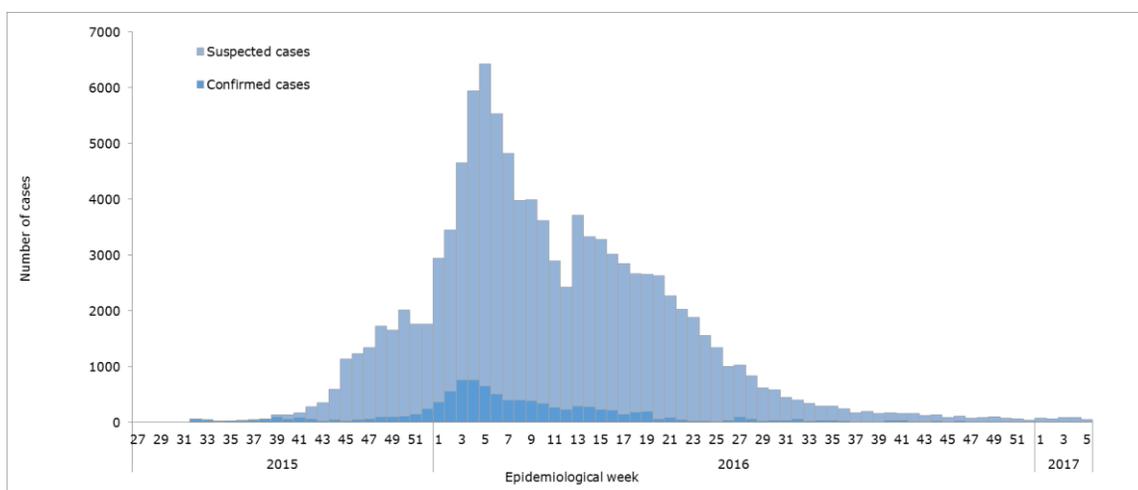


Zika-Epidemiological Report Colombia

2 March 2017

Figure 1. Suspected and confirmed Zika cases by epidemiological week (EW). Colombia. EW 27 of 2015 to EW 05 of 2017.



Source: Data provided by the Colombia Ministry of Health and Social Protection¹

FIRST AUTOCHTHONOUS VECTOR-BORNE CASES

In epidemiological week (EW) 41 of 2015, Colombia health authorities informed PAHO/WHO of the detection of the first autochthonous vector-borne cases of Zika virus in the Bolivar Department. Nine cases of Zika virus infection were preliminarily confirmed by the national reference laboratory at the Colombia National Institute of Health, re-tested and confirmed by the United States Centers for Disease Control and Prevention (CDC).

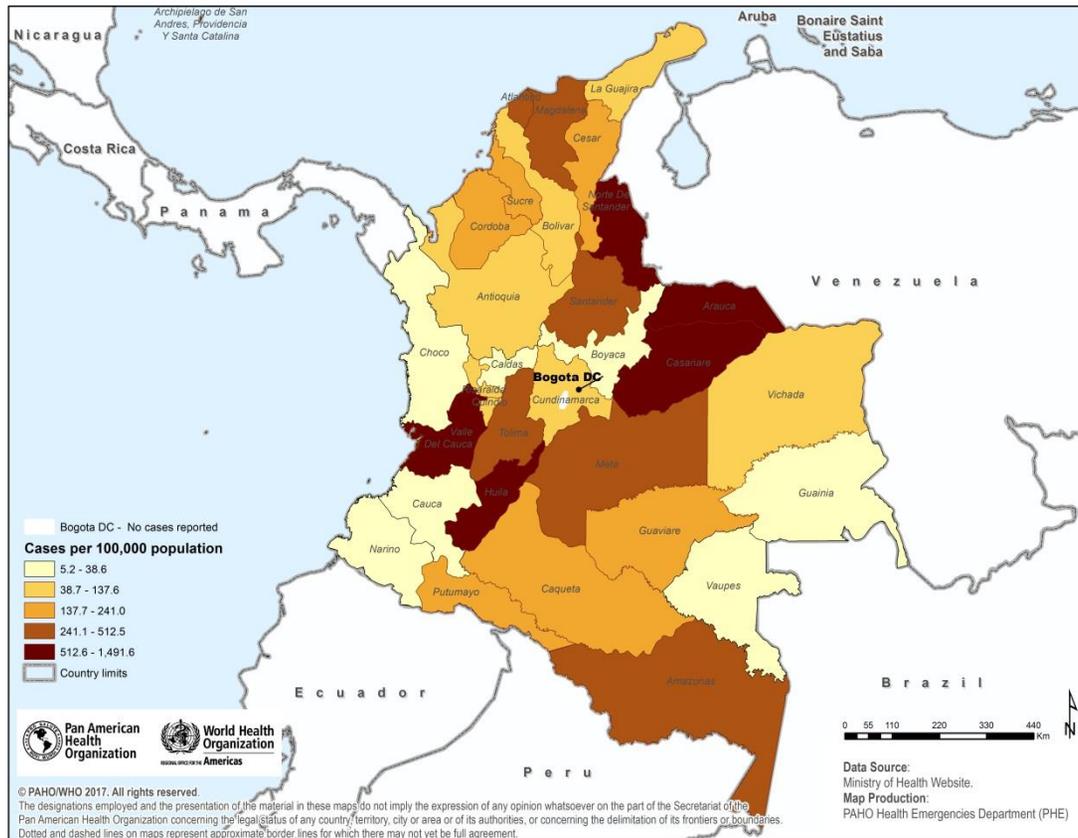
GEOGRAPHIC DISTRIBUTION

As of EW 6 of 2017, 35 of 37 territorial entities in Colombia have reported confirmed cases of Zika virus infection. The territorial entities of Vaupés and Bogotá have not reported any confirmed cases of Zika to date. Between EW 32 of 2015 and EW 6 of 2017, the highest incidence rate of Zika has been reported from the departments of Casanare, Norte De Santander, Arauca, Huila, Valle Del Cauca and the Archipelago de San Andres (**Figure 2**).²

¹ Data reported to PAHO/WHO by the Colombia Ministry of Health and Social Protection on 17 February 2017.

² Colombia National Institute of Health. Epidemiological Bulletin. EW 6 of 2017. Available at: <http://www.ins.gov.co/boletin-epidemiologico/Boletn%20Epidemiolgico/2017%20Bolet%C3%ADn%20epidemiol%C3%B3gico%20semana%2006.pdf>

Figure 2. Confirmed and suspected Zika cases per 100,000 population by department. Colombia. EW 32 of 2015 to EW 6 of 2017.



Source: Data published by the Colombia National Institute of Health and reproduced by PAHO/WHO²

TREND

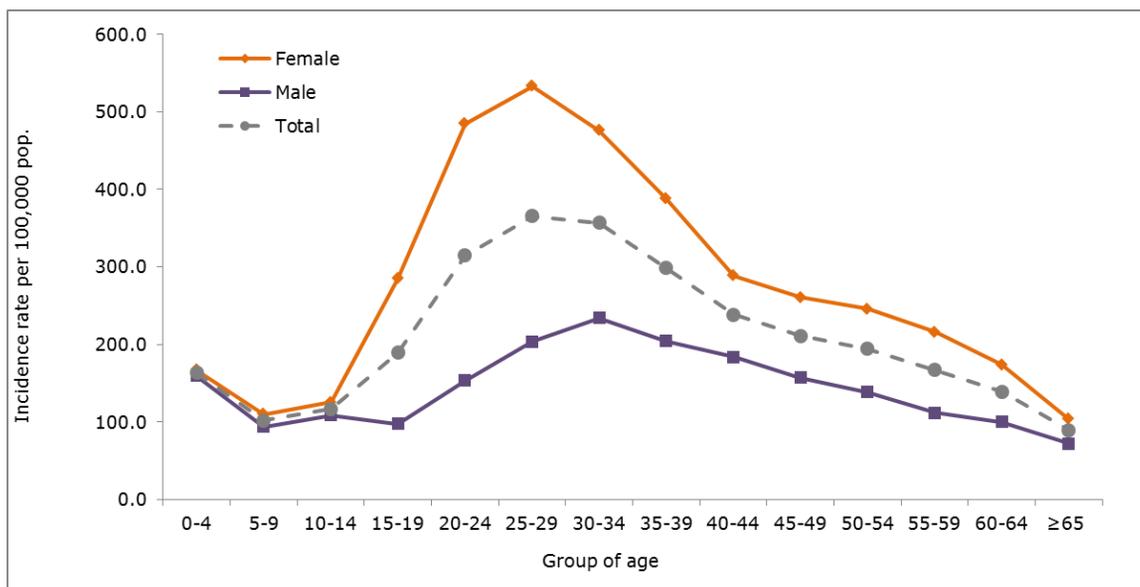
The number of reported Zika cases in Colombia began to increase in EW 32 of 2015 and continued to increase until EW 5 of 2016 (**Figure 1**). There has been a decline in the number of cases since EW 6 of 2016 with an average of 67 cases in the last 8 weeks (EW 50 of 2016 to EW 5 of 2017).¹ The epidemiological curve is produced based on data provided to PAHO/WHO by the Colombia Ministry of Health and Social Protection up to EW 5 of 2017. The Colombia National Institute of Health's (Instituto Nacional de Salud, or INS by its acronym in Spanish) latest epidemiological bulletin also provided an epidemiological curve up to EW 6 of 2017, and shows a similar trend with Zika cases declining between EW 6 of 2016 and EW 6 of 2017.²

Incidence rates of Zika are higher in females than in males (**Figure 2**). Irrespective of gender, incidence is highest among those aged 20 to 34 years.³ Information for Zika incidence rate by gender and age-group is only available up to EW 38 of 2016.

³ Reported to PAHO/WHO by the Colombia Ministry of Health and Social Protection on 28 October 2016.

Suggested citation: Pan American Health Organization / World Health Organization. Zika - Epidemiological Report Colombia. March 2017. Washington, D.C.: PAHO/WHO; 2017

Figure 2. Incidence rate of suspected and confirmed Zika cases per 100,000 population by gender and age-group. Colombia, EW 32 of 2015 to EW 38 of 2016.



Source: Data provided by the Colombia Ministry of Health and Social Protection

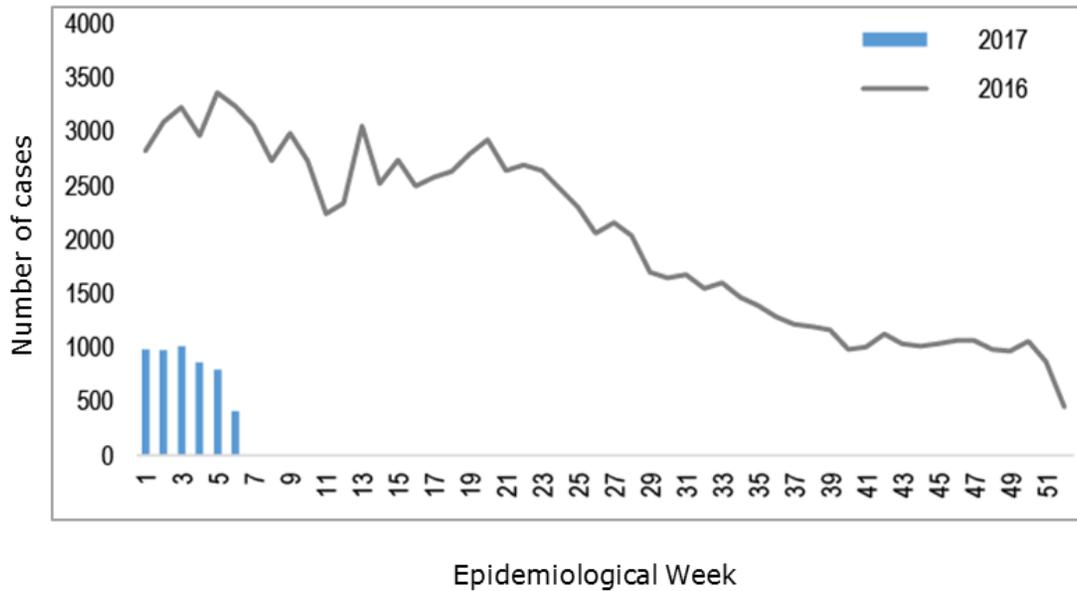
CIRCULATION OF OTHER ARBOVIRUSES

A decrease in dengue and chikungunya cases have been observed during 2017 compared to reported cases in 2016. In 2017, a total of 5,000 dengue cases have been reported up to EW 6, representing a 70% reduction in cases compared to the same period in 2016 (**Figure 3**)^{2,4}. Similarly, a total of 205 chikungunya cases have been reported up to EW 6 in 2017, representing a 97% reduction the cases compared to the same period in 2016 (**Figure 4**)^{2,5}.

⁴ Colombia National Institute of Health. Epidemiological Bulletin. EW 6 of 2016. Available at: <http://www.ins.gov.co/boletin-epidemiologico/Boletn%20Epidemiolgico/2016%20Boletin%20epidemiologico%20semana%206.pdf>

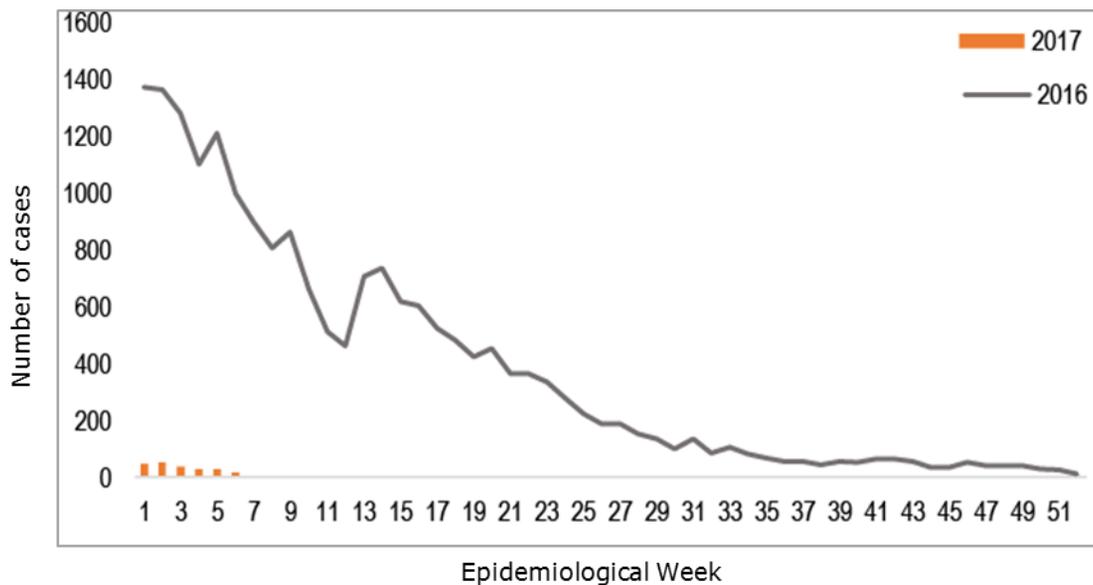
Suggested citation: Pan American Health Organization / World Health Organization. Zika - Epidemiological Report Colombia. March 2017. Washington, D.C.: PAHO/WHO; 2017

Figure 3. Cases of Dengue. Colombia. EW 1 to EW 52 of 2016 and EW 1 to EW 6 of 2017.



Source: Data published Colombia Ministry of Health and Social Protection and reproduced by PAHO/WHO

Figure 4. Cases of Chikungunya. Colombia. EW 1 to EW 52 of 2016 and EW 1 to EW 6 of 2017.



Source: Data published Colombia Ministry of Health and Social Protection and reproduced by PAHO/WHO

ZIKA VIRUS DISEASE IN PREGNANT WOMEN

The Colombian National Institute of Health is conducting surveillance for pregnant women with suspected Zika virus disease. Since the beginning of the outbreak up to EW 6 of 2017, there have

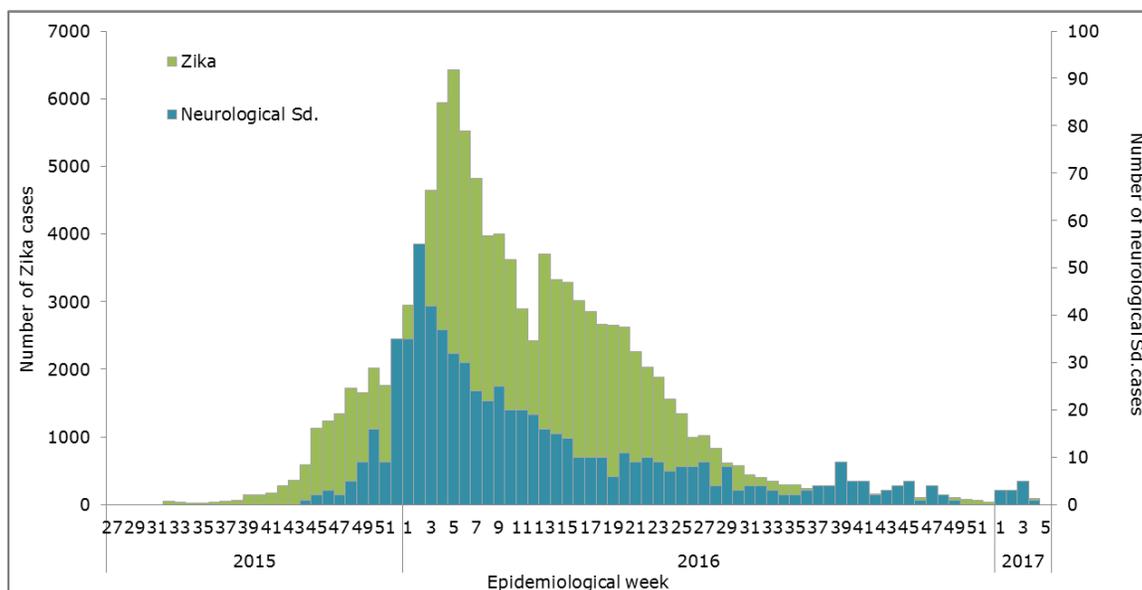
been a total of 19,817 pregnant women with suspected Zika virus disease reported in the country, of which 6,363 have been laboratory-confirmed with Zika virus infection.^{2,5}

ZIKA COMPLICATIONS

ZIKA VIRUS-ASSOCIATED GUILLEIN-BARRÉ SYNDROME (GBS)

Between EW 44 of 2015 and EW 5 of 2017, Colombia reported 689 cases of neurological syndrome in persons with previous history of symptoms consistent with Zika virus disease.¹ Among those patients, 64% (443 cases) have been classified as Guillain-Barré syndrome (GBS) cases. The epidemic curve of the neurological syndrome and Zika is available as of EW 5 of 2017 and shows a similar distribution by EW as the epidemic curve for cases of Zika virus disease (**Figure 5**).²

Figure 5. Suspected and confirmed cases of Zika and neurological syndrome. Colombia. EW 27 of 2015 to EW 5 of 2017.



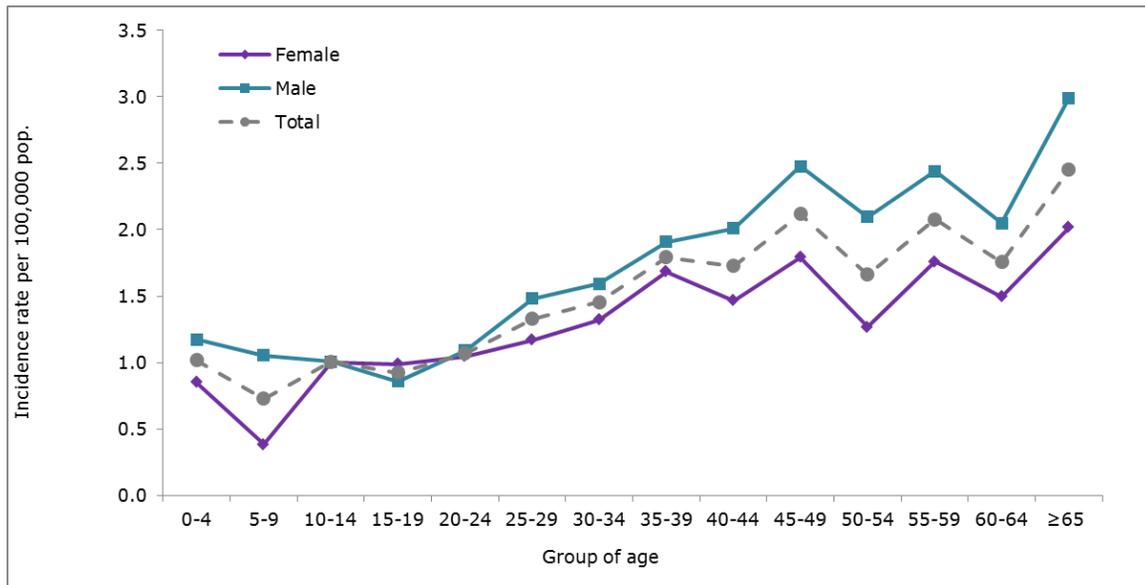
Source: Data provided by the Colombia Ministry of Health and Social Protection ¹

In the distribution by sex, males have a higher incidence rate of GBS compared to females (52.7%).^{2,3} With regards to the age-distribution, the highest incidence rates of neurological syndrome associated to Zika infection are in the following age-groups: older than 65 years, 55-59 years and 45-49 years (**Figure 6**).

⁵ Colombia National Institute of Health. Epidemiological Bulletin. EW 52 of 2016. Available at: <http://www.ins.gov.co/boletin-epidemiologico/Boletn%20Epidemiolgico/2016%20Bolet%C3%ADn%20epidemiol%C3%B3gico%20semana%2052%20-%20.pdf>

Suggested citation: Pan American Health Organization / World Health Organization. Zika - Epidemiological Report Colombia. March 2017. Washington, D.C.: PAHO/WHO; 2017

Figure 6. Incidence rate of neurological syndrome related to infection by Zika virus cases per 100,000 population by sex age-group. Colombia, EW 42 of 2015 to EW 6 of 2017.



Source: Data published by the Colombia Ministry of Health and Social Protection and reproduced by PAHO/WHO^{2,3}

CONGENITAL SYNDROME ASSOCIATED WITH ZIKA VIRUS INFECTION

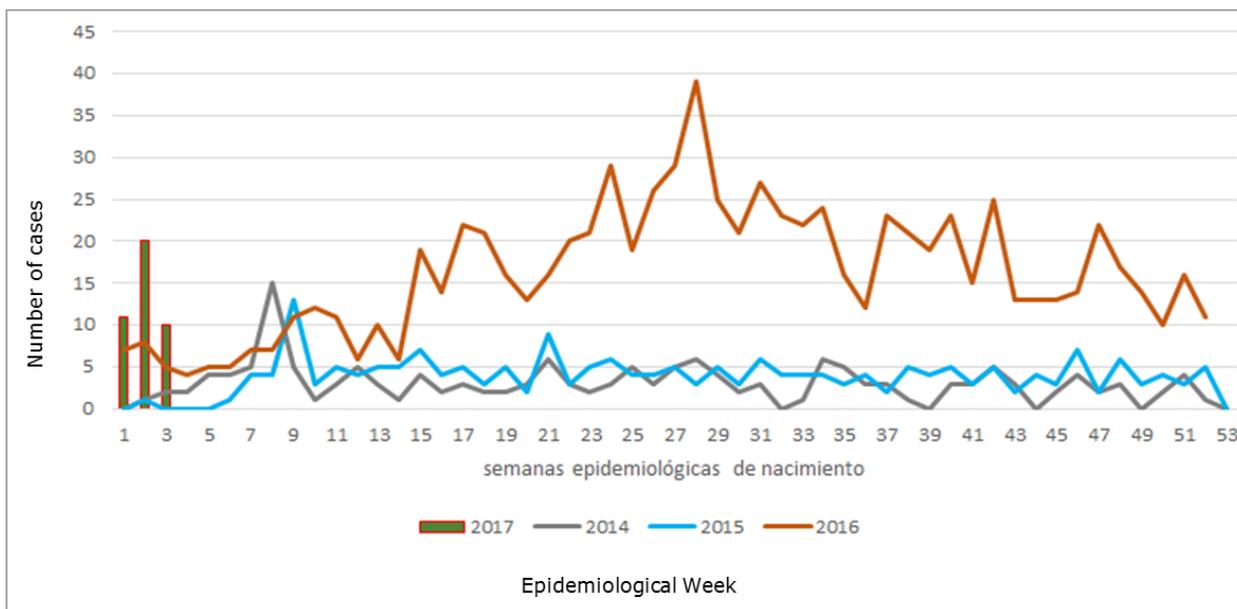
Between EW 1 of 2016 and EW 6 of 2017, a total of 1,024 microcephaly cases have been reported in Colombia.² This number represents an increase compared to the expected historical annual mean (140 cases per year). Of the total cases notified, 113 have been laboratory-confirmed for association with Zika virus infection, 256 cases have been discarded, and 558 remain under investigation.

In 2016, the number of microcephaly cases showed an increasing trend reaching a peak in EW 28 (**Figure 7**).⁷ While the number of cases gradually decreased since, the trend still represented a higher number of cases when compared to the same period in 2014 and 2015.

On 16 December 2016, Colombia’s Instituto Nacional de Salud (INS) and the Colombia Ministry of Health and Social Protection in collaboration the U.S. Centers for Disease Control and Prevention (CDC) published a Morbidity and Mortality Weekly Report (MMWR) titled “Preliminary Report of Microcephaly Potentially Associated with Zika Virus Infection During Pregnancy — Colombia, January–November 2016”.⁶ According to the article, between EW 5 and 45 of 2016, a total of 476 microcephaly cases were reported in Colombia, compared with 110 cases reported during the same period in 2015. Of the 476 microcephaly cases, a total of 306 (64%) were tested for Zika virus infection; 147 (48%) had laboratory evidence of Zika virus infection by RT-PCR or immunohistochemistry, and five of six tested had serologic evidence of infection by MAC-ELISA.⁴

⁶ Cuevas EL, Tong VT, Rozo N, et al. Preliminary Report of Microcephaly Potentially Associated with Zika Virus Infection During Pregnancy — Colombia, January–November 2016. MMWR Morb Mortal Wkly Rep 2016;65:1409–1413. DOI: <http://dx.doi.org/10.15585/mmwr.mm6549e1>.

Figure 7. Microcephaly cases by EW. Colombia. 2014 to EW 3 of 2017.



Source: Data provided by the Colombia Ministry of Health and Social Protection ⁷ and reproduced by PAHO/WHO

DEATHS AMONG ZIKA CASES

As of EW 6 of 2017, no deaths among Zika cases were officially reported by the Colombia Ministry of Health.¹

NATIONAL ZIKA SURVEILLANCE GUIDELINES

The Colombia National Institute of Health surveillance and notification guidelines for Zika virus is available at: <http://www.ins.gov.co/Noticias/Paginas/Zika.aspx#.WLSpD9IrJpj>

The Colombia Ministry of Health guidelines for clinical management of congenital anomalies in fetuses associated with Zika virus during pregnancy are available at:

<https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/PP/ET/linea-deteccion-manejo-clinico-anomalia-congenitas-fotos-zika.pdf#search=guia%2520zika>

The Colombia National Institute of Health surveillance guidelines were implemented on 14 October 2015. More information is available at:

<http://www.ins.gov.co/Noticias/ZIKA/Circular%20Ext%200043%202015%20Zika.pdf>

The announcement on the public health surveillance and control of neurological syndromes associated with the Zika virus released on 15 December 2015 is available at:

<http://www.ins.gov.co/Noticias/ZIKA/Circular%20Ext%200064%202016%20Vigilancia%20y%20notificaci%C3%B3n.pdf>

⁷ Data reported to PAHO/WHO by the Colombia Ministry of Health and Social Protection on 27 February 2017.

Intensification of surveillance for Guillain-Barre syndrome began on 19 April 2016. More information is available at:

<http://www.ins.gov.co/Noticias/ZIKA/Circular%20Ext%200022%202016%20Gillaen%20Barr%C3%A9.pdf>

LABORATORY CAPACITY

The diagnosis of Zika virus is centralized at the INS. The Virology laboratory has capacity for viral detection in different types of samples, including tissues for diagnosis in fatal cases. The INS is currently implementing the PCR multiplex system from the U.S. CDC (Trioplex) and the ELISA IgM for Zika virus.

INFORMATION-SHARING

The Colombia International Health Regulations (IHR) National Focal Point (NFP) has been sharing information with PAHO/WHO. Additionally, the Epidemiological Bulletin is published online by the Colombia National Institute of Health on a weekly basis. Both the information published in the epidemiological bulletin, and data provided by the IHR NFP has been used in this publication. At the time of this report, the latest information shared with PAHO/WHO was from EW 5 of 2017, while the latest available information published online by the Colombia National Institute of Health was from EW 6 of 2017.