Zika virus – Incidence and trends

To date, 47 countries and territories in the Americas have confirmed autochthonous, vector-borne transmission of Zika virus disease since 2015. In addition, five countries in the Americas have reported sexually transmitted Zika cases. Since the last Zika Epidemiological Update of 6 October 2016, no additional countries and/or territories have confirmed vector-borne autochthonous transmission of Zika virus in the Americas (Figure 1).

Figure 1. Countries and territories in the Americas with confirmed autochthonous (vector-borne) Zika virus cases, 2015-2016.

1 Anguilla; Antigua and Barbuda; Argentina; Aruba; the Bahamas; Barbados; Belize; Bolivia (Plurinational State of); Bonaire, Sint Eustatius, and Saba; Brazil; the British Virgin Islands; Cayman Islands; Colombia; Costa Rica; Cuba; Curaçao; Dominica; the 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 Islands; the United States of America; the United States Virgin Islands; and Venezuela (Bolivarian Republic of).
2 Argentina, Canada, Chile, Peru, and the United States of America.

Highlighted below is a summary of the Zika epidemiological situation by sub-regions of the Americas.

**North America**

In Mexico, while a downward trend of confirmed cases has been observed in the last four weeks, from epidemiological week (EW) 36 through EW 39, this may be due to the time between the onset of symptoms and the laboratory confirmation of the case. Since the beginning of the outbreak up to EW 35 of 2016, an upward trend had been observed.

In the United States of America, the U.S. Centers for Disease Control and Prevention (CDC) continues to work with Florida State health authorities to investigate new autochthonous cases of Zika virus. On 14 October 2016, the state of Florida reported Zika virus transmission in a new area within the county of Miami-Dade.

**Central America**

In Central America, Belize, Guatemala, and Panama have reported an increasing trend in cases. In the other countries of Central America, the trend continues to decrease.

In Belize, a bimodal epidemic curve with peaks of suspected cases in EW 34 and EW 38 has been reported.

In Guatemala, in the past three weeks an increase of suspected cases is observed, following what had been decrease in cases since EW 22.

Similar to Guatemala, in Panama, a new increase of cases has been observed between EW 30 and EW 36. The following decrease in cases reported between EW 37 and EW 38 is subject to change by retrospective adjustments of the data.

**Caribbean**

In Anguilla, new cases continue to be reported with an increasing trend in the last four weeks (EW 37 to EW 40).

In the French overseas territories, Saint Martin has had a decrease of suspected cases between EW 37 and EW 39; this follows the previously reported increase of cases between EW 32 and 36. In Saint Barthelemy circulation of Zika virus remains active with a high number of cases reported in the last two weeks (EW 38 and EW 39), with 40 and 30 suspected cases being reported, respectively.

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3 Canada, Mexico, and the United States of America.
4 Read the full report.
5 Belize, Costa Rica, El Salvador, Guatemala, Honduras, Nicaragua, and Panama.
6 Anguilla, Antigua and Barbuda, Aruba, the Bahamas, Barbados, Bonaire, Saint Eustatius and Saba, Curacao, Cayman Islands, Cuba, Dominica, the Dominican Republic, Grenada, Guadeloupe, Haiti, Jamaica, Martinique, Puerto Rico, Saint Barthélemy, Saint Lucia, Saint Martin, Sint Maarten, Saint Vincent and the Grenadines, Trinidad and Tobago, Turks and Caicos Islands, and the U.S. Virgin Islands.
In Sint Maarten, an independent state within the Kingdom of the Netherlands, bordered to the north by the French territory of Saint Martin, an increase in confirmed cases has been reported in the last two weeks reported (EW 37 and EW 38).

In Puerto Rico, a declining trend in confirmed cases has been observed between EW 35 and EW 39.

Other countries/territories in the Caribbean also show a declining trend of Zika cases.

South America

All countries in South America continue to report decreasing numbers of Zika cases.

Congenital syndrome associated with Zika virus infection

To date, 17 countries and territories in the Americas have reported confirmed cases of congenital syndrome associated with Zika virus infection. Since the Zika Epidemiological Update of 6 October 2016, Grenada is the latest country to report a confirmed case of congenital syndrome associated with Zika virus infection.

As of EW 35, Canada reported two maternal-fetal transmissions of Zika Virus; one with severe neurological anomalies.

As of 1 September, the table with the number of confirmed cases of congenital syndrome is published on a weekly basis on the PAHO/WHO website and is available at: http://www.paho.org/hq/index.php?option=com_content&view=article&id=12390&Itemid=42090&lang=en.

Guillain-Barré syndrome (GBS) and other neurological disorders

Since the publication of the Zika Epidemiological Update of 6 October 2016, the countries and/or territories reporting an increase in Guillain-Barre syndrome (GBS) cases with laboratory-confirmation of Zika virus in at least one case of GBS, or an increase in GBS with no Zika virus lab confirmation have not changed (Table 1).

7 Argentina, Bolivia, Brazil, Colombia, Ecuador, French Guiana, Guyana, Paraguay, Peru, Suriname, and Venezuela.
8 Read the case definition.
9 Information on the location where the mother contracted the infection is not publicly available; however, Canadian authorities informed the national authorities of the country where the infection was acquired.
Table 1. Countries and territories in the Americas with GBS in the context of Zika virus circulation.

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<thead>
<tr>
<th>Increase in GBS with Zika virus lab confirmation in at least one case of GBS</th>
<th>Zika virus laboratory confirmation in at least one case of GBS</th>
<th>Increase in GBS with no Zika virus lab confirmation in any of the cases</th>
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Guidelines for the serological diagnosis of Zika virus infection

PAHO/WHO encourages Member States to implement and apply the PAHO/WHO Guidelines for the serological diagnosis of Zika virus infection, published in October 2016, considering that the detection of Zika virus (ZIKV) IgM antibodies is an important tool for confirming the infection to this virus which is associated to complications, including neurological and congenital syndromes, and that ZIKV serological diagnosis can be performed by ELISA IgM starting from the sixth day of onset of symptoms through several months after the infection.