World Health Organization

SITUATION REPORT

ZIKA VIRUS
MICROCEPHALY
GUILLAIN-BARRÉ SYNDROME
27 OCTOBER 2016

DATA AS OF 26 OCTOBER 2016

KEY UPDATES

- Countries and territories reporting mosquito-borne Zika virus infections for the first time in the past week:
  - None
- Countries and territories reporting microcephaly and other central nervous system (CNS) malformations potentially associated with Zika virus infection for the first time in the past week:
  - None
- Countries and territories reporting Guillain-Barré syndrome (GBS) cases associated with Zika virus infection for the first time in the past week:
  - None
- The Ministry of Health of Viet Nam reported a case of microcephaly, for which testing is underway to determine the cause.
- The WHO *Zika Virus Research Agenda* has been published[1]. The goal of the Agenda is to support the gathering of evidence to strengthen essential public health guidance to prevent and limit the impact of Zika virus and its complications. The Research Agenda identifies critical areas of research for which WHO is uniquely placed to implement and coordinate global action.
- The quarterly update of the Zika Strategic Response Plan has been published[2]. This update provides key information on the epidemiological situation, response, and updated funding information for WHO and partners.

ANALYSIS

- Overall, the global risk assessment has not changed.

SITUATION

- Seventy-three countries and territories (Fig. 1, Table 1) have reported evidence of mosquito-borne Zika virus transmission since 2007 (67 with reports from 2015 onwards), of which:

[1] http://www.who.int/reproductivehealth/zika/zika-virus-research-agenda/en/
[2] http://apps.who.int/iris/bitstream/10665/250626/1/WHO-ZIKV-SRF-16.4-eng.pdf?ua=1

- Fifty-six with a reported outbreak from 2015 onwards (Fig. 2, Table 1).
- Seven with having possible endemic transmission or evidence of local mosquito-borne Zika infections in 2016.
    - Solomon Islands was moved from category 3 last week. However, the Zika virus infection reported by Australia in a returning traveller was subsequently determined to be a probable case, rather than a confirmed case. Solomon Islands has therefore been moved back to category 3.
- Ten with evidence of local mosquito-borne Zika infections in or before 2015, but without documentation of cases in 2016, or with the outbreak terminated.
    - Solomon Islands has been reclassified back into this category.

- Twelve countries have reported evidence of person-to-person transmission of Zika virus (Table 2).
- Twenty-three countries or territories have reported microcephaly and other CNS malformations potentially associated with Zika virus infection, or suggestive of congenital infection (Table 3).
- Nineteen countries and territories have reported an increased incidence of GBS and/or laboratory confirmation of a Zika virus infection among GBS cases (Table 4).
- On 17 October 2016, the Ministry of Health of Viet Nam reported that a 4-month-old child had been diagnosed with microcephaly. Testing is being done to determine the potential cause of this microcephaly.
- In Guinea-Bissau, five cases of microcephaly detected beginning in April 2016 are being investigated.
- Operational updates:
    - A national conference on Zika virus awareness is being organized from 27 to 28 October in Pattaya, Thailand.
    - The Government of the Philippines is hosting the “One Philippines against Zika” national summit on 28 October. The objective is to improve awareness of Zika virus, disseminate guidelines, and promote collaboration and commitment among different stakeholders.
    - A regional technical meeting on the current epidemiological situation in the Americas in relation to Zika and other arboviruses was held in Cuba from 20 to 21 October.
    - A technical meeting on psychosocial support, rehabilitation, and clinical management of neurological complications related to Zika virus infection was held in Washington DC, United States of America, from 17 to 19 October.
    - In Bolivia, Mosquito Awareness week is taking place from 24 to 28 October, under the leadership of the ministry of health and with support from WHO/ PAHO and partners.
    - Also in Bolivia, an interagency meeting on progress in the response to Zika is planned for 1 November.

Table 1. Countries and territories that have reported mosquito-borne Zika virus transmission

Classification	WHO Regional Office	Country / territory	Total
Category 1: Countries with a reported outbreak from 2015 onwards[#]	**AFRO**	Cabo Verde; Guinea-Bissau	**2**
	AMRO/PAHO	Anguilla; Antigua and Barbuda; Argentina; Aruba; Bahamas; Barbados; Belize; Bolivia (Plurinational State of); Bonaire, Sint Eustatius and Saba – Netherlands; Brazil; British Virgin Islands; 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 Kitts and Nevis; 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)	**47**
	WPRO	American Samoa; Fiji; Marshall Islands; Micronesia (Federated States of); Samoa; Singapore; Tonga	**7**
Subtotal			**56**
Category 2: Countries with possible endemic transmission or evidence of local mosquito-borne Zika infections in 2016	**SEARO**	Indonesia; Maldives; Thailand	**3**
	WPRO	Malaysia; New Caledonia; Philippines; Viet Nam	**4**
Subtotal			**7**
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	**AFRO**	Gabon**	**1**
	PAHO/AMRO	ISLA DE PASCUA – Chile**	**1**
	SEARO	Bangladesh**	**1**
	WPRO	Cambodia**; Cook Islands**; French Polynesia**; Lao People's Democratic Republic; Papua New Guinea; Solomon Islands; Vanuatu	**7**
Subtotal			**10**
Total			**73**

[#]The wording has been revised in recognition of the fact that a country that has had a first outbreak since 2015 and in which that outbreak has since terminated, may again report a new outbreak or cases which would qualify the country to be re-included in category 1.

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

Category 1: Countries with a 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/volumes/94/9/16-171082.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.*

Figure 1. Cumulative number of countries and territories by WHO region[3] reporting mosquito-borne Zika virus transmission for the first time by year (2007–2014), and by month from 1 January 2015 to 26 October 2016

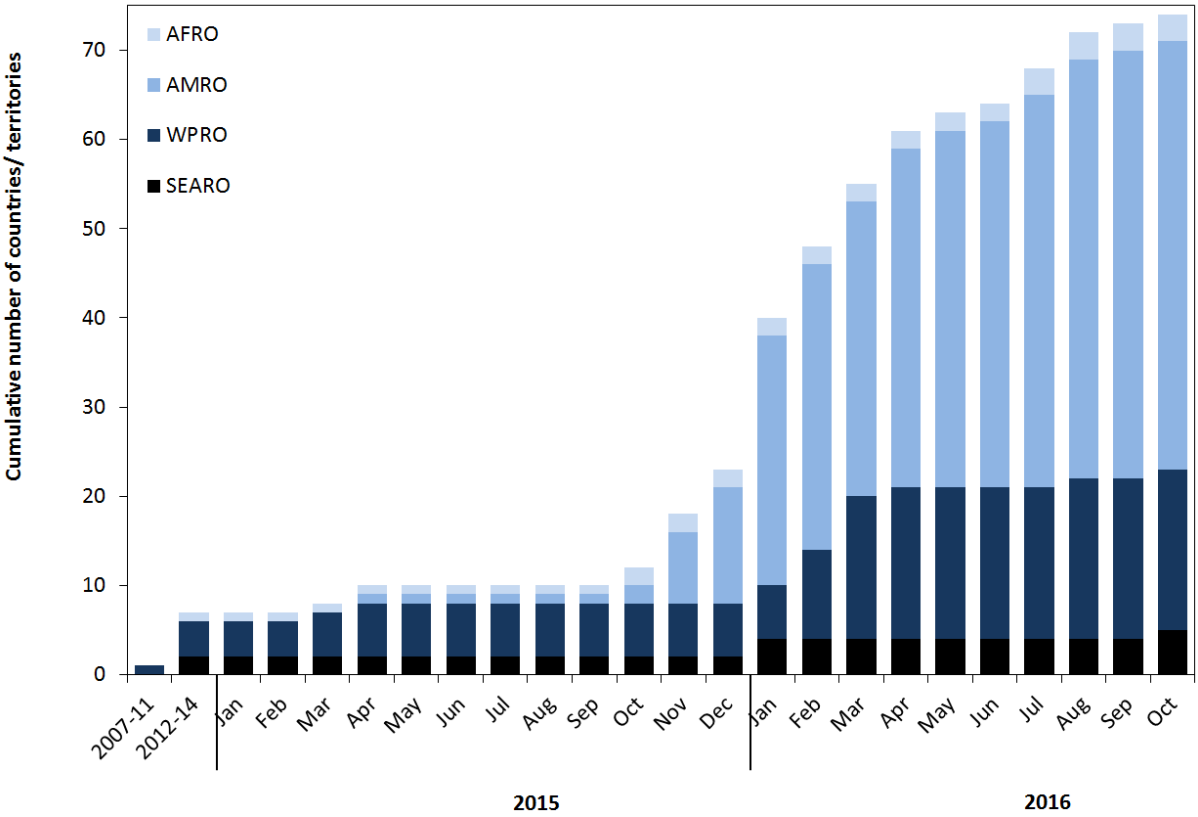
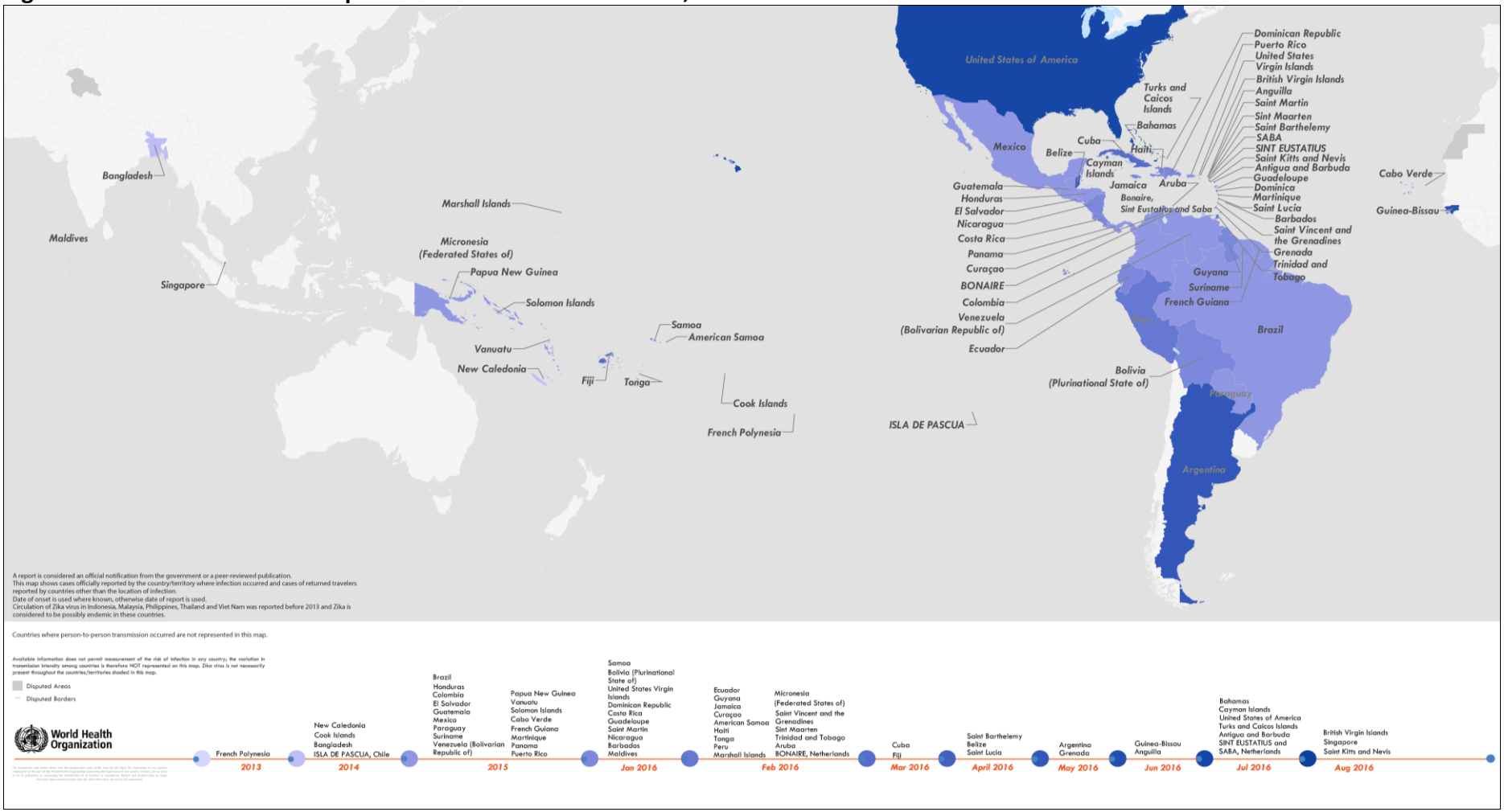


Table 2. Countries reporting person-to-person Zika virus transmission since February 2016

Classification	WHO Regional Office	Country / territory	Total
Countries with evidence of person-to-person transmission of Zika virus, other than mosquito-borne transmission	**AMRO/PAHO**	Argentina, Canada, Chile, Peru, United States of America	**5**
	EURO	France, Germany, Italy, Netherlands, Portugal, Spain	**6**
	WPRO	New Zealand	**1**
Total			**12**

[3] http://www.who.int/about/regions/en/

Figure 2. New detection of mosquito-borne Zika virus infections, 2013–2016



A report is considered an official notification from the government or a peer-reviewed publication. This map shows cases officially reported by the country/territory where infection occurred, and cases of returned travellers reported by countries other than the location of infection. Date of onset is used where known, otherwise date of report is used. Circulation of Zika virus in Indonesia, Malaysia, Philippines, Thailand and Viet Nam was reported before 2013, and Zika is considered to be possibly endemic in these countries. Countries where person-to-person 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 and territories that have reported 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	2063[4]	Brazil
Cabo Verde	9	Cabo Verde
Canada	1	Undetermined
Costa Rica	1	Costa Rica
Colombia	47[5]	Colombia
Dominican Republic	10[6]	Dominican Republic
El Salvador	4	El Salvador
French Guiana	10[7]	French Guiana
French Polynesia	8	French Polynesia
Grenada	1	Grenada
Guatemala	15[8]	Guatemala
Haiti	1	Haiti
Honduras	1	Honduras
Marshall Islands	1	Marshall Islands
Martinique	12[6]	Martinique
Panama	5	Panama
Paraguay	2[9]	Paraguay
Puerto Rico	2[10]	Puerto Rico
Slovenia	1[11]	Brazil
Spain	2	Colombia, Venezuela (Bolivarian Republic of)
Suriname	1	Suriname
Thailand	2	Thailand
United States of America	28[12]	Undetermined*

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

Table 4. Countries and territories that have reported Guillain-Barré syndrome (GBS) potentially associated with Zika virus infection

Classification	Country / territory
Reported increase in incidence of GBS cases, with at least one GBS case with confirmed Zika virus infection	Brazil, Colombia, Dominican Republic, El Salvador*, French Guiana, French Polynesia, Guadeloupe[13], Honduras, Jamaica, Martinique, Puerto Rico[14], Suriname**, Venezuela (Bolivarian Republic of)
No increase in GBS incidence reported, but at least one GBS case with confirmed Zika virus infection	Costa Rica, Grenada[15], Guatemala, Haiti, Mexico, Panama

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

***One case living in continental Netherlands was diagnosed in mid-January 2016 and reported by the Netherlands.*

[4] http://portalsaude.saude.gov.br/images/pdf/2016/outubro/21/Informe-Epidemiologico-n---48--SE-41-2016--19out2016-10h00.pdf
[5] http://www.ins.gov.co/boletin-epidemiologico/Boletn%20Epidemiolgico/2016%20Boletin%20epidemiologico%20semana%2041.pdf
[6] http://digepisalud.gob.do/documentos/?drawer=Boletines%20epidemiol%C3%B3gicos*Boletines%20semanales*2016
[7] http://invs.santepubliquefrance.fr/fr/Publications-et-outils/Points-epidemiologiques/Tous-les-numeros/Antilles-Guyane/2016/Situation-epidemiologique-du-virus-Zika-aux-Antilles-Guyane.-Point-au-6-octobre-2016
[8] http://www.mspas.gob.gt/index.php/en/mspas/noticias/1239-comunicado-ante-la-epidemia-del-virus-zika.html?tmpl=component&print=1&layout=default&page=
[9] http://www.mspbs.gov.py/v3/paraguay-reporta-sus-dos-primeros-casos-de-microcefalia-asociados-al-zika/
[10] http://www.salud.gov.pr/Estadisticas-Registros-y-Publicaciones/Informes%20Arbovirales/Reporte%20ArboV%20semana%2038-2016.pdf
[11] http://www.nejm.org/doi/pdf/10.1056/NEJMoa1600651
[12] http://www.cdc.gov/zika/geo/pregnancy-outcomes.html
[13] http://invs.santepubliquefrance.fr//Publications-et-outils/Points-epidemiologiques/Tous-les-numeros/Antilles-Guyane/2016/Situation-epidemiologique-du-virus-Zika-aux-Antilles-Guyane.-Point-au-15-septembre-2016
[14] http://www.salud.gov.pr/Estadisticas-Registros-y-Publicaciones/Informe%20Sndrome%20GillainBarr/Informe%20de%20Casos%20del%20S%C3%ADndrome%20de%20Guillain-Barr%C3%A9_7Oct2016.pdf
[15] 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