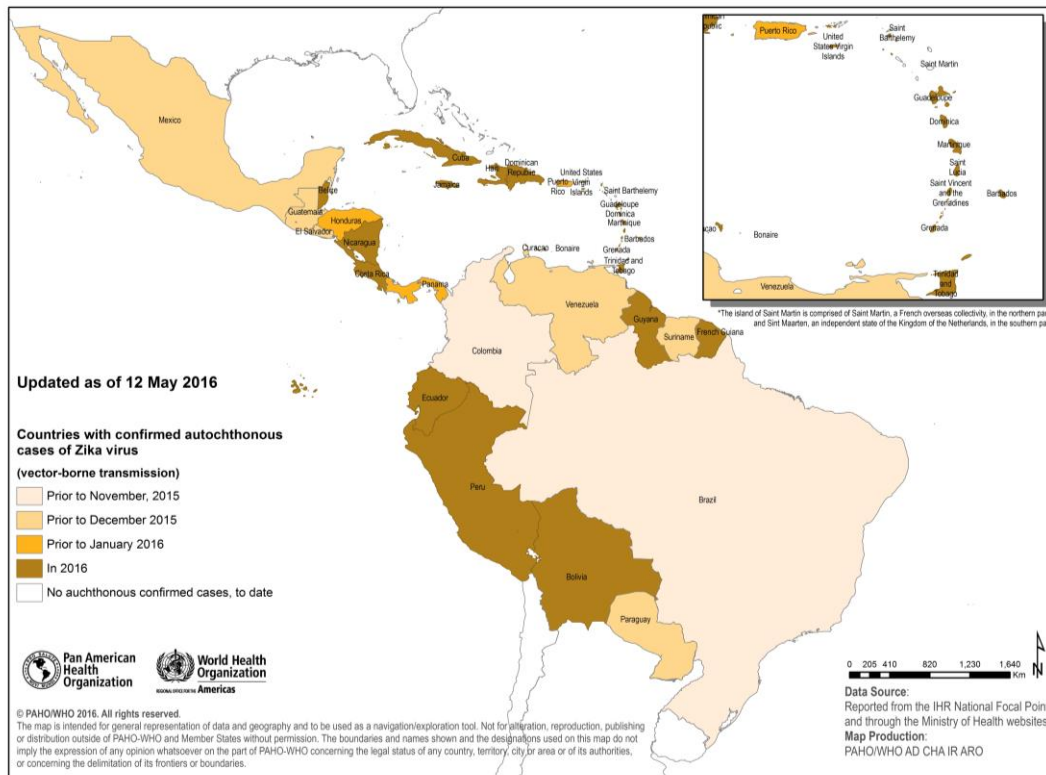


Zika virus – Incidence and trends

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) [Zika Epidemiological Update on 5 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.



Some countries in the Region of the Americas continue to register a downward trend in new cases of Zika virus disease (suspected and confirmed). This is 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 – mainly the Caribbean – an increasing trend is observed.

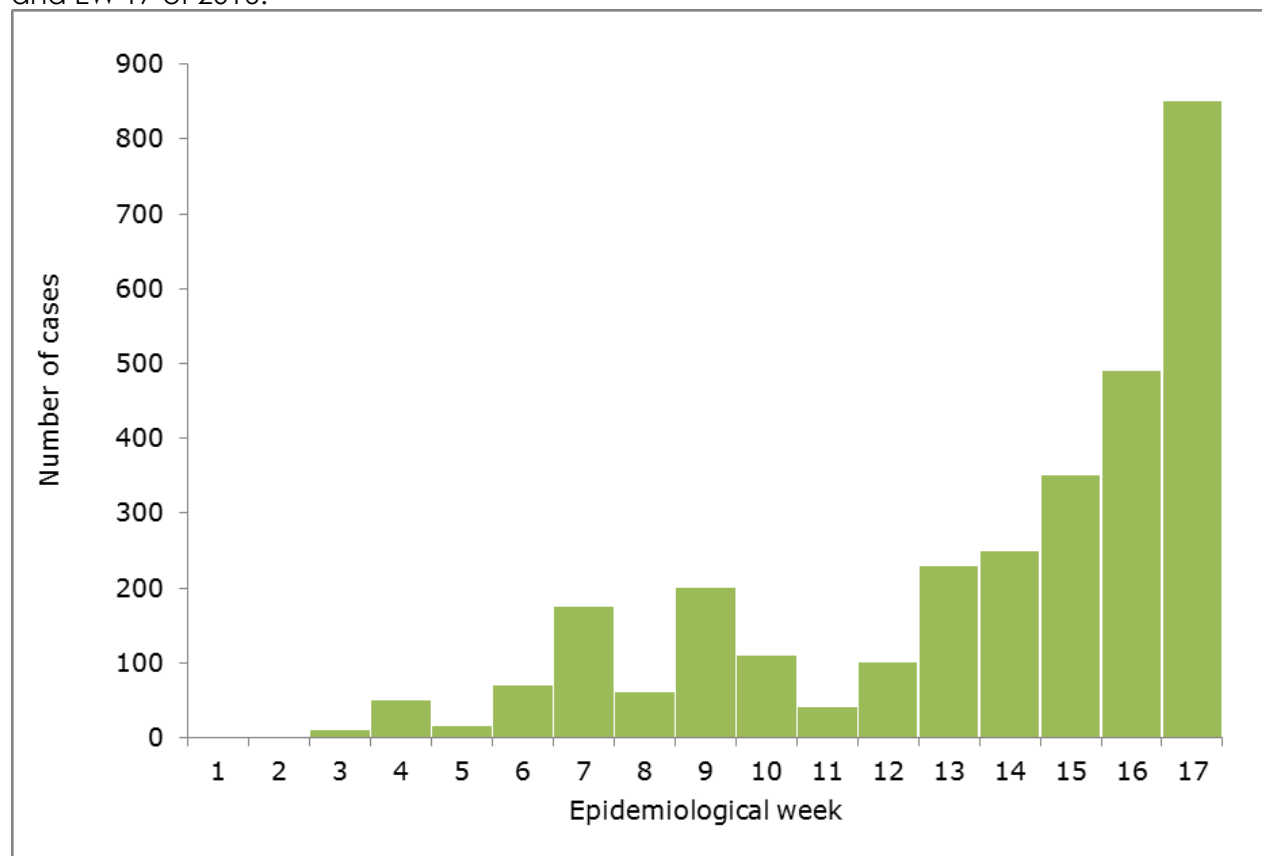
As an example of the increasing trend of Zika virus disease cases, the epidemiological situation in Guadeloupe is illustrated below.

Guadeloupe

In **Guadeloupe**, autochthonous cases of Zika virus disease were first detected in epidemiological week (EW) 3 of 2015. The epidemiological curve of suspected Zika virus disease cases shows an increasing trend, with the increase starting in EW 13 onwards, with the highest number of cases reported in EW 17 (850 cases) (**Figure 2**).

Since the beginning of the epidemic until 28 April 2016 a cumulative total of 412 confirmed cases were reported. Laboratory confirmation in Guadeloupe is obtained only for pregnant women and patients with neurological complications.

Figure 2. Suspected cases of Zika virus disease reported in Guadeloupe, between EW 3 of and EW 17 of 2016.



Source: Data published in the "[Situation épidémiologique du virus Zika aux Antilles Guyane. Point au 4 mai 2016](#)" and reproduced by PAHO/WHO

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 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 5 May 2016](#). Results of the surveillance of pregnant women with Zika virus disease in Colombia, French Guiana, Guadeloupe, and Martinique are 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 13,731 pregnant women have been identified with suspected or confirmed Zika virus infection since the beginning of the outbreak up to EW 17 of 2016. Of these, 15 % were laboratory confirmed with Zika virus. The rest presented symptoms consistent with Zika virus disease.

French Guiana

Since the beginning of the outbreak in EW 51 of 2015 until EW 17 of 2016, a total of 340 pregnant women with laboratory confirmed Zika virus disease have been registered in **French Guiana**. To date, no occurrences of congenital syndrome associated with Zika virus disease have been registered.

Guadeloupe

Since the beginning of the outbreak in EW 3 of 2016 until EW 17 of 2016, **Guadeloupe** has registered a total of 18 pregnant women with laboratory confirmed Zika virus disease. To date, no occurrences of congenital syndrome associated with Zika virus disease have been registered.

Martinique

Since the beginning of the outbreak in EW 51 of 2015 until EW 17 of 2016, **Martinique** has registered a total of 205 pregnant women with laboratory confirmed Zika virus disease. In addition, one case of microcephaly and one other fetal anomaly case have been registered there.

Congenital syndrome associated with Zika virus infection¹

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 5 May 2016](#).

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	1,326
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 7 May 2016, a total of 7,438 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.⁵ Of these, the Brazil Ministry of Health confirmed 1,326 cases of microcephaly by clinical, radiological and/or laboratory methods (205 have been confirmed by laboratory criteria). Out of the total reported cases, 2,679 cases were discarded as being due to non-infectious causes or not fitting the case definition, and 3,433 remain under investigation. The confirmed cases occurred in 484 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 18 of 2016 there was a weekly median of 244 cases investigated (**Figure 3**).

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

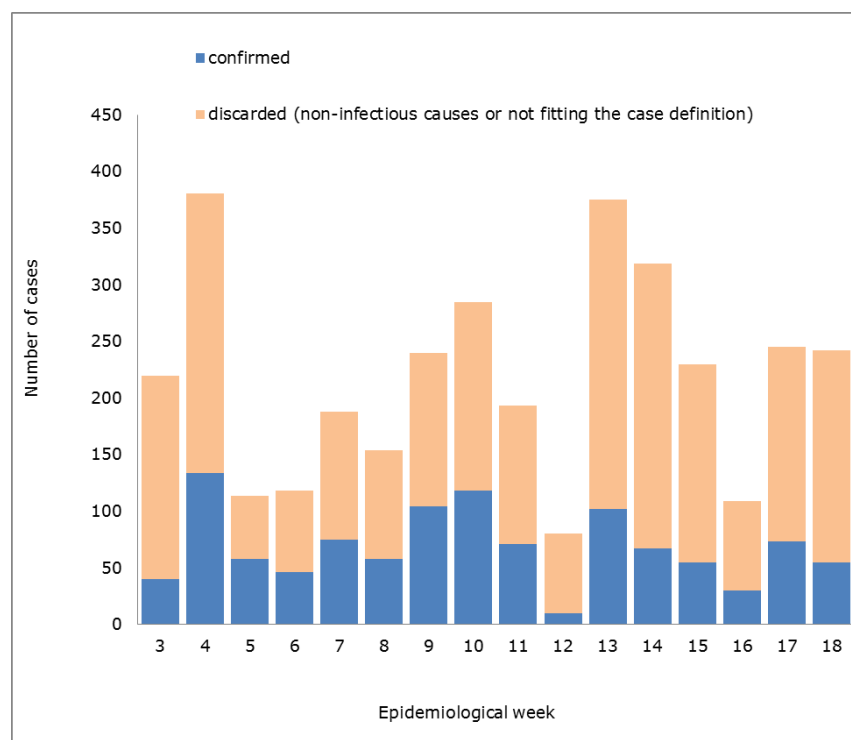
² One microcephaly and one other fetal anomaly. Note the 28 April 2016 report indicates that one of two previously detected microcephaly cases (by ultrasound) was discarded after birth. The number has been adjusted accordingly. [See full report](#).

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 ([see full report](#)) and one case is linked to a brief stay of the mother in Belize, Guatemala and Mexico ([see full report](#)).

⁵ Surveillance and Response Protocol. [See Protocol](#).

Figure 3. Number of investigated cases of microcephaly and other congenital malformation of the CNS by epidemiological week, Brazil, EW 3 – EW 18 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 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		

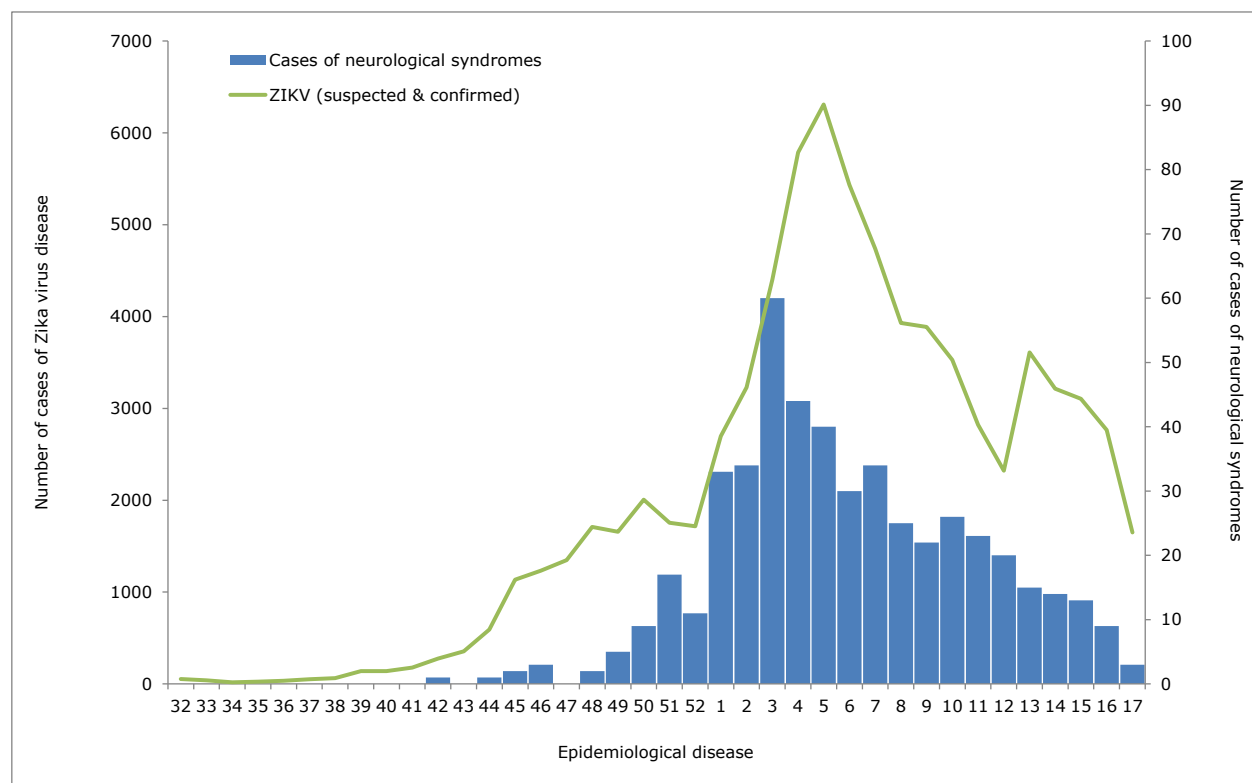
Highlighted below is the trend of neurological syndromes registered in Colombia and the increase in reported acute flaccid paralysis (AFP) in children under 15 years of age in Guatemala.

Trend of neurological syndromes in Colombia

Since 15 December 2015 until EW 17 of 2016, there were 496 cases of neurological syndromes reported in **Colombia** with history of febrile illness consistent with Zika virus infection. Of the total number of neurological syndromes, 65% (323 cases) correspond to GBS. The epidemic curve of neurological syndromes shows a similar distribution to the Zika virus disease cases. The peak of neurological syndrome cases occurred in EW 3 of 2016 while in contrast the peak of Zika virus disease cases occurred in EW 5 of 2016. (**Figure 4**).

With regards to the age distribution of the neurological syndromes registered, the majority (57.5%) are 35 years or older and males accounted for 57% of the cases.

Figure 4. Reported cases of Zika virus disease (suspected and confirmed) and neurological syndromes between EW 32 of 2015 and EW 17 of 2016 in Colombia.



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

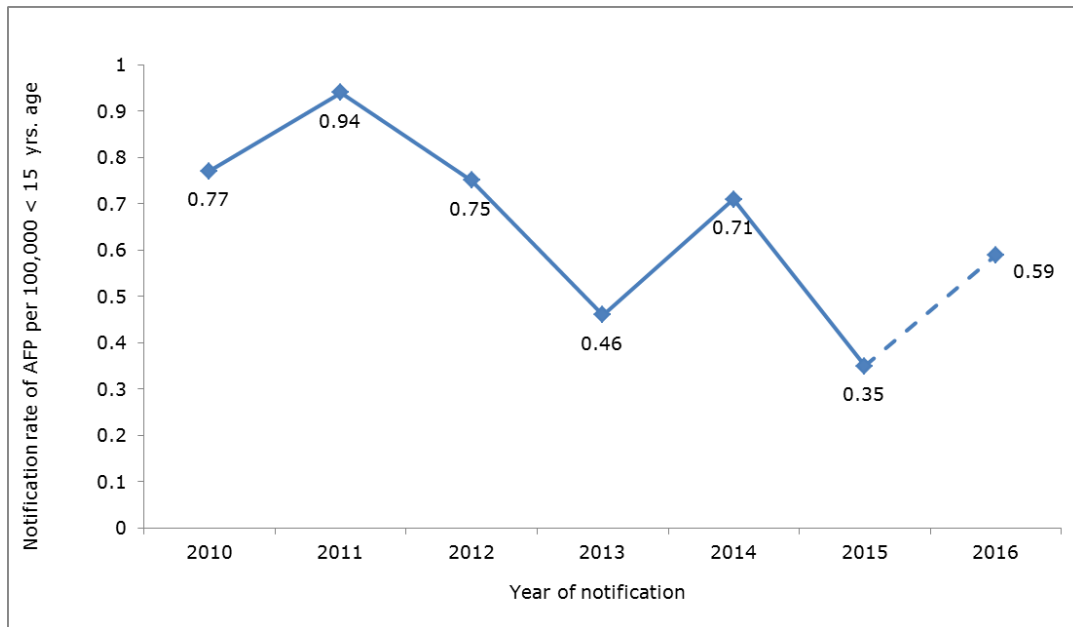
Acute flaccid paralysis trends in Guatemala

In some countries and territories of the Region of the Americas with autochthonous Zika virus transmission, as in Colombia, Ecuador, and Venezuela, 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, this situation highlights the importance for

countries and territories with Zika virus circulation to analyze the trends in reports of AFP and investigate any unusual increase of cases.

As an example, highlighted below is the situation in **Guatemala** where a growing trend in the rate of AFP notifications in 2016 until EW 17 is compared to the data of 2015 (**Figure 5**). Of note, Guatemala, has not reported an increase of GBS cases to date.

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



* 2016 corresponds to EW 18 of 2015 to EW 17 of 2016

Source: Data published in the PAHO/WHO Polio Weekly Bulletin. [See Bulletin.](#)