

## SITUATION REPORT

ZIKA VIRUS MICROCEPHALY GUILLAIN-BARRÉ SYNDROME 16 JUNE 2016

- The third meeting of the Emergency Committee (EC) convened by the Director-General under the International Health Regulations (2005) regarding microcephaly, other neurological disorders and Zika virus was held by teleconference on 14 June 20161. The committee concurred with the international scientific consensus that Zika virus is a cause of microcephaly and GBS, and, consequently, that Zika virus infection and its associated congenital and other neurological disorders is a Public Health Emergency of International Concern (PHEIC). Based on the existing evidence from the current Zika virus outbreak, it is known that this virus can spread internationally and establish new transmission chains in areas where the vector is present. Focusing on the potential risks associated with the Olympic and Paralympic Games, the Committee reviewed information provided by Brazil and Advisors specializing in arboviruses, the international spread of infectious diseases, travel medicine, mass gatherings and bioethics. The Committee concluded that there is a very low risk of further international spread of Zika virus as a result of the Olympic and Paralympic Games as Brazil will be hosting the Games during the Brazilian winter when the intensity of autochthonous transmission of arboviruses, such dengue and Zika viruses, will be minimal and is intensifying vector-control measures in and around the venues for the Games which should further reduce the risk of transmission.
- As of 15 June 2016, 60 countries and territories report continuing mosquito-borne transmission (Fig. 1) of which:
  - 46 countries are experiencing a first outbreak of Zika virus since 2015, with no previous evidence of circulation, and with ongoing transmission by mosquitos (Table 1).
  - 14 countries reported evidence of Zika virus transmission between 2007 and 2014, with ongoing transmission.
- In addition, four countries or territories have reported evidence of Zika virus transmission between 2007 and 2014, without ongoing transmission: Cook Islands, French Polynesia, ISLA DE PASCUA Chile and YAP (Federated States of Micronesia)<sup>2</sup>.
- Ten countries have reported evidence of person-to-person transmission of Zika virus, probably via a sexual route (Table 2).

http://apps.who.int/ihr/eventinformation/announcement/32698-who-statement-third-meeting-international-health-regulations-2005-ihr2005

<sup>&</sup>lt;sup>2</sup> Kosrae has recently reported mosquito-borne Zika virus transmission. However, Yap has reported an outbreak in 2007 that has terminated. Both island states are part of the Federated States of Micronesia.

- In the week to 15 June 2016, no new country reported mosquito-borne or person-toperson Zika virus transmission.
- As of 15 June 2016, microcephaly and other central nervous system (CNS) malformations potentially associated with Zika virus infection or suggestive of congenital infection have been reported by twelve countries or territories. Three of those reported microcephaly cases borne from mothers with a recent travel history to Brazil (Slovenia, United States of America), the Bolivarian Republic of Venezuela and Colombia (Spain), for one additional case the precise country of infection is not determined (as the case travelled to 3 known affected countries in Latin America) (Table 3).
- A first case of microcephaly associated with Zika infection was confirmed in El Salvador.
- A case of microcephaly and other neurological abnormalities, from a mother with recent travel to Honduras, is currently under verification for Zika virus in the United States of America.
- As of 15 June, Cabo Verde has reported a total of six cases of microcephaly and/or other neurological abnormalities with serological indication of previous Zika infection.
- In the context of Zika virus circulation, 13 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).
- Zika infection was diagnosed in 3 patients with a severe neurological condition in Guadeloupe.<sup>3</sup>
- Sequencing of the virus that causes the Zika outbreak in Cabo Verde showed that the virus is of the Asian lineage and the same as the one that circulates in Brazil. The precise implication of this finding is yet to be determined.
- Based on research to date, there is scientific consensus that Zika virus is a cause of microcephaly and GBS.
- The global Strategic Response Framework launched by the World Health Organization (WHO) in February 2016 encompasses surveillance, response activities and research. An interim report<sup>4</sup> has been published on some of the key activities being undertaken jointly by WHO and international, regional and national partners in response to this public health emergency. A revised strategy for the period July 2016 to December 2017 is currently being developed with partners and will be published in mid-June.
- WHO has developed new advice and information on diverse topics in the context of Zika virus. WHO's latest information materials, news and resources to support corporate and programmatic risk communication, and community engagement are available online.<sup>6</sup>

<sup>&</sup>lt;sup>3</sup> http://www.invs.sante.fr/Publications-et-outils/Points-epidemiologiques/Tous-les-numeros/Antilles-Guyane/2016/Situationepidemiologique-du-virus-Zika-aux-Antilles-Guyane.-Point-au-9-juin-2016

http://apps.who.int/iris/bitstream/10665/207474/1/WHO\_ZIKV\_SRF\_16.2\_eng.pdf?ua=1

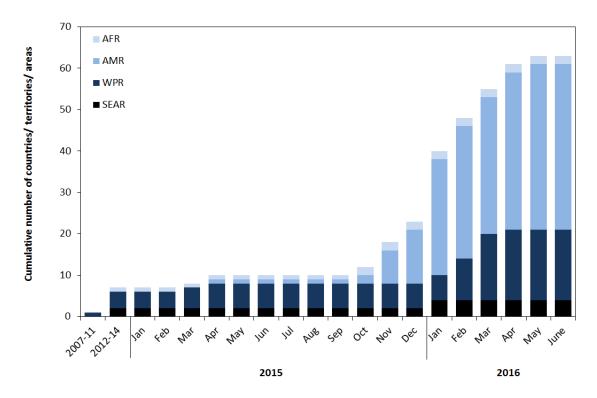
<sup>&</sup>lt;sup>5</sup> http://www.who.int/csr/resources/publications/zika/en/

<sup>&</sup>lt;sup>6</sup> http://www.who.int/emergencies/zika-virus/en/; http://www.who.int/risk-communication/zika-virus/en/

## Risk assessment

Overall, the global risk assessment has not changed, though the implication of the presence of the Asian lineage in Cabo Verde is yet unknown. 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, WHO does not see an overall decline in the outbreak.

Figure 1. Cumulative number of countries, territories and areas by WHO region<sup>7</sup> reporting mosquito-borne Zika virus transmission in years, 2007-2014, and monthly from 1 January 2015 to 15 June 2016



<sup>&</sup>lt;sup>7</sup> 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	
Category 1. Countries and territories experiencing a first outbreak of Zika virus since 2015, with no previous evidence of circulation, and with ongoing transmission by mosquitos.	AFRO	Cabo Verde	1	
	AMRO/PAHO	Argentina <sup>§</sup> , Aruba, Barbados, Belize, Brazil, Bolivia (Plurinational State of), BONAIRE – Netherlands, 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 <sup>§</sup> , Puerto Rico, Saint Barthelemy, Saint Lucia, Saint Martin, Saint Vincent and the Grenadines, Sint Maarten, Suriname, Trinidad & Tobago, United States Virgin Islands, Venezuela (Bolivarian Republic of)	39	
	SEARO	Maldives	1	
	WPRO	American Samoa, Fiji, Marshall Islands, Samoa, Tonga	5	
Subtotal 46				
Category 2. Countries and	AFRO	Gabon	1	
territories where there is evidence of Zika virus transmission from 2007 to 2014, with or without ongoing transmission; or countries where an outbreak since 2007 is reported to be over.	SEARO	Bangladesh, Indonesia, Thailand	3	
	WPRO	Cambodia, Cook Islands, French Polynesia, Lao People's Democratic Republic, Malaysia, Micronesia (Federated States of)*, New Caledonia, Papua New Guinea, Philippines, Solomon Islands, Vanuatu, Viet Nam	12	
	РАНО	ISLA DE PASCUA – Chile <sup>§</sup>	1	
Subtotal			17	
Total			63	

Categories are defined as follows:

- Category 1. Countries experiencing a first outbreak of Zika virus, with no previous evidence of circulation, and with ongoing transmission by mosquitos: countries where Zika virus has recently been introduced, with no evidence of circulation in the past and where there is ongoing transmission. These countries present a high risk of Guillain-Barré syndrome, microcephaly and other neurological disorders associated with Zika virus.
- Category 2. Countries where there is evidence of Zika virus transmission prior to 2015, with or without ongoing transmission or countries where the outbreak is reported to be over: this group includes countries that are not experiencing a first outbreak and where transmission has occurred at low levels in the past, and where transmission may or may not be ongoing or countries that have reported an outbreak since 2007 that is now over. This table lists countries that have experienced outbreaks after 2007, all countries with evidence of infection prior to 2007 are listed in <a href="https://www.who.int/bulletin/online\_first/16-171082.pdf">https://www.who.int/bulletin/online\_first/16-171082.pdf</a>.

Table 2. Countries reporting non vector-borne Zika virus transmission

Classification	WHO Regional Office	Country / territory / area	Total
Countries with evidence of person-to-person transmission of Zika virus, other than mosquitoborne transmission	AIVIK()/PAH()	Argentina, Canada, Chile, Peru, United States of America	5
	EURO	France, Germany, Italy, Portugal	4
	WPRO	New Zealand	1
Total			10

<sup>\*</sup>One island state (Yap) reported an outbreak in 2007

<sup>§</sup>These countries have also reported Zika virus disease through sexual transmission

World Health Organization

Figure 2. Global spread of Zika virus, 2013-2016

ISLA DE PASCUA –Chile is not displayed in the map given the uncertainty in the start date. 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 infections or potentially associated with a Zika virus infection	Probable location of infection
Brazil	1581 <sup>8</sup>	Brazil
Cabo Verde	6	Cabo Verde
Colombia	7	Colombia
El Salvador	1	El Salvador
French Polynesia	8	French Polynesia
Marshall Islands	1	Marshall Islands
Martinique	4 <sup>9</sup>	Martinique
Panama	5	Panama
Puerto Rico	1	Puerto Rico
Slovenia <sup>10</sup>	1	Brazil
Spain	2	Colombia, Venezuela (Bolivarian Republic of)
Jnited States of America 11,12	2	Brazil; Mexico, Belize or Guatemala (undetermined)

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

Classification	Country / territory / area
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, Honduras, Martinique, Suriname, Venezuela (Bolivarian Republic of)
No increase in GBS incidence reported, but at least one GBS case with confirmed Zika virus infection	Haiti, Panama, Puerto Rico

<sup>\*</sup>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.

<sup>&</sup>lt;sup>8</sup> http://portalsaude.saude.gov.br/index.php/cidadao/principal/agencia-saude/24093-microcefalia-1-581-casos-confirmados-em-todo-opais

<sup>&</sup>lt;sup>9</sup> http://www.invs.sante.fr/fr/Publications-et-outils/Points-epidemiologiques/Tous-les-numeros/Antilles-Guyane/2016/Situation-epidemiologique-du-virus-Zika-aux-Antilles-Guyane.-Point-au-2-juin-2016

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

<sup>11</sup> http://governor.hawaii.gov/newsroom/doh-news-release-hawaii-department-of-health-receives-confirmation-of-zika-infection-in-baby-born-with-microcephaly/

<sup>12</sup> http://www.nejm.org/doi/full/10.1056/NEJMoa1601824

Table 5. Strategic Response Framework and Joint Operational Response Plan: summary of key response interventions

Objectives	Activities
Public health	Coordinate and collaborate with partners on risk communication messaging and
risk	community engagement for Zika.
communication	<ul> <li>Develop communication and knowledge packs and associated training on Zika virus</li> </ul>
and community	and all related and evolving issues for communication experts.
1	-
engagement activities	
activities	promote vector control, personal protection measures, reduce anxiety, address
	stigma, and dispel rumours and cultural misperceptions.
	Disseminate material on Zika and potentially associated complications for key  and in a second as the complete of the production and the complete of the
	audiences such as women of reproductive age, pregnant women, health workers,
	clinicians, and travel and transport sector stakeholders.
	Conduct social science research to understand perceptions, attitudes, expectations
	and behaviours regarding fertility decisions, contraception, abortion, pregnancy care
	and care of infants with microcephaly and persons with GBS.
	Support countries to monitor impact of risk communications.
Vector control	<ul> <li>Regularly update and disseminate guidelines/recommendations on emergency Aedes</li> </ul>
and personal	spp. mosquito control and surveillance.
protection	Support insecticide resistance monitoring activities.
against	Support countries in vector surveillance and control, including provision of
mosquitoes	equipment, insecticides, personal protection equipment (PPE) and training.
Care for those	<ul> <li>Assess and support existing capacity and needs for health system strengthening,</li> </ul>
affected and	particularly around antenatal, birth and postnatal care, neurological and mental
advice for their	health services, and contraception and safe abortion.
caregivers	<ul> <li>Map access barriers limiting women's capacity to protect themselves against unintended pregnancy.</li> </ul>
	<ul> <li>Develop guidance for: families affected by microcephaly, GBS or other neurological</li> </ul>
	conditions; women suspected or confirmed to have Zika virus infection, including
	women wanting to get pregnant, pregnant women and women who are
	breastfeeding; health workers on Zika virus health care, blood transfusion services,
	tools for triage of suspected Zika virus, chikungunya and dengue cases; and for health
	services management following a Zika virus outbreak.
	<ul> <li>Provide technical support to countries on health service delivery refinements and</li> </ul>
	national level planning to support anticipated increases in service needs.
	<ul> <li>Procure and provide equipment and supplies to prepare their healthcare facilities in</li> </ul>
	provision of specialized care for complications of Zika virus for prioritized countries and territories.
	and territories.