World Health Organization

SITUATION REPORT

ZIKA VIRUS
MICROCEPHALY
GUILLAIN-BARRÉ SYNDROME
14 JULY 2016

- The World Health Organization (WHO) and partners established a definition of what constitutes an outbreak, endemic transmission, and the interruption of mosquito-borne transmission in order to better characterize the level of transmission of Zika virus infection (Table 1, Fig. 2). This classification system was put into use as of the situation report of 7 July 2016.
- As of 13 July 2016, 65 countries and territories (Fig. 1, Table 1) have reported evidence of mosquito-borne Zika virus transmission since 2007 (62 of these countries and territories have reported evidence of mosquito-borne Zika virus transmission since 2015):
    - 48 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 outbreak terminated.
- No new country or territory has reported mosquito-borne Zika virus transmission in the week to 13 July 2016.
- Eleven countries have reported evidence of person-to-person transmission of Zika virus, probably via a sexual route (Table 2).
- As of 13 July 2016, microcephaly and other central nervous system (CNS) malformations potentially associated with Zika virus infection or suggestive of congenital infection have been reported by 13 countries or territories. Three of those countries reported microcephaly cases born from mothers with a recent travel history to Zika-affected countries in the WHO Region of the Americas (Table 3).
- As of 13 July 2016, the United States Centers for Disease Control and Prevention (US-CDC) reported seven live-born infants with birth defects and five pregnancy losses with birth defects with laboratory evidence of Zika virus infection.[1]
- In the context of Zika virus circulation, 15 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). French Guiana recently

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

confirmed four cases of GBS and one severe neurologic condition, all of which were confirmed positive for Zika virus.[2]

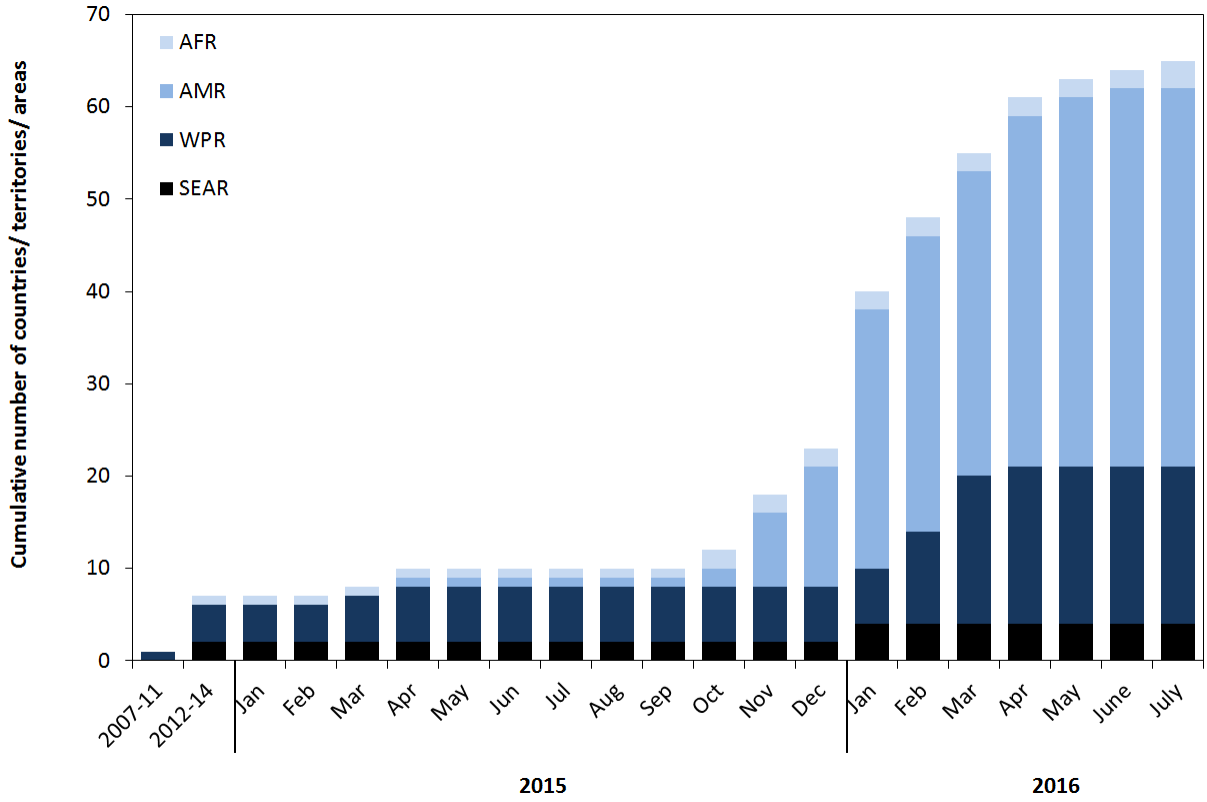
- Based on research to date, there is scientific consensus that Zika virus is a cause of microcephaly and GBS.
- In Guadeloupe, there are four GBS cases confirmed with Zika virus infection, and 12 additional GBS cases under investigation. Five cases of other severe neurological syndrome were confirmed with Zika virus infection. Zika virus was probable or confirmed for 11 cases of unidentified neurological syndrome.[2]
- One neurologic condition laboratory confirmed for Zika virus infection was reported in Saint Martin.[2]
- In Guinea-Bissau, on 29 June 2016, Institute Pasteur Dakar (IPD) confirmed that three of 12 samples tested positive for Zika by PC-R. All 12 samples tested negative against IgM Zika. Four additional samples were sent to IPD on 1 July for gene sequencing and the results are still pending.
- The government of Guinea-Bissau with support from the WHO Country Office (WCO) is demonstrating strong leadership in response to these findings. The WCO has availed funds to support the logistical needs of the response activities. The WHO assessment mission to Guinea-Bissau will be conducted to help identify the priority activities and to strengthen the national response capacity.
- On 13 July 2016, the U.S. CDC released a risk assessment for Zika virus spread related to travel to Olympics. The assessment concluded that international spread of Zika related to the Games would not significantly alter spread, but that four countries were at special risk, because residents of those countries did not have substantial travel to Zika affected countries, outside of potential exposure at the Olympics: Eritrea, Djibouti, Chad, and Yemen.
- The global Strategic Response Framework launched by WHO in February 2016 encompasses surveillance, response activities and research. An interim report[3] describing some of the key activities being undertaken jointly by WHO and international, regional and national partners in response to this public health emergency was published on 27 May 2016. A revised strategy for the period of July 2016 to December 2017 was published on 17 June.[4]
- WHO has developed advice and information on diverse topics in the context of Zika virus.[5] WHO's latest information materials, news and resources to support corporate and programmatic risk communication and community engagement are available online.[6]

[2] 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-7-juillet-2016
[3] http://apps.who.int/iris/bitstream/10665/207474/1/WHO_ZIKV_SRF_16.2_eng.pdf?ua=1
[4] http://apps.who.int/iris/bitstream/10665/246091/1/WHO-ZIKV-SRF-16.3-eng.pdf?ua=1&ua=1
[5] http://www.who.int/csr/resources/publications/zika/en/
[6] 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. 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.

Figure 1. Cumulative number of countries, territories and areas by WHO region[7] reporting mosquito-borne Zika virus transmission in years (2007–2014), and monthly from 1 January 2015 to 13 July 2016



[7] 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 with a first reported outbreak from 2015 onwards	**AFRO**	Cabo Verde; Guinea-Bissau	**2**
	AMRO/PAHO	Anguilla; Argentina; Aruba; Barbados; Belize; Bolivia (Plurinational State of), BONAIRE, SINT EUSTATIUS and SABA – Netherlands*; Brazil; 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 & Tobago; United States Virgin Islands; Venezuela (Bolivarian Republic of)	**40**
	WPRO	American Samoa; Fiji; Marshall Islands; Micronesia (Federated States of); Samoa; Tonga	**6**
Subtotal			**48**
Category 2: Countries with possible endemic transmission or evidence of local mosquito-borne Zika infections in 2016	**SEARO**	Indonesia; Thailand	**2**
	WPRO	Philippines; Viet Nam	**2**
Subtotal			**4**
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; Maldives	**2**
	WPRO	Cambodia; Cook Islands**; French Polynesia**; Lao People's Democratic Republic; Malaysia; New Caledonia; Papua New Guinea; Solomon Islands; Vanuatu	**9**
Subtotal			**13**
Total			**65**

**This includes confirmed Zika virus cases reported in BONAIRE – Netherlands and SINT EUSTATIUS – Netherlands.*

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

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.*

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

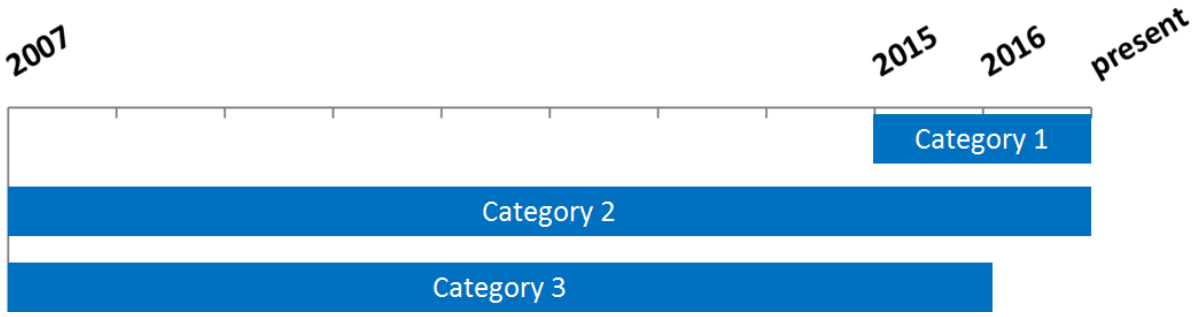
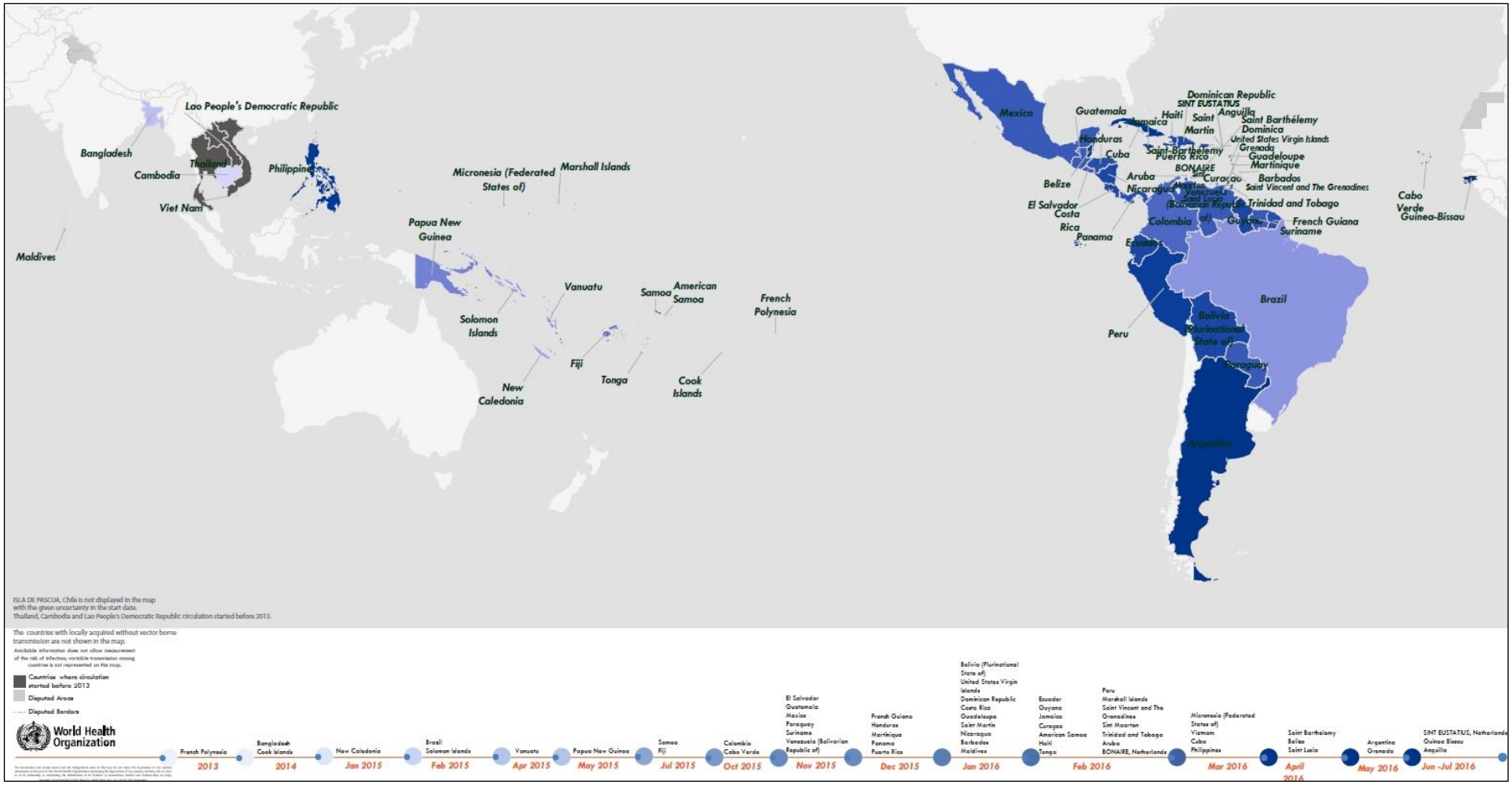


Table 2. Countries reporting non mosquito-borne Zika virus transmission

Classification	WHO Regional Office	Country / territory / area	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, Portugal, Spain	**5**
	WPRO	New Zealand	**1**
Total			**11**

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 infections or potentially associated with a Zika virus infection	Probable location of infection
Brazil	1687[8]	Brazil
Cabo Verde	9	Cabo Verde
Colombia	18[9]	Colombia
El Salvador	1	El Salvador
French Guiana	1	French Guiana
French Polynesia	8	French Polynesia
Marshall Islands	1	Marshall Islands
Martinique	6[10]	Martinique
Panama	5	Panama
Puerto Rico	1	Puerto Rico
Slovenia	1[11]	Brazil
Spain	2	Colombia, Venezuela (Bolivarian Republic of)
United States of America*	12[12]	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.*
***The probable locations of 3 of the infections were Brazil (1 case), Haiti (1 case) and Mexico, Belize or Guatemala (1 case).*

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, Jamaica, Martinique, Suriname, Venezuela (Bolivarian Republic of)
No increase in GBS incidence reported, but at least one GBS case with confirmed Zika virus infection	Guadeloupe[13], Haiti, Panama, Puerto 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.*

[8] http://portalsaude.saude.gov.br/index.php/cidadao/principal/agencia-saude/24544-mais-de-60-dos-casos-suspeitos-de-microcefalia-estao-com-investigacao-concluida
[9] http://www.ins.gov.co/boletin-epidemiologico/Boletn%20Epidemiolgico/2016%20Bolet%C3%ADn%20epidemiol%C3%B3gico%20semana%2026.pdf
[10] 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-23-juin-2016
[11] http://www.nejm.org/doi/pdf/10.1056/NEJMoa1600651
[12] http://www.cdc.gov/zika/geo/pregnancy-outcomes.html
[13] 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

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

Objectives	Activities
Public health risk communication and community engagement activities	▪ Coordinate and collaborate with partners on risk communication messaging and community engagement for Zika. ▪ Develop communication and knowledge packs and associated training on Zika virus and all related and evolving issues for communication experts. ▪ Engage communities to communicate risks associated with Zika virus disease and 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 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 and personal protection against mosquitoes	▪ Regularly update and disseminate guidelines/recommendations on emergency *Aedes spp*. mosquito control and surveillance. ▪ Support insecticide resistance monitoring activities. ▪ Support countries in vector surveillance and control, including provision of equipment, insecticides, personal protection equipment (PPE) and training.
Care for those affected and advice for their caregivers	▪ Assess and support existing capacity and needs for health system strengthening, particularly around antenatal, birth and postnatal care, neurological and mental health services, and contraception and safe abortion. ▪ Map access barriers limiting women's capacity to protect themselves against unintended pregnancy. ▪ Develop guidance for: families affected by microcephaly, GBS or other neurological 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. ▪ Provide technical support to countries on health service delivery refinements and national level planning to support anticipated increases in service needs. ▪ Procure and provide equipment and supplies to prepare their healthcare facilities in provision of specialized care for complications of Zika virus for prioritized countries and territories.