World Health Organization

ZIKA SITUATION REPORT

ZIKA AND POTENTIAL COMPLICATIONS 12 FEBRUARY 2016

1. HIGHLIGHTS

- WHO has called for a coordinated and multisectoral response through an inter-agency Strategic Response Framework focusing on response, surveillance and research.
- 39 countries have reported locally acquired circulation of the virus since January 2007. Geographical distribution of the virus has steadily expanded.
- Six countries (Brazil, French Polynesia, El Salvador, Venezuela, Colombia and Suriname) have reported an increase in the incidence of cases of microcephaly and/or Guillain-Barré syndrome (GBS) in conjunction with an outbreak of the Zika virus. Puerto Rico and Martinique have reported cases of GBS associated with Zika virus infection without an increase of incidence. No scientific evidence to date confirms a link between Zika virus and microcephaly or GBS.
- Women's reproductive health has been thrust into the limelight with the spread of the Zika virus. The latest evidence suggests that Zika virus infection during pregnancy may be linked to microcephaly in newborn babies.
- WHO advice on travel to Zika-affected countries includes advice for pregnant women as well as women who are trying to become pregnant and their sexual partners.



Figure 1: Countries and territories with transmission of Zika virus, 2007 - 2016

2. SITUATION OVERVIEW

- WHO has led partners in the creation of a Strategic Response Framework (SRF) for early response activities to the Zika virus epidemic and potential associated neurological complications to be carried out in the next six months. It comprises activities in coordination, surveillance, community development, vector control, child and maternal health, public health research, and epidemiological research and development. WHO is currently finalizing an overview of urgent needs and requirements for the Zika response.
- At a Member States briefing on 10 February WHO briefed more than a hundred participants on the virus and potential complications and on the SRF.
- As global concern for the spread of the Zika virus gathers momentum, WHO is taking action to strengthen its partnerships with respondents to the current outbreak which has affected 34 countries (Fig. 1). There has been a simultaneous increase in the number of reported cases of microcephaly; a congenital birth defect particularly reported in Brazil. Guillain-Barré syndrome (GBS) is also on the rise in Brazil, Colombia, El Salvador, Suriname and Venezuela. GBS was also observed during the 2013—2014 French Polynesia Zika virus outbreak.
- Prevention measures have become critical. There are concerns that that Zika virus may spread globally to environments where mosquitoes can live and breed. The phenomenon has prompted a call for a global and cross-sectoral response as various sectors may be impacted.
- Last week WHO activated an Incident Management System at WHO headquarters and at the regional level. In South America, WHO is working with the Pan-American Health Organization (PAHO) to coordinate response activities with national governments, UN agencies, the Red Cross and Red Crescent Movement, non-governmental organizations (NGOs) and religious groups.
- The risk of babies being born with microcephaly has raised alarm among women, particularly those who are pregnant or planning to become pregnant. There are many unknowns regarding the possible causes of microcephaly. WHO has proposed that until more evidence comes to light, there are ways that women can protect themselves from Zika virus infection.

3. EPIDEMIOLOGICAL UPDATE

Incidence of Zika virus

- Zika viral transmission since 2007 has been documented in 46 countries and territories (Fig. 1) including 34 countries which reported autochthonous transmission, or locally acquired infection, between 2015 and 2016, six countries with indication of viral circulation, five countries where the Zika virus outbreak has ended and one country with a locally acquired case but without vector borne transmission (Table 1).
- In 2015 and 2016 the geographical range of Zika virus has steadily increased, with 26 countries and territories in the Americas now reporting autochthonous transmission of the virus.
- Brazilian national authorities estimate that up to a 1.5 million cases of Zika virus infection have occurred since the outbreak began.
- After Brazil, Colombia has been the most-affected country, with well over 25 000 suspected cases reported and 1331 Zika virus cases confirmed since October 2015.
- Cape Verde has reported more than seven thousand suspected cases of Zika virus (Fig. 1).

Table 1: Countries and territories with autochthonous transmission of Zika virus, 2007 - 2016

	WHO Regional Office	Country or territory
Reported autochthonous transmission (34)	AFRO	Cape Verde
	AMRO/PAHO	Barbados, Bolivia, Brazil, Colombia, Costa Rica, Curaçao, Dominican Republic, Ecuador, El Salvador, French Guiana, Guadeloupe, Guatemala, Guyana, Haiti, Honduras, Jamaica, Martinique, Mexico, Nicaragua, Panama, Paraguay, Puerto Rico, Saint Martin, Suriname, US Virgin Islands, Venezuela
	SEARO	Maldives, Thailand
	WPRO	American Samoa, Samoa, Solomon Island, Tonga, Vanuatu
Indication of viral circulation (6)	AFRO	Gabon
	SEARO	Indonesia
	WPRO	Cambodia, Fiji, Philippines, Malaysia,
Countries with outbreaks terminated (5)	AMRO/PAHO	Eastern Islands
	WPRO	Cook Islands, French Polynesia, New Caledonia, Yap
Locally acquired without vector borne transmission (1)	AMRO/PAHO	United States of America

Incidence of Microcephaly

- On 30 January 2016, the Ministry of Health of Brazil reported 4783 cases of microcephaly and/or central nervous system (CNS) malformation, including 76 deaths since January 2015.
- Authorities in Brazil have concluded the investigation into 1113 of the reported cases: 709 cases have been discarded, 404 confirmed and 3670 remain under investigation.
- Of the confirmed cases, 387 were compatible with a congenital infection and 17, all from the Northeast Region, had confirmation of Zika virus infection.
- Of 76 deaths due to congenital malformations, Zika virus was identified in foetal tissue in five cases, all from the Northeast Region of Brazil. Robust investigations and research are planned to better understand the potential link with Zika virus.
- A review of birth data from the 2013 2-14 Zika virus outbreak in French Polynesia indicated that the number of congenital abnormalities of the CNS in children born between March 2014 and May 2015 was well above average.
- Zika virus infection was confirmed in a baby born with microcephaly in Hawaii1 and in the foetus of a baby in Slovenia after pregnancy termination. No autochthonous transmission of Zika virus has been reported in Hawaii or Slovenia.

Incidence of Guillain-Barré syndrome (GBS)

- In the context of the Zika virus outbreak, Brazil, Colombia, El Salvador, Suriname and Venezuela have reported an increase of GBS.
- In July 2015 the state of Bahia in Brazil reported 42 cases of GBS, 26 of them in patients with a history of symptoms consistent with Zika virus infection. In November 2015 seven patients presenting GBS were laboratory confirmed for Zika virus infection. In 2015, a 19% increase in GBS cases was reported in comparison to the previous year.

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

- To date, none of the reported GBS cases in Colombia have been laboratory confirmed for Zika virus infection or other causes.
- Since December 2015 El Salvador recorded 46 GBS cases, including two deaths. None of these cases have been laboratory confirmed for Zika virus infection or other causes.
- In Suriname Zika virus infection was confirmed in two of the ten GBS cases reported in 2015.
- In January 2016, 252 GBS cases with a spatiotemporal association to Zika virus were reported in Venezuela. Preliminary analysis of the 66 GBS cases in Zulia state indicates a clinical history consistent with Zika virus infection. Zika virus infection was confirmed for three of the GBS cases, including one fatal case.
- Martinique has reported two GBS cases where Zika infection has also been confirmed; Puerto Rico has reported one case GBS case. Neither of these occurrences constitute an increase of incidence compared to the previous year.
- In French Polynesia, all 42 GBS cases identified during the 2013 2014 Zika virus outbreak tested positive for dengue and Zika virus infection.
- The cause of the increase in GBS incidence observed in Brazil, Colombia, El Salvador and Suriname remains unknown, especially as dengue, chikungunya and Zika virus have all been circulating simultaneously in the Americas. Investigations to determine the cause of infection are ongoing in countries with increased incidence of GBS.

4. RESPONSE

The Strategic Response Framework (SRF), developed in consultation with partners, outlines the overall strategic objectives:

- **Surveillance**: to provide up to date and accurate information on the Aedes aegypti mosquito, Zika virus disease, neurological syndromes and congenital malformations.
- Response: To engage communities to communicate the risks associated with Zika virus disease and promote healthy behaviours, reduce anxiety, address stigma, dispel rumours and cultural misperceptions; increase efforts to control the spread of the Aedes aegypti mosquito and access to personal protection measures; provide guidance and mitigate the impact on pregnant women and those considering pregnancy, as well as families with children affected by Zika virus.
- Research: To investigate the etiology of microcephaly and neurological syndromes and establish the possible consequences of Zika virus infection. Fast-track the R&D of new products including rapid diagnostics, vaccines and therapeutics.

Partner Coordination

- WHO is working with national authorities and other partners to develop strategic response priorities and map multisectoral and multidisciplinary capacities.
- WHO is engaging UN Agencies, GOARN (Global Outbreak Alert and Response Network) and technical networks, public health and research partners, national and international NGOs and development partners, both regionally and globally, to coordinate an effective response.
- WHO and OCHA are working closely to ensure coordination mechanisms and communications are interoperable with existing humanitarian response systems.
- IASC partners are coordinating plans for international response, particularly with organizations with operational capacity on the ground. An IASC partner briefing was organized on 3 February at WHO headquarters in Geneva, with the support of UN headquarters in New York, to promote this initiative.

- Meetings with the GOARN Steering Committee, laboratory and technical partners have been organized to provide input on strategy, operational plans and development of guidelines and advice.
- Consultation with primary institutions and experts has begun on the utility and use of vaccines/ diagnostics/therapeutics and vector control mechanisms, and current products are being mapped. The landscape for vaccines is rapidly evolving; around 15 pharmaceutical companies have commenced work. A DNA vaccine from the US National Institutes of Health and an inactivated product from Bharat Biotech in India are both fairly advanced. Vaccines are at least 18 months away from any large-scale trials. Development of a Target Product Profile (TPP) for diagnostics and vaccines is underway. Once a TPP has been established products can be prioritized using the results of the vaccine mapping exercise.

Voice of the Americas at Geneva Member States' briefing

- At the Member States' briefing in Geneva representatives from Brazil, Colombia, Guatemala, El Salvador and Uruguay briefed on the situation and on preparedness and response in their respective countries and the region. Brazil provided a detailed account of an array of national response efforts to bring the situation under control. Twenty million Brazilian households have been visited by public health agents to identify mosquito breeding grounds and over 500 000 people have been mobilized to carry out vector control activities, risk communication and awareness raising and to provide health services. Brazil will not stand down from hosting the 2016 Olympic Games in Rio. The risk of contracting the Zika virus is minimal in August, the height of winter in the region and a time of year when mosquitos are least active.
- Colombia noted that although it is the second most affected country with Zika virus, no microcephaly cases have been reported there.
- Many countries raised questions at the briefing about the nature of the virus and its different strains, reasons for the current outbreak, possibilities of sexual transmission, specific risk communication messages, especially for pregnant women, vaccine development, specific actions for vector control, and potential travel/trade restrictions. WHO stated that the research community is investigating the current outbreak and understanding of potential causal links of the virus with other complications.

4. RESOURCE MOBILIZATION

- Weekly donor coordination teleconferences are widely attended by representatives of donor countries and agencies.
- WHO is appealing for financial support for Member States' response to Zika outbreaks and to help
 Member States meet their commitments under the International Health Regulations (IHR).
- WHO is consulting the private sector on the possibility of direct donations to countries and on emergency stocks of mosquito repellent, risk communication and direct support for vulnerable populations in affected countries.
- A consolidated overview of needs and requirements will be released next week

5. COMPENDIUM OF RESOURCES

- WHO headquarters microcephaly/Zika virus page: http://www.who.int/emergencies/zika-virus/en/
- PAHO website:
 http://www.paho.org/hq/index.php?option=com_content&view=article&id=11585&Itemid=41688&lang=en
- Fact sheets:
 - o Zika virus: http://www.who.int/mediacentre/factsheets/zika/en/
 - o Microcephaly: http://www.who.int/emergencies/zika-virus/microcephaly/en/
 - Guillain-Barré syndrome: http://www.who.int/mediacentre/factsheets/guillain-barre-syndrome/en/
- WHO recommendations:
 - o WHO has <u>updated</u> its travel advice to <u>Zika-affected</u> countries to include advice for pregnant women and women who are trying to become pregnant and their sexual partners. The travel advisory urges women to take precautionary measures in light of the latest evidence that Zika virus infection during pregnancy may be linked to microcephaly in newborns. Women who are pregnant should discuss travel plans with their health care provider and consider delaying travel to any area where locally acquired Zika infection is occurring.
 - O Zika virus has also been found in human semen and two reports of transmission from one person to another through sexual contact have been confirmed. WHO is advising that all men and women returning from an area where Zika is circulating especially pregnant women and their partners should practice safe sex, including through the correct and consistent use of condoms. Travellers are additionally advised to adhere closely to steps that can prevent mosquito bites during their travel.
- Q&A Women in the context of microcephaly and Zika virus disease: http://who.int/features/qa/zika-pregnancy/en/
- Zika timeline: origin and spread of a mosquito-borne virus: http://who.int/emergencies/zika-virus/timeline/en/