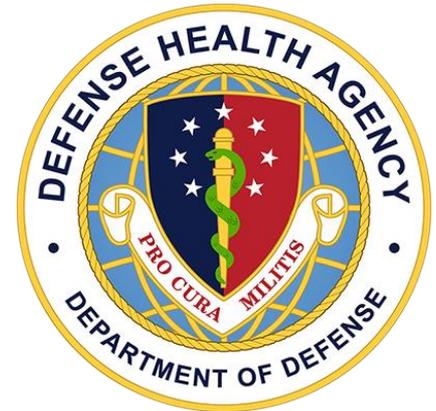


Department of Defense  
Armed Forces Health Surveillance Branch  
Global Zika Virus Surveillance Summary  
(3 AUG 2016)



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# DEPARTMENT OF DEFENSE (AFHSB)

## Global Zika Virus Surveillance Summary #29

### 3 AUG 2016 (next report 10 AUG 2016)



**DoD SURVEILLANCE:** As of 1 AUG, there are 56 confirmed Zika virus (ZIKV) cases, including 41 in Military Health System (MHS) beneficiaries. There is one confirmed case in a pregnant service member. All cases were acquired OCONUS, with 29 reported from Puerto Rico.

As per the AFHSB [updated guidance](#) for detecting and reporting DoD cases of ZIKV disease, 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 NIDDL, BAMC, and USAFSAM. The Triplex EUA assay is available at BAMC, CRDAMC, EAMC, LRMC, USAMRIID, WBAMC, MAMC, Brian Allgood ACH, NHRC, USAFSAM, WAMC, NAMRU-3, TAMC, WRNMMC, NIDDL, and NAMRU-6.

Strategy for Control of Zika Virus Transmitting Mosquitoes on Military Installations is available from the [Armed Forces Pest Management Board](#).

**CASE REPORT:** From 1 MAY 2015 to 3 AUG 2016, confirmed autochthonous vector-borne transmission of Zika virus (ZIKV) has been reported in 45 (+3, United States, Turks & Caicos, and Antigua & Barbuda) countries and territories in the Western Hemisphere, eight in PACOM, and two in AFRICOM. CDC has issued Alert Level 2, Practice Enhanced Precautions travel notices for 53, (+2, Turks & Caicos and Antigua & Barbuda) of these [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. Eleven countries have reported person-to-person transmission, most likely through sexual contact.

On 26 JUL, following a significant decrease in the number of newly detected cases, the Colombia MOH declared an end to the ZIKV epidemic in that country and lifted its recommendation that women delay pregnancy because of the virus. Elsewhere in the Americas, in the last four weeks of reported data up to 29 JUL, an upward trend in new cases has been observed in Costa Rica, Ecuador, Guatemala, Jamaica, Mexico, Nicaragua, Puerto Rico, Saint Barthelemy, Saint Martin, U.S. Virgin Islands, and Venezuela.

As of 27 JUL, CDC (ArboNet) reported 1,642 (+228) travel-related cases, 15 sexually transmitted cases, and one laboratory acquired case in 46 states and the District of Columbia since MAY 2015.

Since 29 JUL, Florida health officials have reported 14 ZIKV cases (11 confirmed and 3 probable) that were likely acquired through local mosquito transmission in the Wynwood area of Miami-Dade County, just north of downtown Miami. Six of the 14 cases were asymptomatic and were identified through a door-to-door sampling survey. A fifteenth case is under investigation. These are the only ZIKV cases likely resulting from local mosquito transmission in the 50 U.S. states and the District of Columbia. On 1 AUG, CDC issued a [health advisory](#) for pregnant women and women of reproductive age traveling to or living in the affected area. CDC continues to investigate a ZIKV infection in a caretaker of a fatal travel-related Zika case in Utah; vector or sexual transmission appear to have been ruled out.

As of 14 JUL, Puerto Rico DOH reported 7,296 (+1,714) confirmed cases (1 death), with 788 (+116) cases in pregnant women. The U.S. Virgin Islands (USVI) DOH reported 56 (+28) confirmed cases as of 28 JUL. According to CDC on 31 JUL, American Samoa has reported 44 confirmed cases, including six cases in pregnant women and one case of fetal demise. As of 21 JUL, the CDC's U.S. [pregnancy registry](#) has recorded 433 (+33) pregnant women with laboratory

Text updated from the previous report will be printed in red; items in (+xx) represent the change in number from the previous AFHSB summary (27 JUL 2016).

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

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**CASE REPORT (cont')**: evidence of a ZIKV infection in the 50 states and the District of Columbia; among these pregnancies, there have been **13 (+1)** infants born with birth defects and six fetal deaths due to birth defects. CDC is tracking **422 (+44)** additional pregnant women in the U.S. territories, with one fetal death due to birth defects.

**ZIKA AND MICROCEPHALY**: As of **1 AUG**, Brazil (**1,749 (+40)** cases), Cape Verde (11 cases), Colombia (21 cases), French Polynesia (8 cases), the Marshall Islands (1 case), Martinique (**8 (+2)** cases), El Salvador (3 cases), French Guiana (**2 (+1)** cases), Panama (5 cases), Puerto Rico (1 case), and **Paraguay (2 cases)** have reported microcephaly and other fetal malformations potentially associated with ZIKV infection or suggestive of a congenital infection. The U.S. (**19 (+1)**), Spain (2), and Slovenia (1) have reported travel associated microcephaly cases. 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 28 JUL](#), 15 countries (14 in the Western Hemisphere and French Polynesia) have reported Guillain-Barré syndrome (GBS) cases that may be associated with ZIKV. There have been five GBS cases linked to ZIKV reported in the continental U.S. and **23 (+2)** cases in Puerto Rico.

**USG RESPONSE**: On **1 AUG**, CDC released [advice for people living in or traveling to Wynwood](#), the neighborhood in Miami, FL, with local transmission. On **31 JUL**, CDC updated its [interim plan for response activities](#) that would occur after local ZIKV transmission has been identified in the continental United States and Hawaii. CDC released two guidance updates on 25 JUL, one for [health care providers caring for pregnant women with possible ZIKV exposure](#) and one on the [prevention of sexual transmission of ZIKV](#). On 23 JUL, FDA issued [Donor Screening Recommendations to Reduce the Risk of Transmission of Zika Virus by Human Cells, Tissues, and Cellular and Tissue-Based Products](#). Based on its analysis of the country-specific risk of ZIKV importation and sustained transmission, [CDC reported](#) on 13 JUL that travel to the 2016 Olympic and Paralympic Games, does not "pose a unique or substantive risk for mosquito-borne transmission of ZIKV in excess of that posed by non-Games travel" for most countries. Additional data, guidance, and information from CDC is available on its [ZIKV](#) web pages.

**GLOBAL RESPONSE**: WHO issued a revised [Strategic Response Plan](#) on 17 JUN that places a greater focus on preventing and managing medical complications caused by ZIKV infection. Following the third meeting of the [WHO Emergency Committee](#) concerning ZIKV and observed increases in neurological disorders and neonatal malformations on 14 JUN, WHO said that the clusters of microcephaly cases and other neurological disorders continue to constitute a Public Health Emergency of International Concern (PHEIC). The Committee said 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. PAHO has created a [searchable database](#) of published primary research and protocols. For additional information, visit the [WHO](#) and [PAHO](#) Zika web pages.

**MEDICAL COUNTERMEASURES**: On 26 JUL, Inovio Pharmaceuticals announced that it had started a phase I trial of its Zika DNA vaccine (GLS-5700). The trial will test safety, tolerability, and immunogenicity in 40 human volunteers. On 28 JUN, Nature reported on two other vaccine candidates, including one developed at the Walter Reed Army Institute of Research (WRAIR), that protected 100% of tested mice from ZIKV infection four and eight weeks after a single injection. [WRAIR will co-develop](#) its vaccine with Sanofi Pasteur.

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All information has been verified unless noted otherwise. Additional sources include: Sanofi Pasteur, Radio New Zealand, Brazil MOH, and Colombia MOH

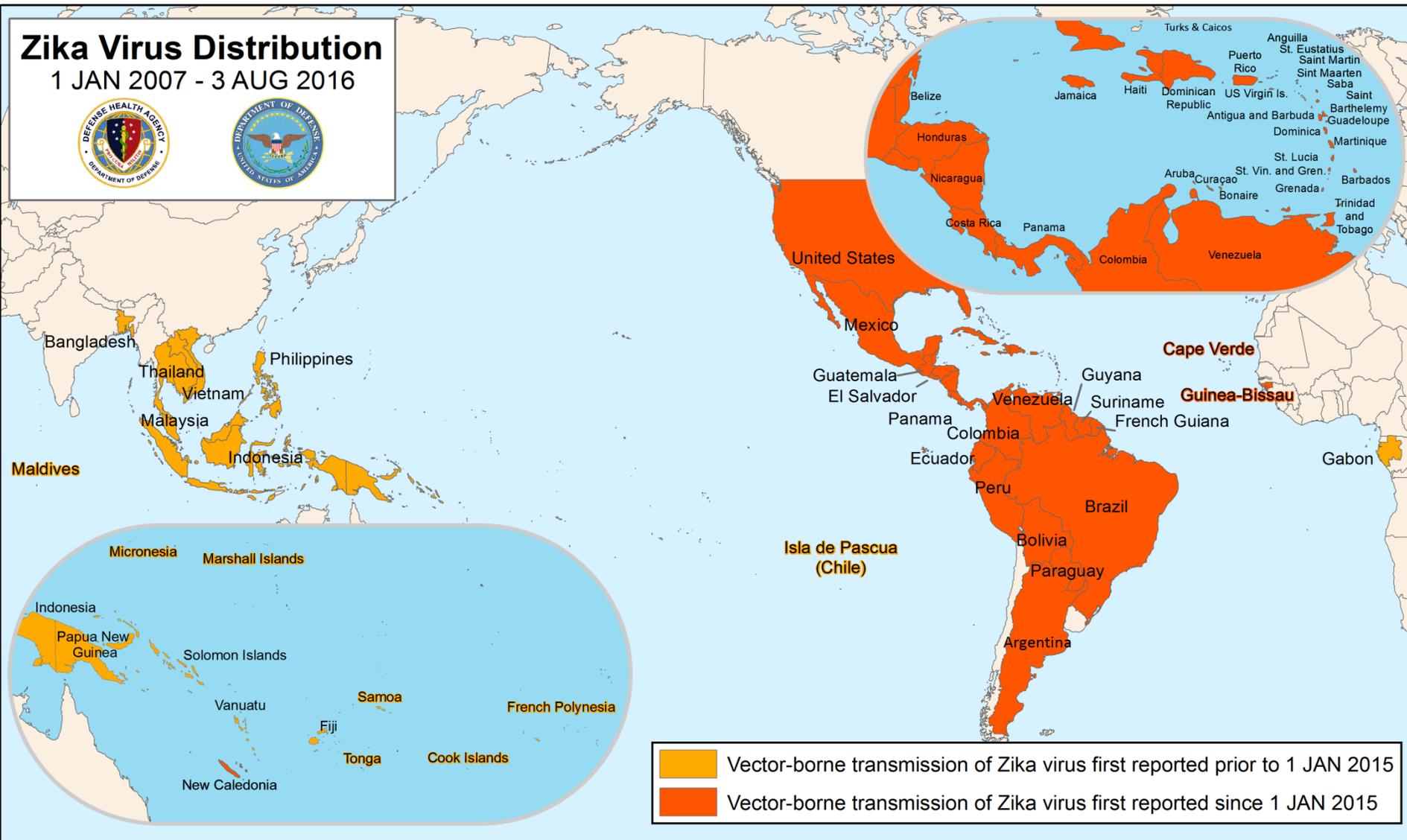
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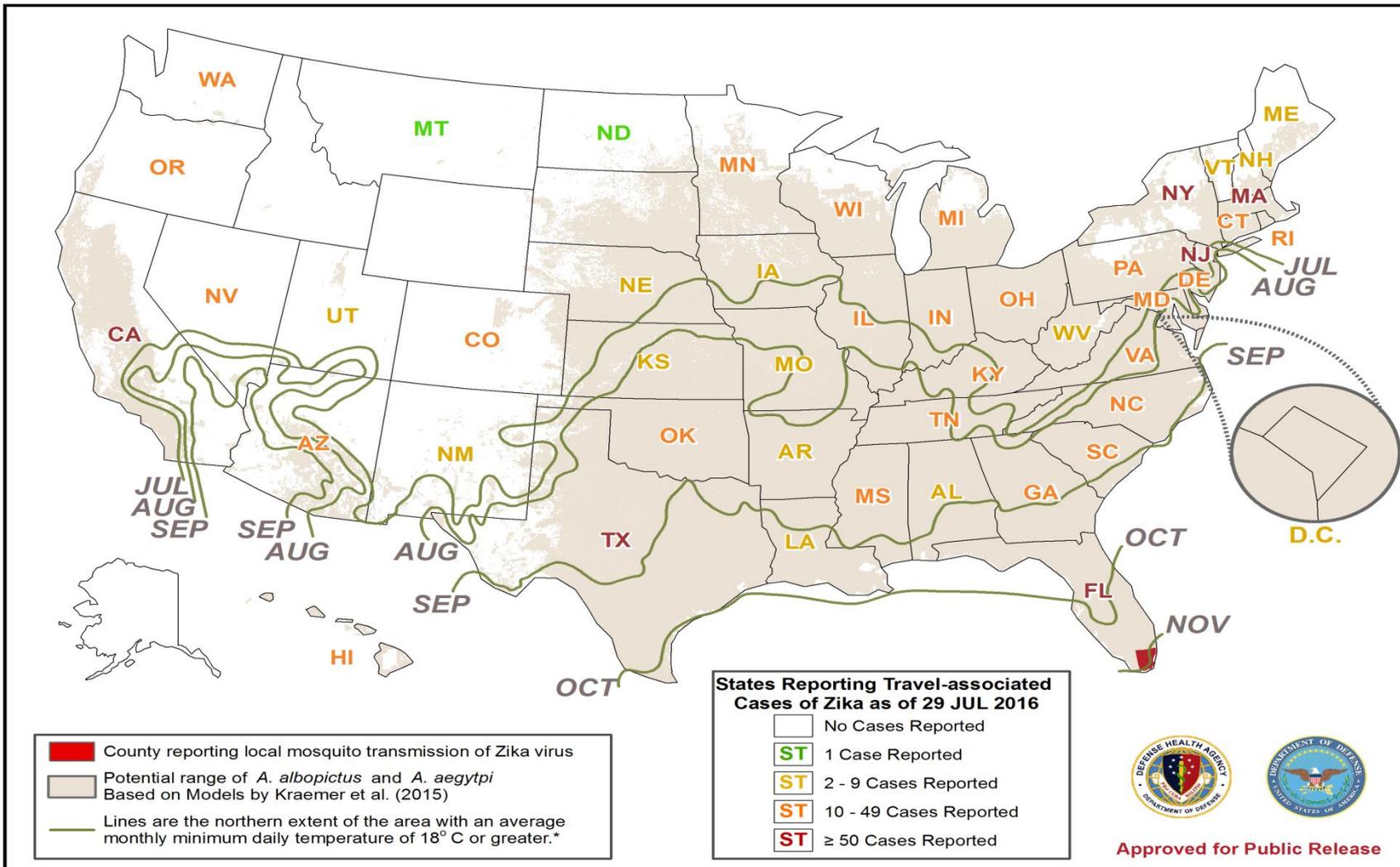
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# DEPARTMENT OF DEFENSE (AFHSB)

## Overlap of States Reporting Imported Zika Cases and the Estimated Range of Mosquito Vectors and Transmission Suitability

### 3 AUG 2016



This version of the map shows that after JUL the northern extent begins to move southward.

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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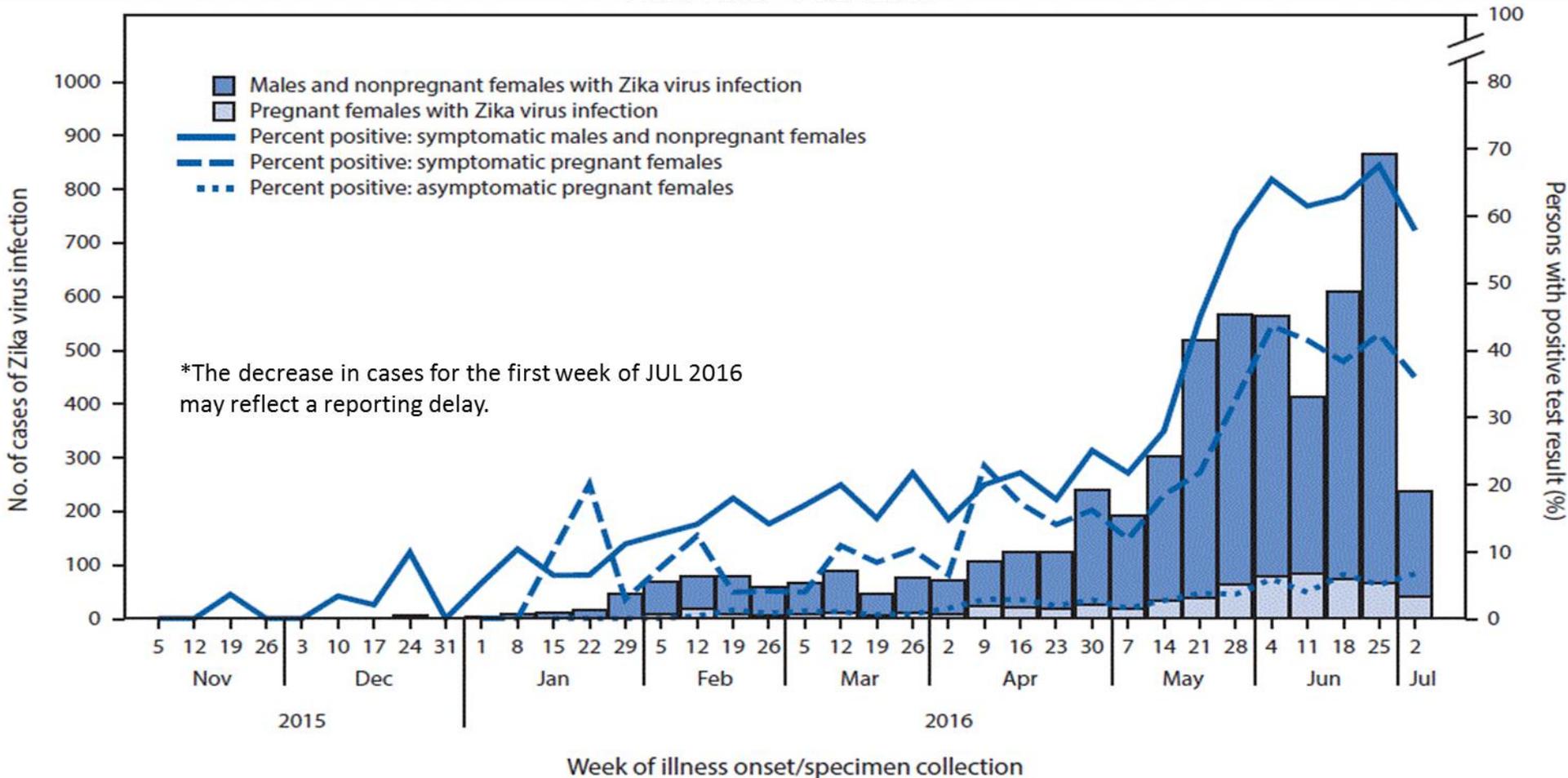
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**Cases of confirmed and presumptive Zika virus infection (N = 5,582), by pregnancy status and week of illness onset or specimen collection, and percentage of persons with test results positive for Zika virus — Puerto Rico  
1 NOV 2015 – 7 JUL 2016\***



Source: Update: Ongoing Zika Virus Transmission — Puerto Rico, November 1, 2015–July 7, 2016. MMWR, 29 JUL 2016

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#### Western Hemisphere Countries<sup>‡</sup> and Territories with Autochthonous Transmission of Zika Virus: 01 JAN 2015 – 28 JUL 2016

	Confirmed	Suspected	Microcephaly Cases*	Reporting GBS <sup>†</sup>
<b>Total</b>	<b>91,207</b>	<b>436,106</b>	<b>1,789</b>	<b>14 Countries</b>

Country/Territory	Confirmed	Suspected	Microcephaly Cases*	Reporting GBS <sup>†</sup>
Anguilla	2	15		
Antigua & Barbuda	1	0		
Argentina	23	1,725		
Aruba	21	0		
Barbados	18	770		
Belize	5	0		
Bolivia	126	0		
Bonaire, St. Eustatius, Saba	9	0		
Brazil	66,180	165,932	1,749**	Yes
Colombia	8,682	90,895	21**	Yes
Costa Rica	238	816		
Cuba	1	0		
Curaçao	208	0		
Dominica	65	708		
Dominican Republic	154	4,660		Yes
Ecuador	1,481	1,354		
El Salvador	54	10,861	3	Yes
French Guiana	483	9,090	2	Yes
Grenada	2	0		
Guadeloupe	379	23,330		Yes
Guatemala	484	2,133		

Country/Territory	Confirmed	Suspected	Microcephaly Cases*	Reporting GBS <sup>†</sup>
Guyana	6	0		
Haiti	5	2,125		Yes
Honduras	131	28,720		Yes
Jamaica	55	2,845		Yes
Martinique	12	33,460	6	Yes
Mexico	1,115	0		
Nicaragua	736	0		
Panama	295	1,262	5 <sup>††</sup>	Yes
Paraguay	8	275	2	
Peru	89	0		
Puerto Rico	7,296	0	1	Yes
Saint Barthelemy	61	270		
Saint Lucia	13	319		
Saint Martin	200	1,580		
Saint Vincent & the Grenadines	8	0		
Sint Maarten	25	0		
Suriname	697	2,676		Yes
Trinidad and Tobago	149	0		
Turks & Caicos	2	0		
U.S. Virgin Islands	56	400		
Venezuela	1,632	49,885		Yes

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

\*\* Brazil is currently investigating 3,062 suspected microcephaly cases as of 23 JUL; Colombia is currently investigating 207 suspected microcephaly cases as of 23 JUL.

† 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 cases due to a lack of information, specifically trimester of infection.

‡ Excludes the U.S.; this data can be found elsewhere in this report.

All data was obtained from PAHO, Ministries of Health, and Departments of Health unless otherwise noted.

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