

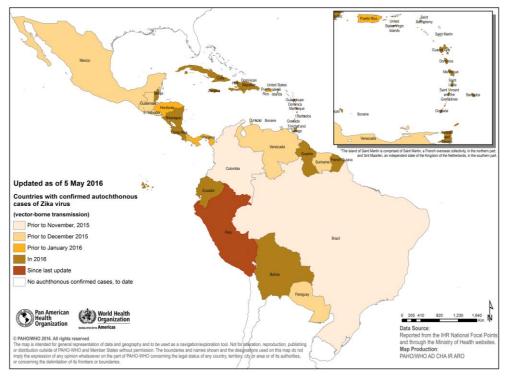
Zika - Epidemiological Update

5 May 2016

Zika virus – Incidence and trends

To date, 38 countries and territories have confirmed local, vector-borne transmission of Zika virus in the Region of the Americas since 2015 (**Figure 1**). Since the last Pan American Health Organization/ World Health Organization (PAHO/WHO) <u>Zika Epidemiological Update on 28 April</u>, Grenada, Peru, and Saint Barthélemy have confirmed vector-borne autochthonous transmission of Zika virus.

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



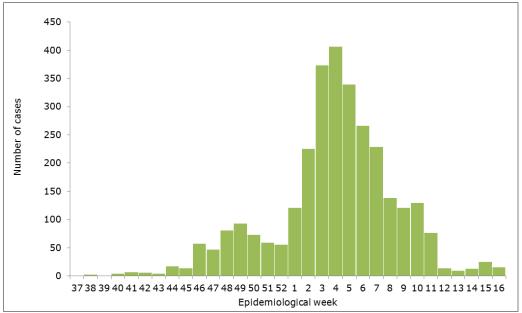
In relation to the observed trend of cases of Zika virus disease, as mentioned in previous updates, some countries in the Region of the Americas have been showing a downward trend in new cases (suspected and confirmed), consistent with seasonal trends observed in corresponding periods in previous years for other mosquito-borne diseases. Conversely, during the same seasonality, in other countries and territories, an increasing tendency is observed. Epidemiological situation in Suriname with a decreasing trend of cases of Zika virus disease illustrated below.

Suggested citation: Pan American Health Organization / World Health Organization. Zika Epidemiological Update, 5 May 2016. Washington, D.C.: PAHO/WHO; 2016

Suriname

In **Suriname**, autochthonous cases of Zika virus disease were first detected in epidemiological week (EW) 37 of 2015. The epidemiological curve demonstrates a bimodal shape with a peak in EW 49 of 2015 (93 cases) and a subsequent peak in EW 4 of 2016 (406 cases). A gradually decreasing trend is observed following EW 4 of 2016 (**Figure 2**).

Figure 2. Suspected and confirmed cases of Zika virus disease reported in Suriname, between EW 37 of 2015 and EW 16 of 2016.



Source: Surveillance data provided to PAHO/WHO from the Suriname Ministry of Health

Zika virus disease in pregnant women

Detection of Zika virus disease in pregnant women is being heightened in countries in the Region due to risk of congenital syndrome associated with Zika virus infection. There are 21 countries and territories of the Americas reporting confirmed and suspected cases of Zika virus disease in pregnant women (**Table 1**); this number remains the same since the last PAHO/WHO <u>Zika Epidemiological Update on 28 April</u>. Results of the surveillance of pregnant women with Zika virus disease in Colombia is highlighted below.

Table 1. Countries and territories in the Americas reporting confirmed and suspected cases of Zika virus disease in pregnant women.

Countries and territories reporting Zika virus disease in pregnant women

Barbados	Dominican Republic	Honduras	Puerto Rico	
Brazil	Ecuador	Martinique	Saint Martin	
Bolivia	El Salvador	Mexico	Venezuela	
Colombia	French Guiana	Nicaragua		
Costa Rica	Guadeloupe	Panama		
Dominica	Guatemala	Paraguay		

Colombia

In **Colombia**, a total of 13,314 pregnant women have been identified with suspected or confirmed Zika virus infection since the beginning of the outbreak up to EW 16 of 2016. Of these, 2,008 have been laboratory confirmed with Zika virus. The remaining 11,306 presented symptoms consistent with Zika virus disease.

Congenital syndrome associated with Zika virus infection¹

No new countries have reported cases of congenital syndrome associated with Zika virus infection (**Table 2**) since the last PAHO/WHO Zika Epidemiological Update on 28 April.

Table 2. Countries and territories in the Americas with reported congenital syndrome associated with Zika virus infection.

Countries reporting congenital syndrome associated with Zika virus	Number of confirmed cases to date
Brazil	1,271
Colombia	7
Martinique ²	2
Panama ³	4
United States ⁴	2

Brazil

According to the Ministry of Health of **Brazil**, between 22 October 2015 and 30 April 2016, a total of 7,343 suspected cases of microcephaly and other congenital malformation as per Brazil's Surveillance and Response Protocol⁵ have been reported. Of these, the Brazil Ministry of Health confirmed 1,271 cases of microcephaly by clinical, radiological and/or laboratory methods (203 have been confirmed by laboratory criteria). Out of the total reported cases, 2,492 cases were discarded as being due to non-infectious causes or not fitting the case definition, and 3,580 remain under investigation. The confirmed cases occurred in 470 municipalities, located in 25 out of 27 Federal Units.

A weekly median of 191 microcephaly cases were investigated (confirmed and discarded) between EW 3 and EW 12 of 2016 and between EW 13 and 17 of 2016, there was a weekly median of 245 cases investigated (**Figure 3**).

² One microcephaly and one other fetal anomaly. Note the 28 April 2016 report indicates that one of two previously detected microcephaly cases (by ultrasound) was discarded after birth. The number has been adjusted accordingly. See full report.

¹ Case definition available at: http://bit.ly/1TpcVIS

³ There is one additional suspected case of congenital malformations in a fetus diagnosed by ultrasonography under investigation.

⁴ Imported cases; one case linked to a stay in Brazil (<u>see full report</u>) and one case is linked to a brief stay of the mother in Belize, Guatemala and Mexico (<u>see full report</u>).

⁵ Surveillance and Response Protocol. <u>See Protocol</u>.

Confirmed discarded (non-infectious causes or not fitting the case definition)

450

400

350

250

150

100

50

Figure 3. Number of investigated cases of microcephaly and other congenital malformation by epidemiological week, Brazil, EW 3 – EW 17 of 2016.

Source: Data published by the Brazil Ministry of Health and reproduced by PAHO/WHO

10

Epidemiological week

11

12

14

15

16

0

3

5

7

8

As of EW 17 of 2016, there have been 267 reported deaths (including miscarriages or stillbirths), of which 57 were confirmed as microcephaly cases by clinical, radiological and/or laboratory methods. See full report.

Guillain-Barré syndrome (GBS) and other neurological disorders

To date, 7 countries in the Region have reported an increase in cases of Guillain-Barré syndrome (GBS) with at least one case laboratory confirmed for Zika virus. Paraguay has reported an increase in GBS cases, none of which have laboratory results confirming Zika virus infection. Five other countries and territories have not recorded increases but identified Zika virus-associated cases of GBS (**Table 3**).

Table 3. Countries and territories in the Americas with GBS in the context of Zika virus circulation.

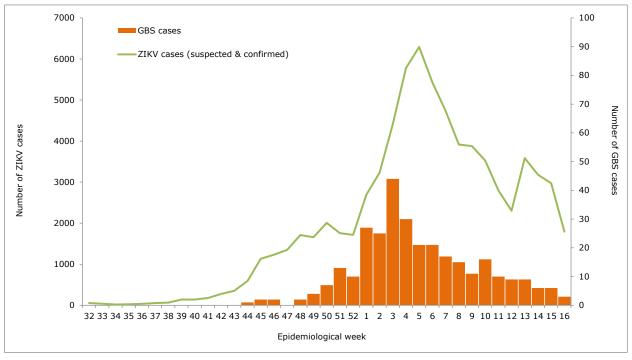
Increase in GBS plus Zika virus lab confirmation in at least one case of GBS	Zika virus lab confirmation in at least one case of GBS	Increase in GBS with no Zika virus lab confirmation in any of the cases
Brazil	French Guiana	Paraguay
Colombia	Haiti	
Dominican Republic	Panama	
El Salvador	Puerto Rico	
Honduras	Martinique	
Suriname		
Venezuela		

Highlighted below are the GBS trends of Colombia and the increase in reported acute flaccid paralysis (AFP) in children under 15 years of age in Ecuador.

GBS trends in Colombia

Since 15 December 2015 up to EW 16 of 2016, there were 474 cases of neurological syndromes reported in **Colombia** with history of febrile illness consistent with Zika virus infection. Of the total number of neurological syndromes, 66% (311 cases) correspond to GBS. (**Figure 4**).

Figure 4. Reported cases of Zika virus disease (suspected and confirmed) and GBS between EW 32 of 2015 and EW 16 of 2016 in Colombia.



Source: Surveillance data provided to PAHO/WHO from the Colombia Ministry of Health

Acute flaccid paralysis trends in Ecuador

As mentioned in the PAHO/WHO <u>Zika Epidemiological Update on 17 March 2016</u> and on <u>21 April 2016</u>, in some countries and territories of the Region of the Americas with autochthonous Zika virus transmission, there has been an increase in reporting of acute flaccid paralysis (AFP) in children <15 years of age. While AFP is the manifestation of a wide spectrum of diseases it is important for countries and territories with Zika virus circulation to analyze the trends in reports of AFP and investigate any unusual increase of cases. The situation in **Ecuador** is highlighted below, where there has not been a reported increase in GBS cases. However, a slight increase trend in AFP is noted when comparing the data from 2016 with that from the previous three years (**Figure 5**).

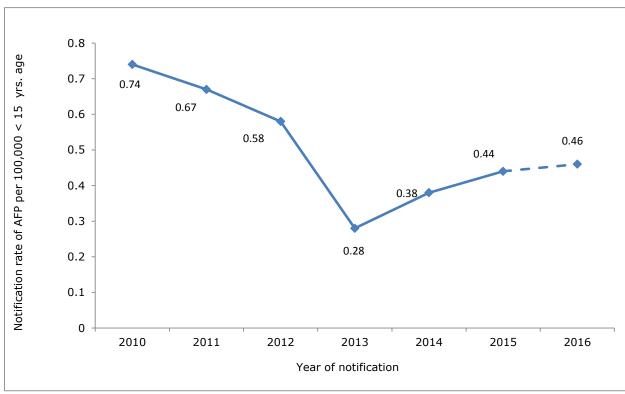


Figure 5. AFP rates per 100,000 in children <15 years old in Ecuador, 2010-2016*

* 2016 corresponds to EW 52 of 2015 to EW 16 of 2016 **Source:** PAHO/WHO Polio Weekly Bulletin. See Bulletin.