

Department of Defense
Armed Forces Health Surveillance Branch
Global Zika Virus Surveillance Summary
(22 JUN 2016)



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For questions or comments, please contact:

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



DEPARTMENT OF DEFENSE (AFHSB)

Global Zika Virus Surveillance Summary #23

22 JUN 2016 (next report 29 JUN 2016)



DoD SURVEILLANCE: On 17 MAY, AFHSB issued updated guidance for detecting and reporting DoD cases of acute Zika virus disease that includes changes to clinical criteria, case definitions, and laboratory testing, as well as a list of DoD laboratory POCs. 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 are available under an Emergency Use Authorization (EUA) at DoD laboratories. The IgM is available at three labs (NIDDL, BAMC, and USAFSAM). The Triplex EUA assay is available at 15 DoD labs (BAMC, CRDAMC, EAMC, LRMC, USAMRIID, WBAMC, MAMC, Brian Allgood ACH, NHRC, USAFSAM, WAMC, NAMRU-3, TAMC, WRNMMC, and NIDDL).

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 22 JUN 2016, confirmed autochthonous vector-borne transmission of Zika virus (ZIKV) has been reported in 39 [countries and territories](#) in the Western Hemisphere. In AFRICOM, Cape Verde reported 7,580 cases as of 8 JUN. WHO [reported on 20 MAY](#) that the ZIKV circulating in Cape Verde is the Asian strain, which is the same strain circulating in the Americas; it was most likely imported from Brazil. In PACOM, American Samoa, Samoa, Fiji, Kosrae (Federated States of Micronesia), Marshall Islands, New Caledonia, Papua New Guinea, and Tonga are reporting active ZIKV transmission. CDC has issued Alert Level 2, Practice Enhanced Precautions travel notices for these 48 [areas](#) 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. 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. Ten countries have reported person-to-person transmission, most likely through sexual contact.

As of 15 JUN, CDC (ArboNet) and state health departments report 745 (+64) travel-related cases, 11 locally-acquired, non-vector-borne (sexually transmitted) cases, and one laboratory acquired case in 46 states and the District of Columbia since MAY 2015; no autochthonous vector-borne cases have been reported. As of 2 JUN, Puerto Rico DOH reports 1,726 (+225) confirmed cases (1 death), with 191 (+9) cases in pregnant women. The U.S. Virgin Islands DOH reported 26 (+2) confirmed cases as of 14 JUN. American Samoa DOH has reported 29 confirmed cases, including 14 cases in pregnant women, as of 9 JUN. The CDC’s U.S. [pregnancy registry](#) has recorded 234 (+28) pregnant women with laboratory evidence of a ZIKV infection in the 50 states and the District of Columbia. As of 9 JUN, there have been three infants born with birth defects and three fetal deaths due to birth defects. CDC is tracking an additional 189 (+23) pregnant women in the U.S. territories.

On 17 JUN, CDC said none of the 5,961 donated blood units tested at the Gulf Coast Regional Blood Center in Texas since 23 MAY have tested positive for ZIKV. In Puerto Rico, [CDC reports](#) 68 of 12,777 (0.5%) of blood donors tested ZIKV positive between 3 APR and 11 JUN. During the latest week of testing, 1.1% of blood donors were positive; the percentage has been increasing over time.

Text updated from the previous report will be printed in red; items in (+xx) represent the change in number from the previous AFHSB summary (15 JUN 2016).

All information has been verified unless noted otherwise. Additional sources include: Pacific Public Health Surveillance Network and Gulf Coast Regional Blood Center.

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CASE REPORT (con't): On 9 JUN, Eurosurveillance published three case reports related to sexual transmission of ZIKV. One describes transmission from an asymptomatic male to his female partner at least 28 days after returning to France from an endemic area. The female was also asymptomatic, and the infection was detected during pre-in vitro fertilization screening.

ZIKA AND MICROCEPHALY: As of 20 JUN, Brazil (1,616 (+65) cases), Cape Verde (6 cases), Colombia (6 cases), French Polynesia (8 cases), the Marshall Islands (1 case), Martinique (4 cases), El Salvador (1 case), French Guiana (1 case), Panama (5 cases), and Puerto Rico (1 case) have reported microcephaly and other fetal malformations potentially associated with ZIKV infection or suggestive of a congenital infection. The U.S. (6 (+4)), Spain (2), and Slovenia (1) have reported travel associated microcephaly cases. NEJM published a preliminary analysis of the ZIKV outbreak in Colombia, with the main finding that infection during the third trimester of pregnancy is not linked to structural abnormalities in the fetus. CDC has said, "a causal relationship exists between prenatal Zika virus infection and microcephaly and other serious brain anomalies."

ZIKA AND GUILLAIN-BARRÉ SYNDROME: According to WHO on 16 JUN, 13 countries (12 in the Western Hemisphere and French Polynesia) have reported Guillain-Barré syndrome (GBS) cases that may be associated with the introduction of ZIKV. There have been three (+1) GBS cases linked to ZIKV reported in the continental U.S. and 12 (+1) cases in Puerto Rico. (CDC, PR DOH, Colombia MOH, Brazil MOH)

USG RESPONSE: On 17 JUN, CDC published guidance for Americans living in areas with ongoing ZIKV transmission. On 14 JUN, CDC issued its draft interim plan for response activities that would occur after locally acquired ZIKA transmission has been identified in the continental United States and Hawaii. CDC published interim guidance for interpretation of ZIKV antibody test results in its 3 JUN MMWR. On 25 MAY, CDC released a Health Alert Network (HAN) notice on urine testing to further explain the interim guidance for Zika virus testing of urine issued on 10 MAY (with an erratum on 13 MAY). ZIKV disease is a notifiable disease in the U.S. Additional data, guidance, and information from CDC is available on its ZIKV web pages.

GLOBAL RESPONSE: On 14 JUN, WHO convened the third meeting of the WHO Emergency Committee concerning ZIKV and observed increases in neurological disorders and neonatal malformations. The Committee said that the clusters of microcephaly cases and other neurological disorders continue to constitute a Public Health Emergency of International Concern (PHEIC). The Committee found the risk of further international spread of ZIKV from the Olympic and Paralympic games is very low and reaffirmed its previous advice that there should be no general restrictions on travel and trade with countries, areas, and/or territories with ZIKV transmission. The Committee provided additional advice to the Director-General on controlling ZIKV during mass gatherings.

WHO updated its interim guidance for preventing sexual transmission on 7 JUN. WHO published a Strategic Response Framework and Joint Operations Plan to guide the international response; it issued an update on the global response on 27 MAY. An epi-curve published by PAHO shows a downward trend in suspected and confirmed cases reported since early FEB 2016 in the countries where the ZIKV outbreak started in the fall of 2015. PAHO has created a searchable database of published primary research and protocols. WHO Regional Office in Europe assessed the risk of ZIKV spread in Europe during late spring and summer to be low to moderate. 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 (8 JUN 2016).

All information has been verified unless noted otherwise. Additional sources include: Brazil MOH and Generalitat de Catalunya .

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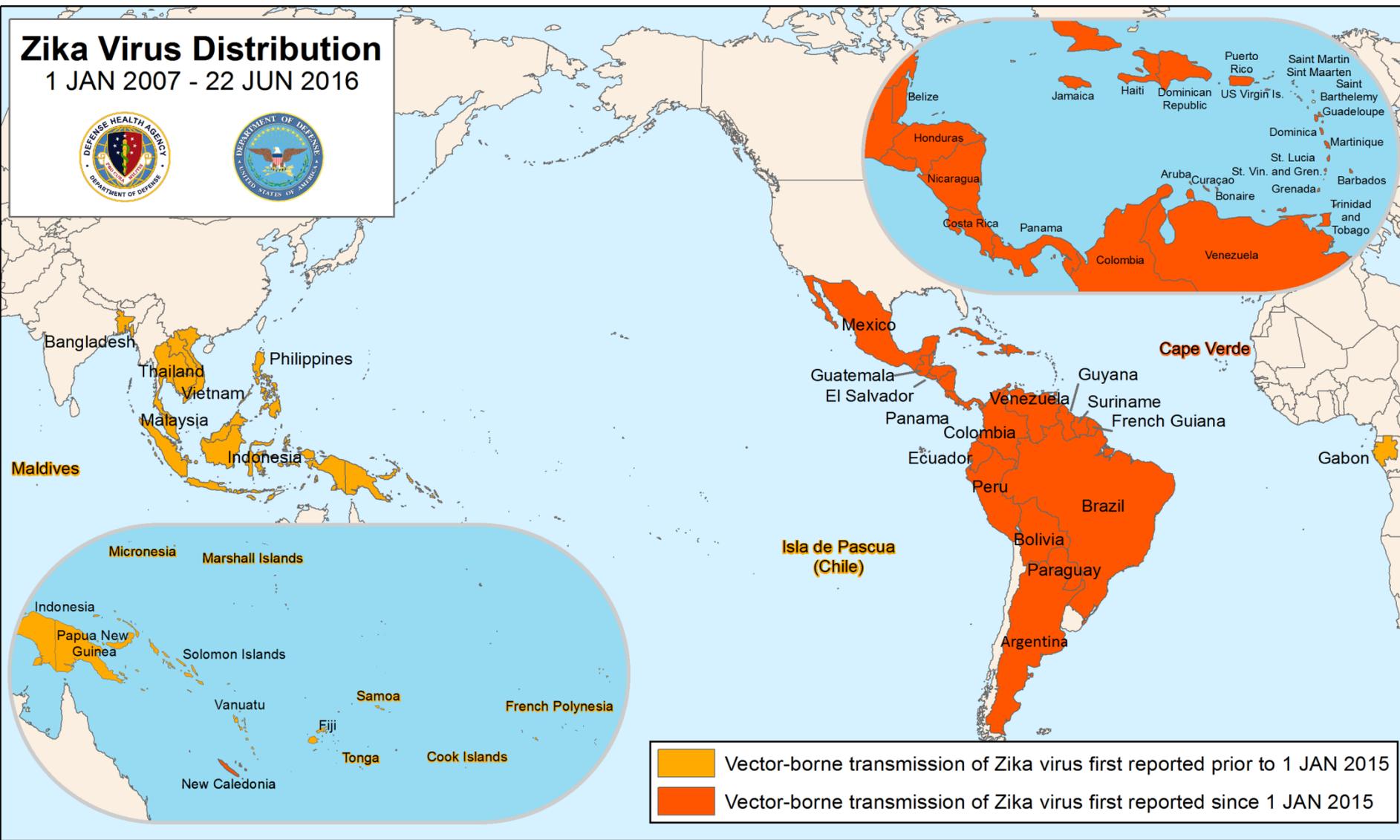
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Zika Virus Distribution

1 JAN 2007 - 22 JUN 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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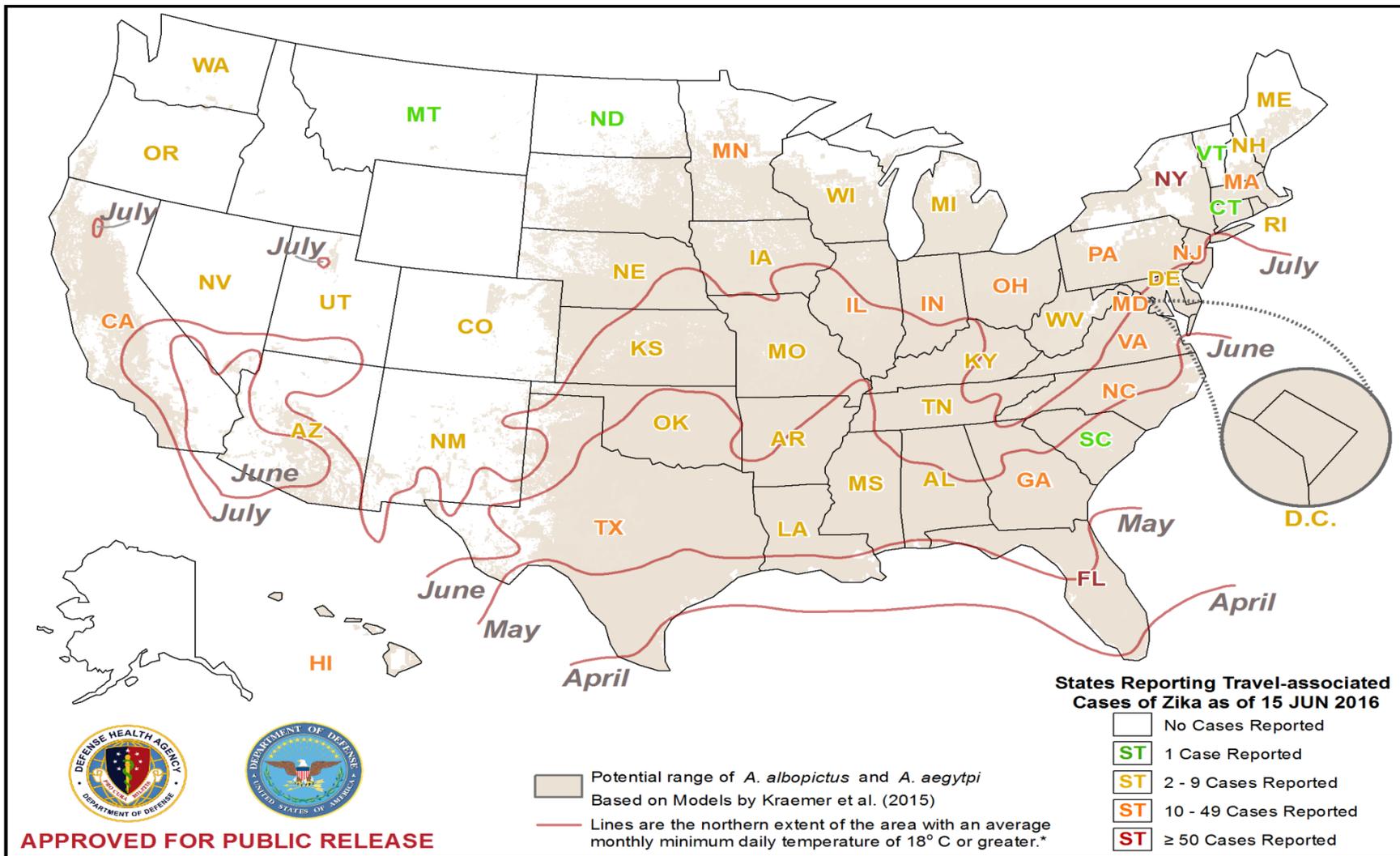
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Overlap of States Reporting Imported Zika Cases with Locations of Major DoD Installations, and the Estimated Range of Mosquito Vectors and Transmission Suitability

22 JUN 2016



Based on Sang et al, Predicting Unprecedented Dengue Outbreak Using Imported Cases and Climatic Factors in Guangzhou, 2014. PLoS Negl Trop Dis 9(5);e0003808.

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Western Hemisphere Countries and Territories with Autochthonous Transmission of Zika Virus: 01 JAN 2015 – 20 JUN 2016

	Confirmed	Suspected	Microcephaly Cases*	Reporting GBS†
Total	53,847	371,816	1,634	12 Countries

Country/Territory	Confirmed	Suspected	Microcephaly Cases*	Reporting GBS†
Argentina	20	1,681		
Aruba	17	0		
Barbados	7	316		
Belize	2	0		
Bolivia	11	102		
Bonaire	3	0		
Brazil	39,993	159,914	1,616**	Yes
Colombia	8,078	82,935	6**	Yes
Costa Rica	98	487		
Cuba	1	0		
Curaçao	73	0		
Dominica	47	437		
Dominican Republic	73	3,218		Yes
Ecuador	240	2,614		
El Salvador	46	10,476	1	Yes
French Guiana	483	7,540	1	Yes
Grenada	2	0		
Guadeloupe	379	10,180		
Guatemala	377	1,162		
Guyana	6	0		

Country/Territory	Confirmed	Suspected	Microcephaly Cases*	Reporting GBS†
Haiti	5	1,918		Yes
Honduras	44	22,705		Yes
Jamaica	21	1,408		
Martinique	12	28,910	4	Yes
Mexico	357	0		
Nicaragua	207	0		
Panama	276	863	5††	Yes
Paraguay	8	275		
Peru	77	118		
Puerto Rico	1,726	0	1	Yes
Saint Barthelemy	14	52		
Saint Lucia	4	27		
Saint Martin	180	690		
Saint Vincent and the Grenadines	8	0		
Sint Maarten	7	0		
Suriname	527	2,515		Yes
Trinidad and Tobago	40	0		
U.S. Virgin Islands	26	49		
Venezuela	352	31,224		Yes

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

**Brazil is currently investigating 3,007 suspected microcephaly cases as of 18 JUN; Colombia is currently investigating 81 suspected microcephaly cases as of 11 JUN.

† 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 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 16 JUN, and Zika cases reported by the health departments in Puerto Rico as of 2 JUN and USVI as of 14 JUN; and GBS cases and microcephaly cases reported to WHO as of 15 JUN, except for microcephaly cases reported by the MOHs of Brazil as of 18 JUN, Colombia as of 11 JUN, and French Guiana as of 20 JUN.

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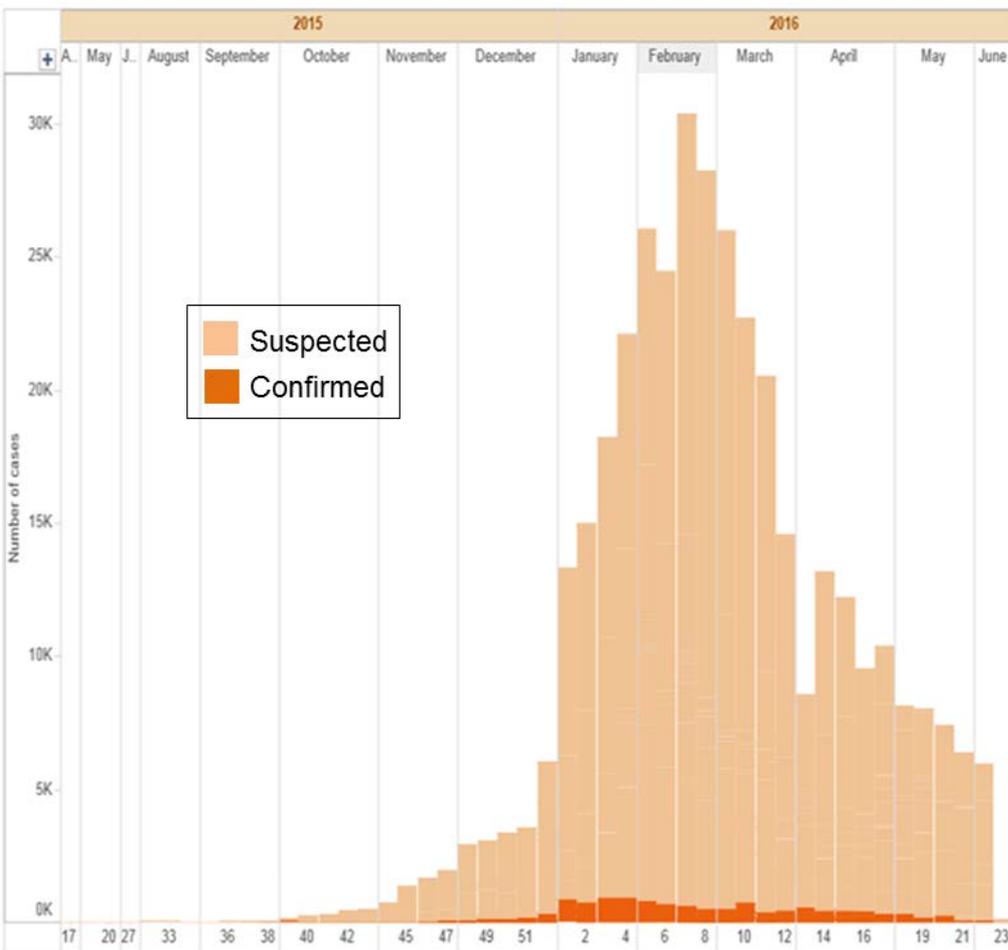
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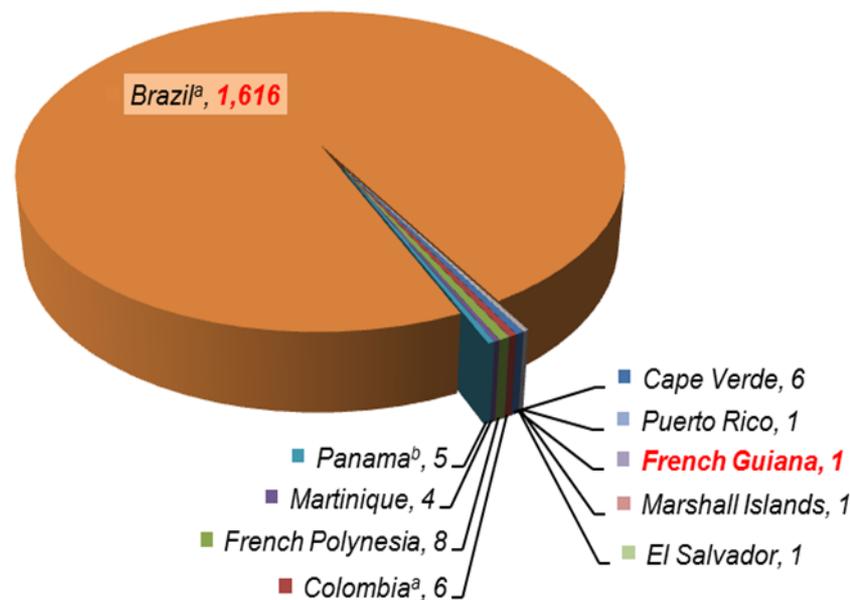
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Suspected and confirmed ZIKV cases in the Americas by Epidemiological Week, 1 MAY 2015 - 16 JUN 2016



Countries and Territories reporting microcephaly and/or CNS malformation cases potentially associated with ZIKV infection as of 20 JUN 2016



a) Brazil is currently investigating **3,007** suspected microcephaly cases as of **18 JUN**; Colombia is currently investigating **81** suspected microcephaly cases as of **11 JUN**.

b) [WHO reports](#) that it "is not possible to establish a link between" ZIKV infection and microcephaly in one of the reported Panama cases because of a lack of information and because the infection may have occurred too late in the pregnancy.

Source: PAHO, http://ais.paho.org/phis/viz/ed_zika_epicurve.asp

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