

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



Approved for Public Release

For questions or comments, please contact:

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DEPARTMENT OF DEFENSE (AFHSB)

Zika Virus in the Americas Surveillance Summary #12

6 APR 2016 (next report 13 APR 2016)



DoD 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 Triplex rRT-PCR Emergency Use Authorization (EUA) assays are being 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 Triplex EUA assay is currently being or has been distributed to 16 DoD labs, with eight labs (EAMC, LPMC, USAMRIID, WBAMC, MAMC, Brian Allgood ACH, NHRC, USAFSAM) having received approval to start patient testing. Approval to start patient testing is contingent upon completing training and an external quality assurance panel that is specific for each EUA assay. The [NIDDL](#) currently has ZIKV PCR testing available for clinical diagnosis using a laboratory developed test. Testing can be requested through the Composite Health Care System in the National Capital Region (NCR); others should use the NIDDL's [test request form](#).

The Armed Forces Pest Management Board issued updated [vector control guidance](#) for *Aedes* mosquitoes on 2 MAR. 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 6 APR 2016, confirmed autochthonous vector-borne transmission of ZIKV has been reported in 33 [countries and territories](#) in the Western Hemisphere and **eight (+2)** countries outside of the Western Hemisphere. CDC has issued Alert Level 2, Practice Enhanced Precautions travel notices for these [41 countries and territories](#) (+2, **Fiji and Kosrae, Federated States of Micronesia**) 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 the Philippines, Thailand, **Vietnam**, and Laos.

Western Hemisphere Countries and Territories Reporting Autochthonous Zika Virus Infections as of 6 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 (30 MAR 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 **5 APR**, CDC (ArboNet) and state health departments report **314 (+22)** 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 **55 (+22)** confirmed or suspect cases in pregnant women, **with one case of microcephaly, two cases of intrauterine fetal demise, four terminations, 39 ongoing pregnancies, eight healthy infants delivered, and one case currently under investigation.** As of **18 MAR**, Puerto Rico DOH reports **372 (+22)** cases, including **44 (+4)** 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 **2 APR**, Brazil is investigating **4,046 (-245)** suspect microcephaly cases, including **227 (+19)** deaths; Brazil has completed investigating **2,860 (+375)** suspect cases; **1,046 (37%)** were confirmed as microcephaly suggestive of congenital infection and **170 (+40)** of these tested ZIKV positive; **1,814 (63%)** cases were ruled out. Hawaii and Slovenia have each reported a microcephaly case linked to ZIKV infection acquired in Brazil. Colombia is investigating **34** microcephaly cases. [Investigators have not been able to establish a link](#) between ZIKV infection and a newborn with microcephaly in Panama, according to WHO. France reported microcephaly in a 22-week old fetus in Martinique; the mother had serologic evidence of a recent ZIKV infection, and viral RNA was isolated in the amniotic fluid and fetal blood. Investigators continue to work on establishing a definitive causal link between ZIKV infection during pregnancy and subsequent congenital neurological malformations. **Preliminary data from a joint CDC-Brazil MOH study of 165 cases and 446 controls suggest women infected during the first trimester were more likely to have children with microcephaly.** In an Emerging Infectious Diseases (EID) journal article released on 29 MAR, researchers reported preliminary evidence from a study of [microcephaly in 104 infants in Pernambuco State, Brazil in 2015](#). The study, which has several significant limitations (such as no ZIKV testing), found microcephaly peaked in OCT 2015, and all 58 imaged cases demonstrated abnormal brain development in utero and intracranial calcifications consistent with an intrauterine infection.

ZIKA AND GUILLAIN-BARRÉ SYNDROME: According to [WHO on 31 MAR](#), **12 (+1)** 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.

USG RESPONSE: On 15 JAN, CDC began issuing public health, clinical, and laboratory guidance on ZIKV, which is available on its [Zika Virus](#) web page. **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: 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. For additional information, visit the [WHO](#) and [PAHO](#) Zika web pages.

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All information has been verified unless noted otherwise. Additional sources include: Brazil MOH

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Western Hemisphere Countries and Territories with Autochthonous Transmission of Zika Virus: 01 JAN 2015 – 6 APR 2016

| 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 | 5,092* | Yes† |
| Colombia | 2,361 | 56,477 | 0 | 34 | Yes† |
| Costa Rica | 8 | 0 | 0 | NR | No |
| Cuba | 1 | 0 | 0 | NR | No |
| Curaçao | 1 | 0 | 0 | NR | No |
| Dominican Republic | 18 | 991 | 0 | NR | Yes† |
| Dominica | 1 | 0 | 0 | NR | No |
| Ecuador | 63 | 0 | 0 | NR | No |
| El Salvador | 3 | 9,597 | 0 | NR | Yes† |
| French Guiana | 216 | 2,770 | 0 | NR | Yes† |
| Guadeloupe | 151 | 794 | 0 | NR | No |
| Guatemala | 261 | 915 | 0 | NR | No |
| Guyana | 1 | 0 | 0 | NR | No |
| Haiti | 5 | 1,777 | 0 | NR | Yes† |
| Honduras | 2 | 16,536 | 0 | NR | Yes† |
| Jamaica | 1 | 0 | 0 | NR | No |
| Martinique | 12 | 14,320 | 0 | NR | Yes† |
| Mexico | 185 | 0 | 0 | NR | No |
| Nicaragua | 129 | 0 | 0 | NR | No |
| Panama | 141 | 0 | 0 | NR | Yes† |
| Paraguay | 7 | 0 | 0 | NR | No |
| Puerto Rico | 372 | 0 | 0 | NR | Yes† |
| Saint Martin | 30 | 154 | 0 | NR | No |
| Saint Vincent and the Grenadines | 1 | 0 | 0 | NR | No |
| Sint Maarten | 2 | 0 | 0 | NR | No |
| Suriname | 2 | 2,352 | 4 | NR | Yes† |
| Trinidad and Tobago | 9 | 0 | 0 | NR | No |
| U.S. Virgin Islands | 12 | 77 | 0 | NR | No |
| Venezuela | 352 | 15,495 | 1 | NR | Yes† |
| Total | 4,905 | 194,633 | 9 | 5,126 | 12 Countries |

* Confirmed (1,046) and suspected (4,046) microcephaly cases; excludes investigated and ruled out (1,814) as of 2 APR

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

Sources: Zika cases reported to PAHO as of 31 MAR, except for microcephaly reported by the Brazil MOH as of 2 APR and Colombia MOH as of 1 APR; Zika cases reported by the health departments in Puerto Rico as of 18 MAR and in the U.S. Virgin Islands as of 29 MAR; and GBS cases reported to WHO as of 31 MAR.

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