

SITUATION REPORT

ZIKA VIRUS MICROCEPHALY GUILLAIN-BARRÉ SYNDROME 1 DECEMBER 2016

DATA AS OF 30 NOVEMBER 2016

KEY UPDATES

- Countries and territories reporting mosquito-borne Zika virus infections for the first time in the past week:
 - o 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:
 - o None
- Countries and territories reporting Guillain-Barré syndrome (GBS) cases associated with Zika virus infection for the first time in the past week:
 - The Plurinational State of Bolivia

ANALYSIS

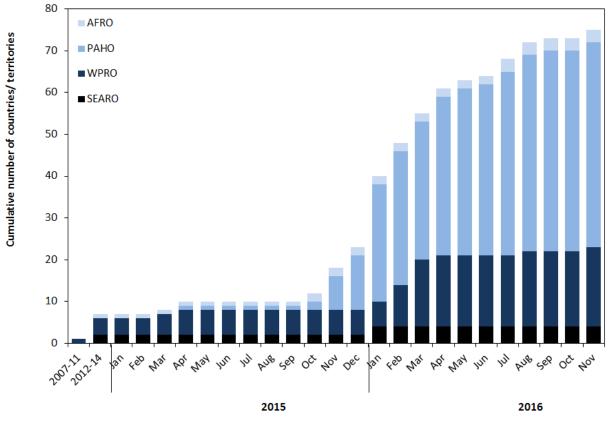
 Overall, the global risk assessment has not changed. Zika virus continues to spread geographically to areas where competent vectors are present. Although a decline in cases of Zika infection has been reported in some countries, or in some parts of countries, vigilance needs to remain high.

SITUATION

- Seventy-five countries and territories (Fig. 1, Table 1) have reported evidence of mosquitoborne Zika virus transmission since 2007 (69 with reports from 2015 onwards), of which:
 - o Fifty-eight with a reported outbreak from 2015 onwards (Fig. 2, Table 1).
 - Seven with having possible endemic transmission or evidence of local mosquitoborne Zika infections in 2016.
 - 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.
- Twelve countries have reported evidence of person-to-person transmission of Zika virus (Table 2).
- Twenty-eight countries or territories have reported microcephaly and other CNS malformations potentially associated with Zika virus infection, or suggestive of congenital infection (Table 3).

- Twenty countries or territories have reported an increased incidence of GBS and/or laboratory confirmation of a Zika virus infection among GBS cases (Table 4).
- The first Zika case in Myanmar reported on 4 November was confirmed by the Ministry of Health and Sport (MoHS). According to the final case report, there have been no additional cases of Zika detected in the last month despite a community-wide search for Zika cases. The MoHS concluded that this case was not due to local mosquito-borne transmission but possibly through person-to-person transmission. The husband of the case had recent travel history to multiple countries that have reported evidence of local mosquito-borne Zika infections in 2016.

Figure 1. Cumulative number of countries and territories by WHO region¹ reporting mosquito-borne Zika virus transmission for the first time by year (2007–2014), and by month from 1 January 2015 to 30 November 2016



2

¹ http://www.who.int/about/regions/en/

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

Classification	WHO Regional Office	Country / territory	Total
	AFRO	Cabo Verde; Guinea-Bissau	
Category 1: Countries with a reported outbreak from 2015 onwards [#]	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; Grenad Guadeloupe; Guatemala; Guyana; Haiti; Honduras; Jamaica; Martinique; Mexico; Montserrat; 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; Unite States of America; United States Virgin Islands; Venezuela (Bolivarian Republic of)	
	WPRO	American Samoa; Fiji; Marshall Islands; Micronesia (Federated States of); Palau; Samoa; Singapore; Tonga	8
Subtotal			58
Category 2: Countries with	SEARO	Indonesia; Maldives; Thailand	3
possible endemic transmission or evidence of local mosquito-borne Zika infections in 2016	WPRO	Malaysia; New Caledonia; Philippines; Viet Nam	4
Subtotal			7
evidence of local mosquito- borne Zika infections in or before 2015, but without	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 Total			10 75

[#]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.

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.

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

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

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

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 virus infections or potentially associated with a Zika virus infection	Probable location of infection
Argenina	1	Argentina
Bolivia	9 ²	Bolivia
Brazil	2189 ³	Brazil
Cabo Verde	9	Cabo Verde
Canada	1	Undetermined
Colombia	60 ⁴	Colombia
Costa Rica	2	Costa Rica
Dominican Republic	22 ⁵	Dominican Republic
El Salvador	4	El Salvador
French Guiana	14 ⁶	French Guiana
French Polynesia	8	French Polynesia
Grenada	1	Grenada
Guadeloupe	1	Guadeloupe
Guatemala	15 ⁷	Guatemala
Haiti	1	Haiti
Honduras	2	Honduras
Marshall Islands	1	Marshall Islands
Martinique	14 ⁶	Martinique
Panama	5	Panama
Paraguay	28	Paraguay
Puerto Rico	5 ⁹	Puerto Rico
Slovenia	1 ¹⁰	Brazil
Cnain	2	Colombia, Venezuela
Spain	2	(Bolivarian Republic of)
Suriname	2	Suriname
Thailand	2	Thailand
Trinidad and Tobago	1	Trinidad and Tobago
United States of America	33 ¹¹	Undetermined*
Viet Nam	1	Viet Nam

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

² https://www.minsalud.gob.bo/1877-santa-cruz-medicos-del-pais-se-capacitan-en-el-manejo-de-enfermedades-producidas-por-el-zika

http://portalsaude.saude.gov.br/images/pdf/2016/novembro/28/Informe-Epidemiologico-n---53--SE-46-2016--23nov2016-16H42.pdf

http://www.ins.gov.co/boletin-epidemiologico/Boletn%20Epidemiolgico/2016%20Bolet%C3%ADn%20epidemiol%C3%B3gico%20semana%2046.pdf

http://digepisalud.gob.do/documentos/?drawer=Boletines%20epidemiol%C3%B3gicos*Boletines%20semanales*2016

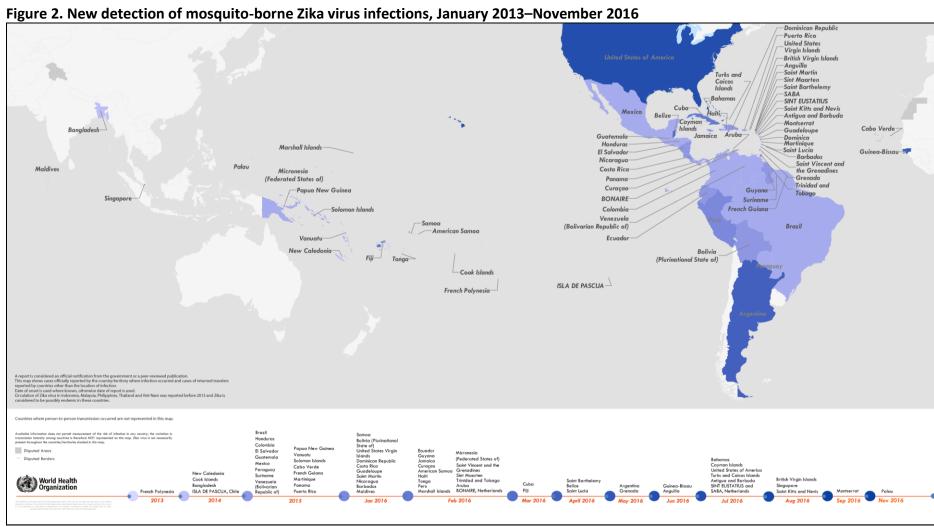
⁶ http://invs.santepubliquefrance.fr/fr/Publications-et-outils/Points-epidemiologiques/Tous-les-numeros/Antilles-Guyane/2016/Situation-epidemiologique-du-<u>virus-Zika-aux-Antilles-Guyane.-Point-au-6-octobre-2016</u>

http://www.mspas.gob.gt/index.php/en/mspas/noticias/1239-comunicado-ante-la-epidemia-del-virus-<u>zika.html?tmpl=component&print=1&layout=default&page=</u>

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

http://www.salud.gov.pr/Estadisticas-Registros-y-Publicaciones/Informes%20Arbovirales/Reporte%20ArboV%20semana%2045-2016.pdf
http://www.nejm.org/doi/pdf/10.1056/NEJMoa1600651

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



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 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 ¹² , Guatemala, Honduras, Jamaica, Martinique, Puerto Rico ¹³ , Suriname**, Venezuela (Bolivarian Republic of)
No increase in GBS incidence reported, but at least one GBS case with confirmed Zika virus infection	Bolivia (Plurinational State of), Costa Rica, Grenada ¹⁴ , 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.

Publicaciones/Informe%20Sndrome%20GillainBarr/Informe%20de%20Casos%20del%20S%C3%ADndrome%20de%20GuillainBarr%C3%A9 7Oct2016.pdf

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

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

¹³ http://www.salud.gov.pr/Estadisticas-Registros-y-

^{14 &}lt;a href="http://health.gov.gd/index.php?option=com">http://health.gov.gd/index.php?option=com content&view=article&id=434:nine-confirmed-zika-cases-in-grenada&catid=83:latest-news<emid=932&lang=en