

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



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*For questions or comments, please contact:*

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# DEPARTMENT OF DEFENSE (AFHSB)

## Global Zika Virus Surveillance Summary #14

### 20 APR 2016 (next report 27 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 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 Triplex EUA assay is currently being or has been distributed to 16 DoD labs; **12 (+2)** labs have received approval to start patient testing (BAMC, CRDAMC, EAMC, LRMC, USAMRIID, WBAMC, MAMC, Brian Allgood ACH, NHRC, USAFSAM, **WAMC, and NAMRU-3**).

[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 **20 APR** 2016, confirmed autochthonous vector-borne transmission of ZIKV has been reported in **35 (+1, Belize)** [countries and territories](#) in the Western Hemisphere. In AFRICOM, Cape Verde reported 7,488 ZIKV cases through 5 MAR, at that time incidence was rapidly declining. In PACOM, American Samoa, Samoa, Fiji, Kosrae (Federated States of Micronesia), Marshall Islands, New Caledonia, and Tonga are reporting active ZIKV transmission. CDC has issued Alert Level 2, Practice Enhanced Precautions travel notices for these **43 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 the Philippines, **Papua New Guinea**, Thailand, Vietnam, and Laos. 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.

**Seven (+1)** countries have reported person-to-person transmission, probably through sexual transmission (**Peru**, Argentina, Chile, France, Italy, New Zealand and the U.S.).

As of **18 APR**, CDC (ArboNet) and state health departments report **363 (+12)** travel-related and seven locally-acquired, non-vector-borne (sexually transmitted) ZIKV cases in **43 (+2, Vermont and Rhode Island)** states and the District of Columbia since MAY 2015; no autochthonous vector-borne cases have been reported. As of 12 APR, CDC has reported 84 confirmed or suspect cases in pregnant women, with two cases of microcephaly, two cases of intrauterine fetal demise, four terminations, 52 ongoing pregnancies, 15 healthy infants delivered, and nine cases under investigation. As of **1 APR**, Puerto Rico reports **550 (+114)** cases, including **71 (+11)** cases in pregnant women. **Six of 1,550 blood donors in Puerto Rico have been confirmed positive for ZIKV**. 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.

Text updated from the previous report will be printed in red; items in (+xx) represent the change in number from the previous AFHSB summary (**13 APR 2016**).

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

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**ZIKA AND MICROCEPHALY:** In a 13 APR NEJM article, CDC researchers said, “a causal relationship exists between prenatal Zika virus infection and microcephaly and other serious brain anomalies” based on a review of available data. As of **16 APR**, Brazil is investigating **3,741 (-95)** suspected microcephaly cases, including **240 (+5)** deaths; investigation is completed for **3,409 (+230)** suspect cases; **1,168 (34%)** were confirmed as microcephaly suggestive of congenital infection and **192 (+3)** of these tested ZIKV positive; **2,241 (66%)** cases were ruled out. In addition to Brazil, Cape Verde (two cases), Colombia (**two cases**), French Polynesia (eight cases), Martinique (three cases), and Panama (**three cases**) have reported microcephaly and other fetal malformations potentially associated with ZIKV infection or suggestive of a congenital infection according to [WHO](#) and the Colombia MOH on 14 APR. However, [WHO reports](#) that it “is not possible to establish a link between” ZIKV infection and microcephaly in **one of the three** Panama cases because of a lack of information and because the infection may have occurred too late in the pregnancy. Hawaii has two cases; one resulted from an infection acquired in Brazil and one was in the newborn of a Marshall Islands resident who gave birth in the state. Slovenia has reported one microcephaly case linked to ZIKV infection acquired in Brazil.

**ZIKA AND GUILLAIN-BARRÉ SYNDROME:** According to [WHO on 14 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 **six (+3)** 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; these are 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. **CDC reported male-to-male sexual transmission of ZIKV on 15 APR** and issued [case definitions for congenital microcephaly](#) on 31 MAR. ZIKV disease is a [notifiable disease](#) in the U.S.

**On 19 APR, President Obama signed into law legislation that adds ZIKV to the FDA priority review voucher program to encourage the development of treatments for neglected tropical diseases.**

On 30 MAR, FDA announced the availability of an [investigational test to screen blood donations](#) for ZIKV in areas with active mosquito-borne transmission of ZIKV.

**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 [laboratory 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 and concluded that the clusters of microcephaly cases and other neurological disorders continue to constitute a Public Health Emergency of International Concern (PHEIC). 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.

Text updated from the previous report will be printed in **red**; items in **(+xx)** represent the change in number from the previous AFHSB summary (**13 APR 2016**).

All information has been verified unless noted otherwise. Additional sources include: Brazil MOH  
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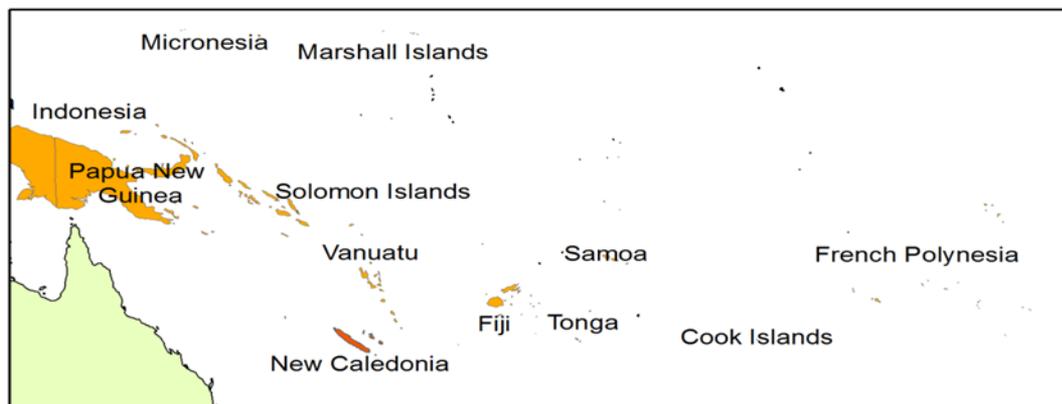
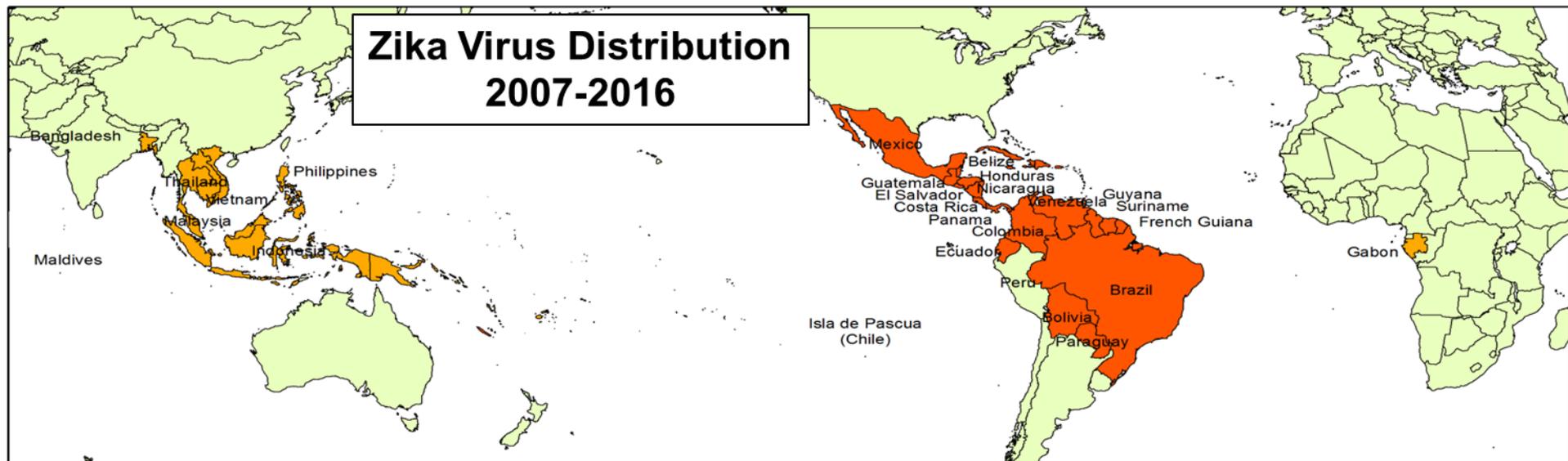
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**Zika Virus Distribution  
2007-2016**



 Vector-borne transmission of Zika virus first reported prior to 1 JAN 2015

 Vector-borne transmission of Zika virus first reported since 1 JAN 2015

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#### Western Hemisphere Countries and Territories with Autochthonous Transmission of Zika Virus: 01 JAN 2015 – 16 APR 2016

	Confirmed	Suspected	Deaths	Microcephaly Cases*	Reporting GBS
<b>Total</b>	<b>6,674</b>	<b>207,312</b>	<b>10</b>	<b>1,176</b>	<b>12 Countries</b>

Country/Territory	Confirmed	Suspected	Deaths	Microcephaly Cases*	Reporting GBS
Aruba	4	0	0	NR	No
Barbados	7	316	0	NR	No
<b>Belize</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>NR</b>	<b>No</b>
Bolivia	12	0	0	NR	No
Bonaire	1	0	0	NR	No
Brazil	534	72,062	4	1,168**	Yes†
Colombia	3,061	61,778	0	2**	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	56	1,249	1	NR	Yes†
Ecuador	71	139	0	NR	No
El Salvador	43	11,011	0	NR	Yes†
French Guiana	355	3,620	0	NR	Yes†
Guadeloupe	191	1,090	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	17,556	0	NR	Yes†
Jamaica	1	0	0	NR	No
Martinique	12	16,650	0	3	Yes†
Mexico	222	0	0	NR	No
Nicaragua	135	0	0	NR	No
Panama	220	0	0	3††	Yes†
Paraguay	7	0	0	NR	No
Puerto Rico	550	0	0	NR	Yes†
Saint Lucia	2	0	0	NR	No
Saint Martin	42	160	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	13	0	0	NR	No
U.S. Virgin Islands	14	54	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 3,741 suspected microcephaly cases as of 16 APR; Colombia is currently investigating 15 suspected microcephaly cases as of 14 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 one of the three reported Panama cases 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 14 APR, and Zika cases reported by the health departments in Puerto Rico as of 1 APR and USVI as of 12 APR; and GBS cases and microcephaly cases reported to WHO as of 14 APR, except for microcephaly cases reported by the Brazil MOH as of 16 APR and Colombia MOH as of 14 APR.

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