

SITUATION REPORT

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ZIKA VIRUS MICROCEPHALY GUILLAIN-BARRÉ SYNDROME 11 AUGUST 2016

- As of 10 August 2016, 69 countries and territories (Fig. 1, Table 1) have reported evidence of mosquito-borne Zika virus transmission since 2007 (66 of these countries and territories have reported evidence of mosquito-borne Zika virus transmission since 2015):
 - 52 countries and territories with a first reported outbreak from 2015 onwards (Table 1).
 - Four countries are classified as having possible endemic transmission or have reported evidence of local mosquito-borne Zika infections in 2016.
 - 13 countries and territories have reported evidence of local mosquito-borne Zika infections in or before 2015, but without documentation of cases in 2016, or with the outbreak terminated.
- The Cayman Islands, a British Overseas Territory in the Caribbean, is the latest territory to report locally-acquired mosquito borne Zika virus infection.
- Since February 2016, 11 countries have reported evidence of person-to-person transmission of Zika virus, probably via a sexual route (Table 2).
- As of 10 August 2016, 15 countries or territories have reported microcephaly and other central nervous system (CNS) malformations potentially associated with Zika virus infection or suggestive of congenital infection. Canada is the latest country to report a case of congenital malformation associated with a travel-related case of Zika virus infection. Four of the 15 total countries reported microcephaly cases born from mothers in countries with no endemic Zika virus transmission but who reported recent travel history to Zika-affected countries in the WHO Region of the Americas (Table 3).
- As of 10 August 2016, the United States Centers for Disease Control and Prevention (US-CDC) reported 15 live-born infants with birth defects and six pregnancy losses with birth defects with laboratory evidence of Zika virus infection.¹
- As of 10 August 2016, 16 countries and territories worldwide have reported an increased incidence of Guillain-Barré syndrome (GBS) and/or laboratory confirmation of a Zika virus infection among GBS cases (Table 4). Grenada is the latest country to report a case of GBS associated with a confirmed Zika virus infection.
- In Guinea-Bissau, on 29 June 2016, Institute Pasteur Dakar (IPD) laboratory technicians confirmed that three of 12 samples tested positive for Zika by PC-R. All 12 samples tested

¹ https://www.cdc.gov/zika/geo/pregnancy-outcomes.html

negative against IgM Zika. One additional sample from a recent case also tested positive for Zika virus infection. All four samples were sent to IPD on 1 July for gene sequencing and the results are pending. Results from the 22 additional samples collected from the Bijagos archipelago and sent to IPD are negative with ELISA and PCR testing. The same samples were also sent to Dakar for confirmation. A further total of 12 new samples were collected and results are still pending.

- Two cases of microcephaly have been reported in the Western region of Gabu in Guinea-Bissau. The family members of the two children with microcephaly have not travelled outside Guinea-Bissau. The investigations regarding these two cases are ongoing. Trainings for regional health staff on the Zika case definition and other areas are planned to help ensure that cases are detected efficiently and effectively.
- The joint mission by staff from the WHO Regional Office for Africa and from WHO headquarters to Guinea-Bissau has concluded and priority activities and gaps were identified as the following: additional financial resources to reinforce leadership and coordination mechanisms of the Emergency operations Centre (EOC); reinforcement of epidemiologic and entomologic surveillance systems; increasing laboratory capacity at three levels; strengthening of response to Zika cases in terms of detection, community involvement and risk communication; and continued monitoring of Zika virus and its complications.
- Zika virus test kits have been made available by the local authorities at the Central Public Health Laboratory in Rio de Janeiro in Brazil and symptomatic athletes, volunteers, visitors and residents are encouraged to get tested.
- WHO has developed advice and information on diverse topics in the context of Zika virus.^{2,3}

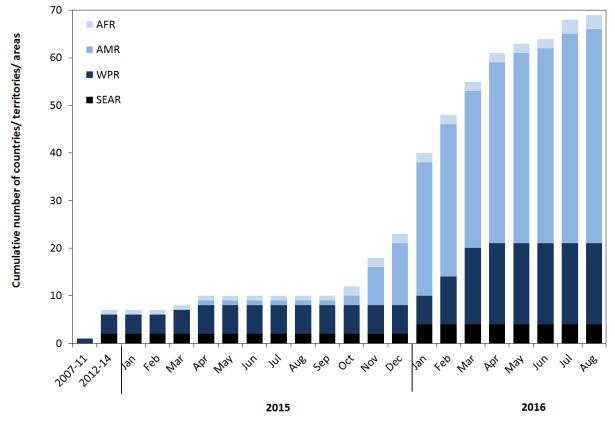
Risk assessment

Overall, the global risk assessment has not changed. Zika virus continues to spread geographically to areas where competent vectors are present. Although a decline in cases of Zika infection has been reported in some countries, or in some parts of countries, vigilance needs to remain high. At this stage, based on the evidence available, there is no overall decline in the outbreak.

³ http://www.who.int/emergencies/zika-virus/en/; http://www.who.int/risk-communication/zika-virus/en/

² http://www.who.int/csr/resources/publications/zika/en/

Figure 1. Cumulative number of countries, territories and areas by WHO region⁴ reporting mosquito-borne Zika virus transmission in years (2007–2014), and monthly from 1 January 2015 to 10 August 2016



⁴ http://www.who.int/about/regions/en/

Table 1. Countries and territories reporting mosquito-borne Zika virus transmission

Classification	WHO Regional Office	Country / territory / area	Total
	AFRO	Cabo Verde; Guinea-Bissau	2
Category 1: Countries with a first reported outbreak from 2015 onwards	AMRO/PAHO	Anguilla; Antigua and Barbuda; Argentina; Aruba; Barbados; Belize; Bolivia (Plurinational State of), Bonaire, Sint Eustatius and Saba – Netherlands*; Brazil; Cayman Islands; Colombia; Costa Rica; Cuba; Curaçao; Dominica; Dominican Republic; Ecuador; El Salvador; French Guiana; Grenada; Guadeloupe; Guatemala; Guyana; Haiti; Honduras; Jamaica; Martinique; Mexico; Nicaragua; Panama; Paraguay; Peru; Puerto Rico; Saint Barthélemy; Saint Lucia; Saint Martin; Saint Vincent and the Grenadines; Sint Maarten; Suriname; Trinidad and Tobago; Turks and Caicos; United States of America; United States Virgin Islands; Venezuela (Bolivarian Republic of)	44
	WPRO	American Samoa; Fiji; Marshall Islands; Micronesia (Federated States of); Samoa; Tonga	6
Subtotal			52
with possible endemic transmission or evidence	SEARO	Indonesia; Thailand	2
	WPRO	Philippines; Viet Nam	2
Subtotal			4
Category 3: Countries	AFRO	Gabon	1
with evidence of local mosquito-borne Zika	PAHO/AMRO	ISLA DE PASCUA — Chile**	1
	SEARO	Bangladesh; Maldives	2
documentation of cases in	WPRO	Cambodia; Cook Islands**; French Polynesia**; Lao People's Democratic Republic; Malaysia; New Caledonia; Papua New Guinea; Solomon Islands; Vanuatu	9
Subtotal Total			13 69

^{*}This includes confirmed Zika virus cases reported in BONAIRE – Netherlands, SINT EUSTATIUS and SABA – Netherlands.

Categories are defined as follows (Fig. 2):

Category 1: Countries with a first reported outbreak from 2015 onwards

- A laboratory confirmed, autochthonous, mosquito-borne case of Zika virus infection in an area where there is no evidence
 of circulation of the virus in the past (prior 2015), whether it is detected and reported by the country itself or by another
 state party diagnosing returning travellers OR
- A laboratory confirmed, autochthonous, mosquito-borne case of Zika virus infection in an area where transmission has
 been previously interrupted. The assumption is that the size of the susceptible population has built up to a sufficient level
 to allow transmission again; the size of the outbreak will be a function of the size of the susceptible population OR
- An increase of the incidence of laboratory confirmed, autochthonous, mosquito-borne Zika virus infection in areas where
 there is on-going transmission, above two standard deviations of the baseline rate, or doubling the number of cases over a
 4-week period. Clusters of febrile illnesses, in particular when epidemiologically-linked to a confirmed case, should be
 microbiologically investigated.

Category 2: Countries with possible endemic transmission or evidence of local mosquito-borne Zika infections in 2016 with the reporting period beginning in 2007

- Countries or territories that have reported an outbreak with consistent presence of laboratory confirmed, autochthonous, mosquito-borne cases of Zika virus infection 12 months after the outbreak OR
- Countries or territories where Zika virus has been circulating for several years with consistent presence of laboratory confirmed, autochthonous, mosquito-borne cases of Zika virus infection or evidence of local mosquito-borne Zika infections in 2016. Reports can be from the country or territory where infection occurred, or from a third party where the case is first recorded according to the International Health Regulations (IHR 2005). Countries with evidence of infection prior to 2007 are listed in http://www.who.int/bulletin/online_first/16-171082.pdf

Category 3: Countries with evidence of local mosquito-borne Zika infections in or before 2015, but without documentation of cases in 2016, or outbreak terminated with the reporting period beginning in 2007

 Absence of confirmed cases over a 3-month period in a specific geographical area with climatic conditions suitable for year-round arbovirus transmission, or over a 12-month period in an area with seasonal vector activity.

^{**}These countries and territories have not reported Zika virus cases in 2015 or 2016.

Figure 2. Country categorization according to dates of first and last report of confirmed Zika virus

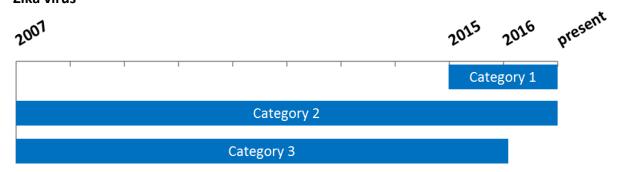


Table 2. Countries reporting non mosquito-borne Zika virus transmission since February 2016

Classification	WHO Regional Office	Country / territory / area	Total
Countries with evidence of person-to-person transmission of	AIVIK()/PAH()	Argentina, Canada, Chile, Peru, United States of America	5
Zika virus, other than mosquito-	EURO	France, Germany, Italy, Portugal, Spain	5
borne transmission	WPRO	New Zealand	1
Total			11

World Health Organization

Figure 3. Global spread of Zika virus, 2013-2016

ISLA DE PASCUA – Chile is not displayed in the map given uncertainty about the date of onset of the outbreak there. Circulation of Zika virus in Thailand, Cambodia and Lao People's Democratic Republic started before 2013. Countries where sexual transmission occurred are not represented in this map. Available information does not permit measurement of the risk of infection in any country; the variation in transmission intensity among countries is therefore NOT represented on this map. Zika virus is not necessarily present throughout the countries/territories shaded in this map.

Table 3. Countries, territories and areas reporting microcephaly and/or CNS malformation cases potentially associated with Zika virus infection

Reporting country or territory	Number of microcephaly and/or CNS malformation cases suggestive of congenital Zika infections or potentially associated with a Zika virus infection	Probable location of infection
Brazil	1773 ⁵	Brazil
Cabo Verde	9	Cabo Verde
Canada	1	Undetermined
Colombia	22 ⁶	Colombia
El Salvador	4	El Salvador
French Guiana	2 ⁷	French Guiana
French Polynesia	8	French Polynesia
Marshall Islands	1	Marshall Islands
Martinique	8 ⁸	Martinique
Panama	5	Panama
Paraguay	2 ⁹	Paraguay
Puerto Rico	1	Puerto Rico
Slovenia	1 ¹⁰	Brazil
Spain	2	Colombia, Venezuela (Bolivarian Republic of)
United States of America*	21 ¹¹	Undetermined**

^{*} US-CDC has modified the way information is displayed. To protect the privacy of the women and children affected by Zika, US-CDC is not reporting individual state, tribal, territorial or jurisdictional level data.

Table 4. Countries, territories or areas reporting Guillain-Barré syndrome (GBS) potentially associated with Zika virus infection

Classification	Country / territory / area
	Brazil, Colombia, Dominican Republic, El
Reported increase in incidence of GBS cases, with at	Salvador*, French Guiana, French Polynesia,
least one GBS case with confirmed Zika virus infection	Honduras, Jamaica, Martinique, Suriname**,
	Venezuela (Bolivarian Republic of)
No increase in GBS incidence reported, but at least one	Grenada ¹² , Guadeloupe ¹³ , Haiti, Panama, Puerto
GBS case with confirmed Zika virus infection	Rico

^{*}GBS cases with previous history of Zika virus infection were reported by the International Health Regulations (2005) National Focal Point in United States of America.

^{**}The probable locations of three of the infections were Brazil (1 case), Haiti (1 case) and Mexico, Belize or Guatemala (1 case).

^{**}One case living in continental Netherlands was diagnosed in mid-January 2016 at the Erasmus Academic Medical Center and reported by the Netherlands.

 $[\]frac{5}{\text{http://portalsaude.saude.gov.br/images/pdf/2016/agosto/04/Informe-Epidemiol--gico-n---37--SE-30-2016--02ago2016-19h14m.pdf}{\frac{1}{2}}$

⁶ http://www.ins.gov.co/boletin-epidemiologico/Boletn%20Epidemiolgico/2016%20Boletin%20epidemiologico%20semana%2030.pdf

⁷ http://www.invs.sante.fr/Publications-et-outils/Points-epidemiologiques/Tous-les-numeros/Antilles-Guyane/2016/Situation-epidemiologique-du-virus-Zika-aux-Antilles-Guyane.-Point-au-21-juillet-2016

http://www.invs.sante.fr/Publications-et-outils/Points-epidemiologiques/Tous-les-numeros/Antilles-Guyane/2016/Situation-epidemiologique-du-virus-Zika-aux-Antilles-Guyane.-Point-au-21-juillet-2016

⁹ http://www.mspbs.gov.py/v3/paraguay-reporta-sus-dos-primeros-casos-de-microcefalia-asociados-al-zika/

¹⁰ http://www.nejm.org/doi/pdf/10.1056/NEJMoa1600651

¹¹ http://www.cdc.gov/zika/geo/pregnancy-outcomes.html

¹² http://health.gov.gd/index.php?option=com_content&view=article&id=434:nine-confirmed-zika-cases-in-grenada&catid=83:latest-news&Itemid=932&lang=en

¹³ <a href="http://www.invs.sante.fr/Publications-et-outils/Points-epidemiologiques/Tous-les-numeros/Antilles-Guyane/2016/Situation-epidemiologique-du-virus-Zika-aux-Antilles-Guyane.-Point-au-23-juin-2016