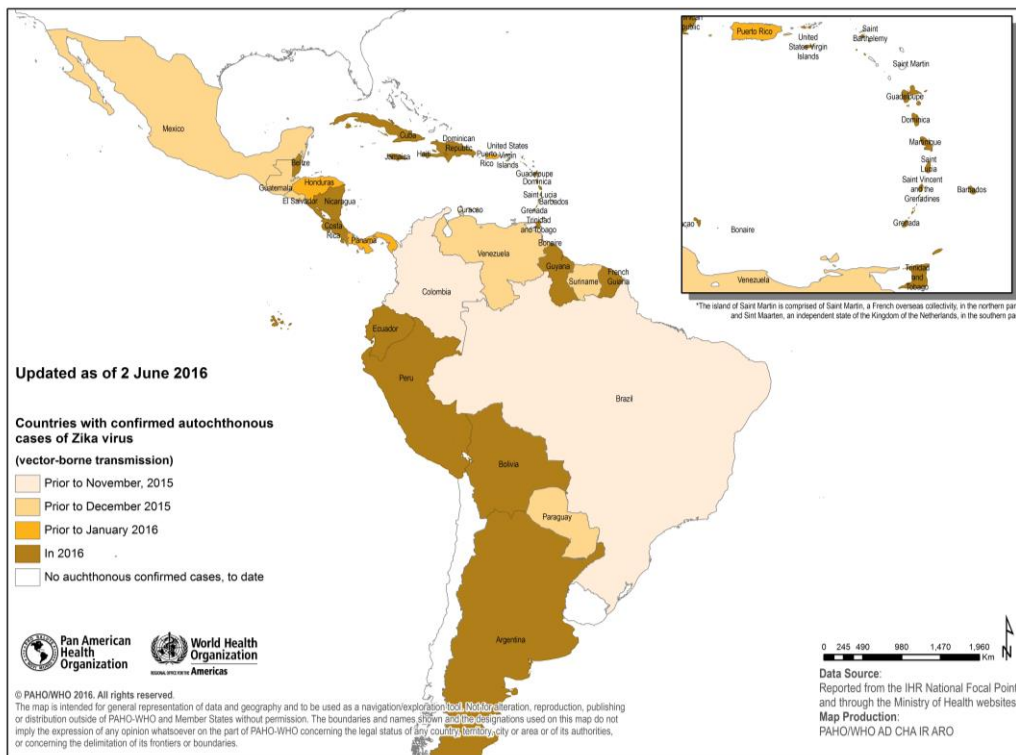


## Zika virus – Incidence and trends

To date, 39 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) [Zika Epidemiological Update on 26 May 2016](#), no additional countries or territories 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.



A downward trend of cases of Zika virus disease in Central and South America continues to occur while in most Caribbean countries and territories the trend continues to rise. This trend should be interpreted with caution due to delays in notification which may subsequently alter the trend of the previous 4 to 6 weeks.

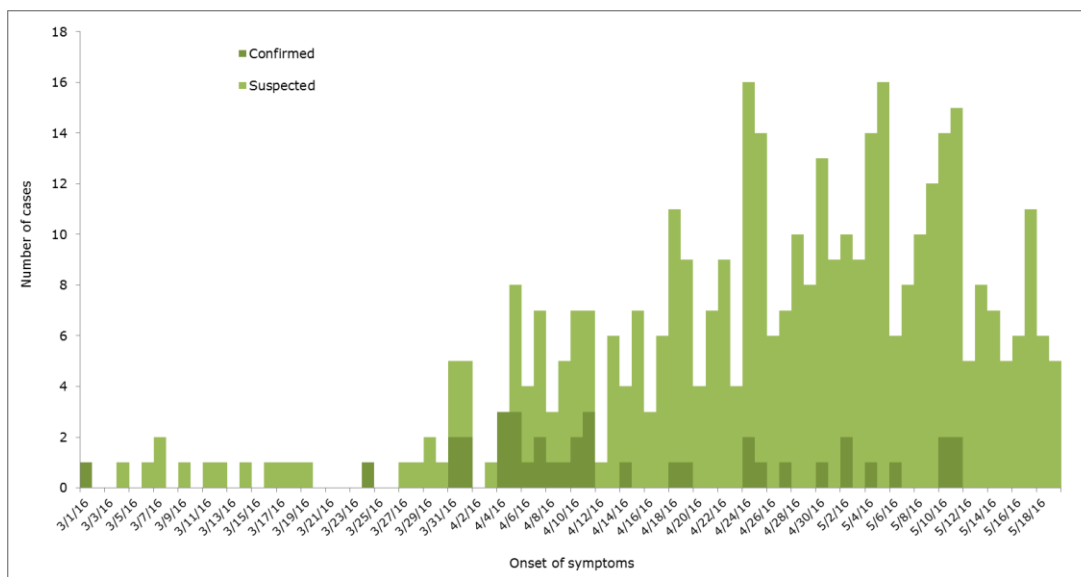
Highlighted below is the Zika virus disease epidemiological situation in Dominica.

Suggested citation: Pan American Health Organization / World Health Organization. Zika Epidemiological Update, 2 June 2016. Washington, D.C.: PAHO/WHO; 2016

## Dominica

The first cases of autochthonous transmission of Zika virus disease in Dominica were confirmed in epidemiological week (EW) 11 of 2016. According to the onset date of symptoms, the epidemiological curve of suspected and confirmed cases in Dominica has a spread out distribution with a peak of cases (18 cases) on 5 May, as demonstrated in **Figure 2**. The Zika virus epidemic has spread throughout the country, although most cases are concentrated in Roseau parish.

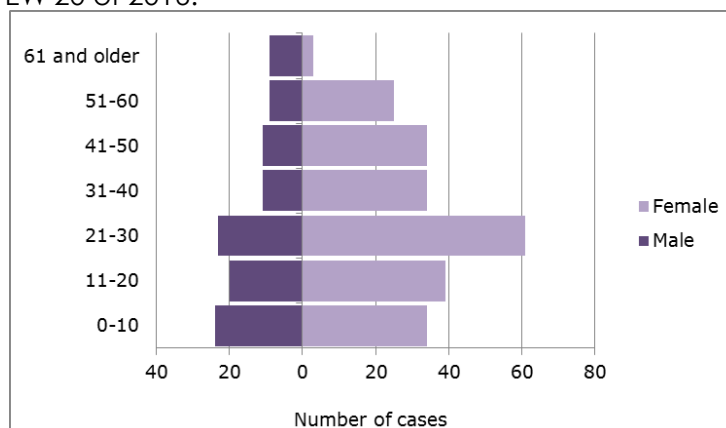
**Figure 2.** Suspected and confirmed cases of Zika virus disease, by date of symptom onset. Dominica. EW 9 to EW 20 of 2016.



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

In Dominica, with regards to the distribution by sex and age group, the number of cases of Zika virus disease reported in women (230 cases) is over double the number of cases in men (107 cases). Reviewing the data for each age group, women outnumber men by two to three times, with the only exception being in the age group of 61 and older (**Figure 3**).

**Figure 3.** Suspected and confirmed Zika virus disease cases by sex and age-group. Dominica. EW 9 to EW 20 of 2016.



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

## Zika virus disease in pregnant women

The detection of Zika virus disease in pregnant women is being heightened in countries in the Region due to the risk of congenital syndrome associated with Zika virus infection. There are 21 countries and territories in 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 [Zika Epidemiological Update on 26 May 2016](#).

**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	

Highlighted below are the surveillance results of pregnant women with Zika virus disease in El Salvador.

### El Salvador

Between EW 47 of 2015 and EW 20 in 2016, a total of 275 pregnant women suspected of having Zika virus disease have been reported. Of these, 3 have been laboratory confirmed. To date, in El Salvador, there have been no confirmed cases of congenital syndrome associated with infection Zika virus. [See full report](#).

## Congenital syndrome associated with Zika virus infection<sup>1</sup>

No new countries or territories have reported cases of congenital syndrome associated with Zika virus infection (**Table 2**) since the last PAHO/WHO [Zika Epidemiological Update on 26 May 2016](#).

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

**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	1,489
Colombia	7
Martinique <sup>2</sup>	3
Panama <sup>3</sup>	4
Puerto Rico <sup>4</sup>	1
United States <sup>5</sup>	2

## Brazil

According to Brazil's Ministry of Health, between 22 October 2015 and 28 May 2016, a total of 7,723 suspected cases of microcephaly and other congenital malformation of the central nervous system (CNS) have been reported as per Brazil's Surveillance and Response Protocol.<sup>6</sup> Of these, Brazil's Ministry of Health confirmed 1,489 cases of microcephaly by clinical, radiological, and/or laboratory methods (223 have been confirmed by laboratory criteria). Out of the total reported cases, 3,072 cases were discarded as being due to non-infectious causes or not fitting the case definition, and 3,162 remain under investigation. The confirmed cases occurred in 539 municipalities, located in 26 out of 27 Federal Units of Brazil.

Between EW 3 and EW 21 of 2016, the median number of cases investigated (confirmed and discarded) was 197, with a range between 80 (EW 12) and 381 (EW 4) (**Figure 4**).

---

<sup>2</sup> Two microcephaly cases and one other fetal anomaly; these were detected by ultrasound in mothers with laboratory confirmed Zika virus infection. Note the 28 April 2016 report indicated that one previously detected microcephaly case (by ultrasound) was discarded after birth. This data does not include that case. [See full report](#).

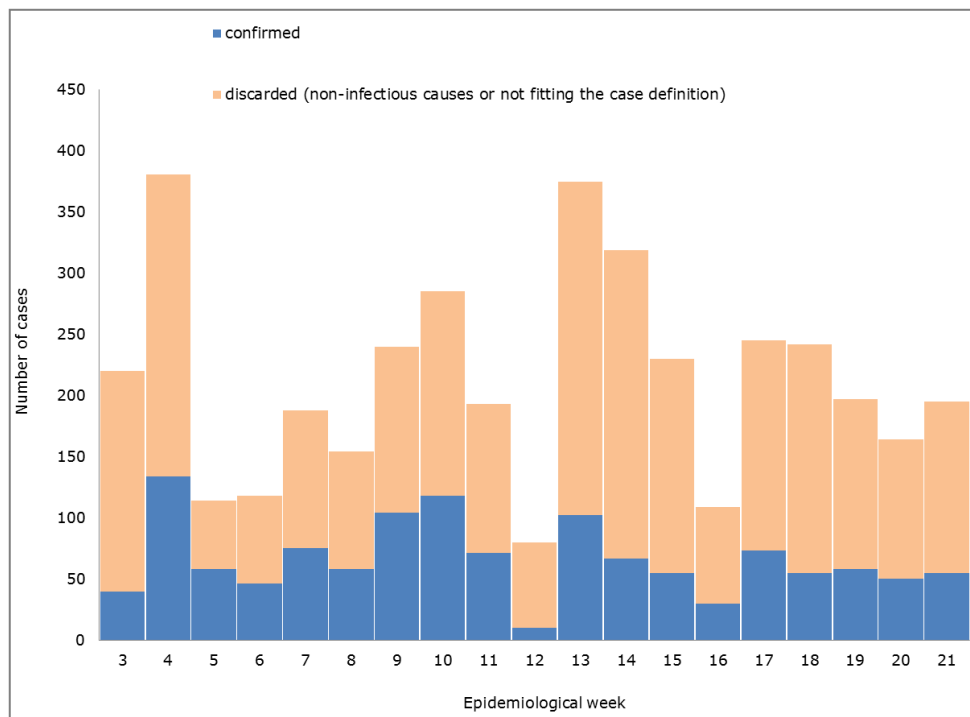
<sup>3</sup> There is one additional suspected case of congenital malformations in a fetus diagnosed by ultrasonography.

<sup>4</sup> This is a congenital anomaly case. [See full report](#).

<sup>5</sup> Imported cases; one case linked to a stay in Brazil ([see full report](#)) and one case is linked to a brief stay of the mother in Belize, Guatemala and Mexico ([see full report](#)).

<sup>6</sup> Surveillance and Response Protocol. [See Protocol](#).

**Figure 4.** Number of investigated cases of microcephaly and other congenital malformation of the CNS in Brazil by epidemiological week, EW 3 – EW 21 of 2016.



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

## 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 continues to report 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 have 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

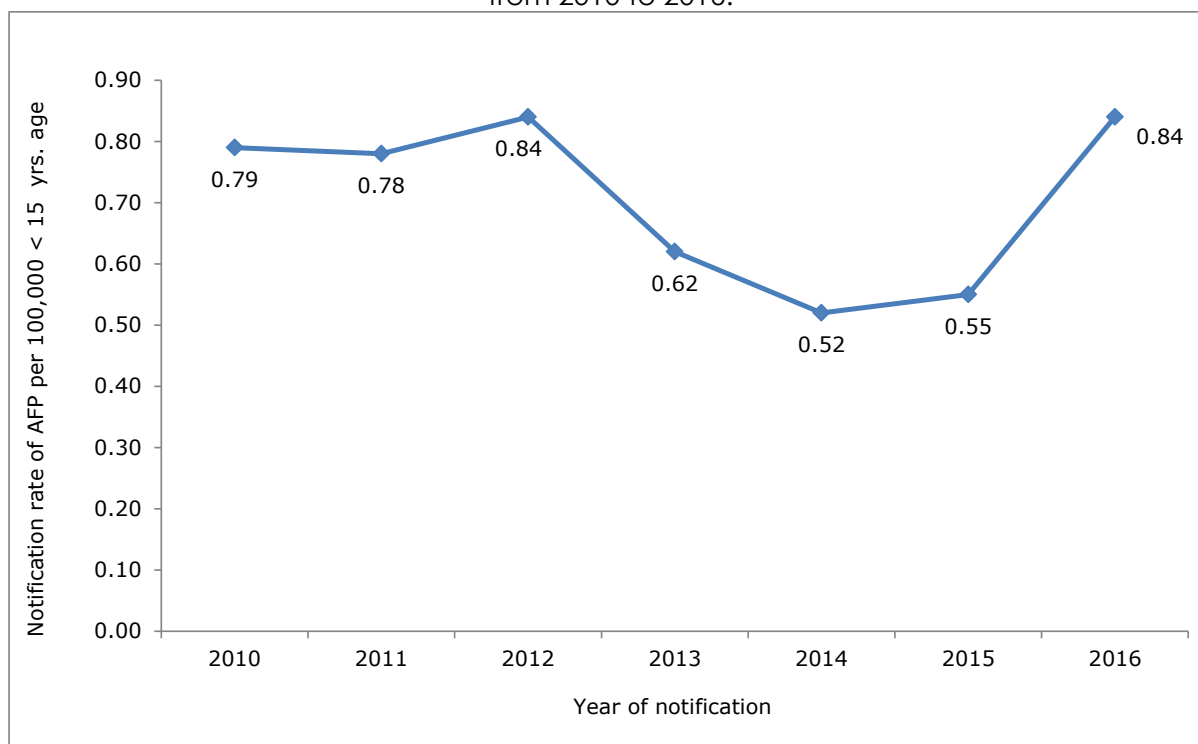
---

Highlighted below is information on the situation regarding acute flaccid paralysis in Brazil.

### Trend of acute flaccid paralysis in Brazil

In Brazil, between 2010 and 2012, the rate of AFP notifications in children under 15 years of age fluctuated between 0.78 and 0.84 and presented a downward trend between 2013 and 2014; subsequently, from 2014 to 2016 an upward trend is observed (**Figure 5**).<sup>7</sup>

**Figure 5.** Reported AFP rate in minors under 15 years of age, Brazil, as of EW 20 of each year from 2010 to 2016.



**Source:** PAHO/WHO Polio Weekly Bulletin. [See Bulletin.](#)

As mentioned in previous Epidemiological Updates, increasing rates of AFP in children under 15 years of age, could be attributed to multiple causes; however, as some countries have reported an increase of GBS associated Zika virus infection, an increase in AFP may be a reflection of neurological complications associated with the Zika virus in children.

---

<sup>7</sup> This AFP data is calculated from EW 21 of each preceding year up to EW 20 of the year listed.