly cases, including **235 (+8)** deaths; investigation is completed for **3,179 (+319)** suspect cases; **1, 113 (35%)** were confirmed as microcephaly suggestive of congenital infection and **189 (+19)** of these tested ZIKV positive; **2,066 (65%)** cases were ruled out. In addition to Brazil, Cape Verde (two cases), Colombia (seven cases), French Polynesia (eight cases), Martinique (three cases), and Panama (one case) have reported microcephaly and other fetal malformations potentially associated with ZIKV infection or suggestive of a congenital infection according to [WHO on 7 APR](#). However, [WHO reports](#) that it "is not possible to establish a link between" ZIKV infection and microcephaly in the Panama case because of a lack of information and because the infection may have occurred too late in the pregnancy. Hawaii has **two (+1)** cases; one resulted from an infection acquired in Brazil and **one in the newborn of a Marshall Islands resident who gave birth in the state**. Slovenia has reported a microcephaly case linked to ZIKV infection acquired in Brazil.

ZIKA AND GUILLAIN-BARRÉ SYNDROME: According to [WHO on 7 APR](#), 12 countries in the Western Hemisphere and French Polynesia have reported an increased incidence of Guillain-Barré syndrome (GBS) and/or laboratory confirmation of a Zika virus infection among GBS cases that may be associated with the introduction of ZIKV. There has been one GBS case linked to ZIKV reported in the continental U.S. and three in Puerto Rico. **On 10 APR, Brazilian researchers reported two cases of acute disseminated encephalomyelitis (ADEM) that may be associated with ZIKV infection.**

USG RESPONSE: On 15 JAN, CDC began issuing public health, clinical, and laboratory guidance on ZIKV, which is available on its [Zika Virus](#) web pages. On 1 APR, CDC hosted a [Zika Action Plan Summit](#) to review guidance for all states on CDC's recommendations for preparing and responding to the emergence of Zika virus. On 31 MAR, CDC issued [case definitions for congenital microcephaly](#). ZIKV disease is a [notifiable disease](#) in the U.S.

FDA announced the availability of an [investigational test to screen blood donations](#) for Zika virus. The test may be used under an investigational new drug (IND) application for screening donated blood in areas with active mosquito-borne transmission of Zika virus.

GLOBAL RESPONSE: **Based on a growing body of preliminary research , WHO believes there is scientific consensus that Zika virus is a cause of microcephaly and Guillain-Barré syndrome.** On 23 MAR, WHO issued guidance on [lab testing for ZIKV](#). WHO has published [interim guidance](#) on entomological surveillance for *Aedes* mosquitoes and a [report](#) on Zika diagnostic, treatment, and prevention products currently in development. On 9 MAR, WHO published a [statement](#) on research and development priorities for Zika medical products. The second meeting of the WHO [Emergency Committee](#) on clusters of microcephaly cases and other neurological disorders in some areas affected by ZIKV met on 8 MAR. The Committee said that the clusters of microcephaly cases and other neurological disorders continue to constitute a Public Health Emergency of International Concern (PHEIC), and that there is increasing evidence of a causal relationship with Zika virus. On 16 FEB, the WHO launched a global [Strategic Response Framework and Joint Operations Plan](#) to guide the international response. **PAHO has created a searchable database of published primary research and protocols.** For additional information, visit the [WHO](#) and [PAHO](#) Zika web pages.

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Western Hemisphere Countries and Territories with Autochthonous Transmission of Zika Virus: 01 JAN 2015 – 09 APR 2016

| | Confirmed | Suspected | Deaths | Microcephaly Cases* | Reporting GBS |
|--------------|--------------|----------------|-----------|---------------------|---------------------|
| Total | 5,933 | 199,922 | 10 | 1,124 | 12 Countries |

| Country/Territory | Confirmed | Suspected | Deaths | Microcephaly Cases* | Reporting GBS |
|--------------------|-----------|-----------|--------|---------------------|---------------|
| Aruba | 4 | 0 | 0 | NR | No |
| Barbados | 7 | 316 | 0 | NR | No |
| Bolivia | 12 | 0 | 0 | NR | No |
| Bonaire | 1 | 0 | 0 | NR | No |
| Brazil | 534 | 72,062 | 4 | 1,113** | Yes† |
| Colombia | 2,603 | 58,790 | 0 | 7** | Yes† |
| Costa Rica | 8 | 0 | 0 | NR | No |
| Cuba | 1 | 0 | 0 | NR | No |
| Curaçao | 1 | 0 | 0 | NR | No |
| Dominica | 1 | 0 | 0 | NR | No |
| Dominican Republic | 55 | 1,090 | 1 | NR | Yes† |
| Ecuador | 69 | 0 | 0 | NR | No |
| El Salvador | 46 | 9,772 | 0 | NR | Yes† |
| French Guiana | 299 | 3,190 | 0 | NR | Yes† |
| Guadeloupe | 139 | 900 | 0 | NR | No |
| Guatemala | 261 | 915 | 0 | NR | No |
| Guyana | 1 | 0 | 0 | NR | No |

| Country/Territory | Confirmed | Suspected | Deaths | Microcephaly Cases* | Reporting GBS |
|----------------------------------|-----------|-----------|--------|---------------------|---------------|
| Haiti | 5 | 1,777 | 0 | NR | Yes† |
| Honduras | 2 | 16,536 | 0 | NR | Yes† |
| Jamaica | 1 | 0 | 0 | NR | No |
| Martinique | 12 | 15,440 | 0 | 3 | Yes† |
| Mexico | 201 | 0 | 0 | NR | No |
| Nicaragua | 131 | 0 | 0 | NR | No |
| Panama | 196 | 0 | 0 | 1†† | Yes† |
| Paraguay | 7 | 0 | 0 | NR | No |
| Puerto Rico | 436 | 0 | 0 | NR | Yes† |
| Saint Lucia | 2 | 0 | 0 | NR | No |
| Saint Martin | 36 | 157 | 0 | NR | No |
| Saint Vincent and the Grenadines | 1 | 0 | 0 | NR | No |
| Sint Maarten | 2 | 0 | 0 | NR | No |
| Suriname | 485 | 3,440 | 4 | NR | Yes† |
| Trinidad and Tobago | 9 | 0 | 0 | NR | No |
| U.S. Virgin Islands | 13 | 42 | 0 | NR | No |
| Venezuela | 352 | 15,495 | 1 | NR | Yes† |

* Number of microcephaly and/or CNS malformation cases suggestive of congenital infections or potentially associated with ZIKV infection

**Brazil is currently investigating 3,836 suspected microcephaly cases as of 9 APR; Colombia is currently investigating 30 suspected microcephaly cases as of 7 APR.

† Reported increase in GBS cases associated with the introduction of ZIKV and/or GBS case(s) linked to ZIKV infection

†† WHO reports that it "is not possible to establish a link between" ZIKV infection and microcephaly in the Panama case because of a lack of information and because the infection may have occurred too late in the pregnancy.

Sources: Zika cases reported to PAHO as of 7 APR, and Zika cases reported by the health department in Puerto Rico as of 25 MAR; and GBS cases and microcephaly cases reported to WHO as of 7 APR, except for microcephaly cases reported by the Brazil MOH as of 9 APR and Colombia MOH as of 7 APR.

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