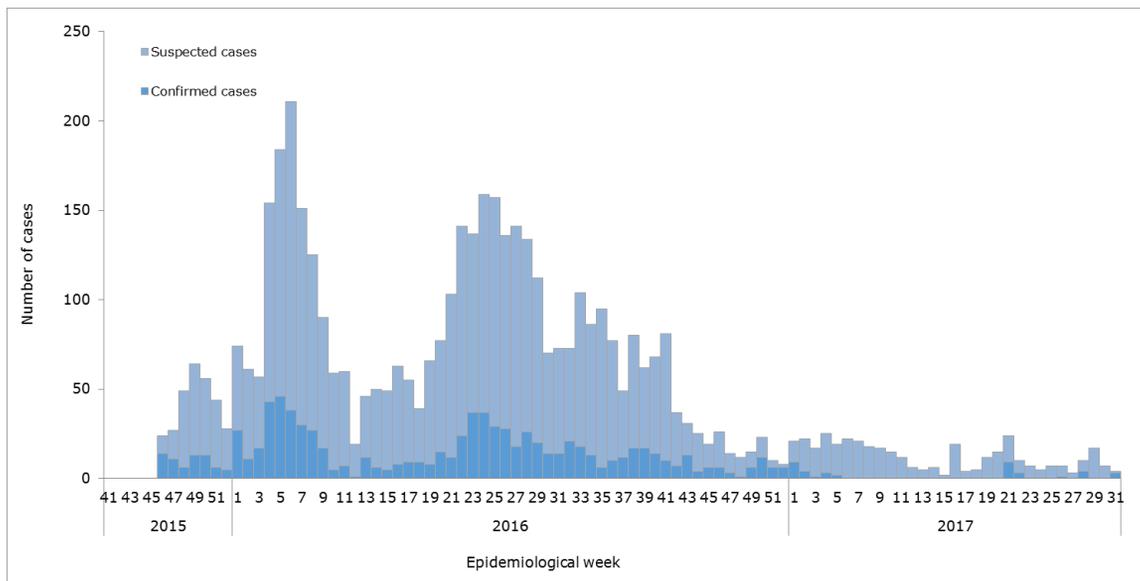


Zika-Epidemiological Report Guatemala

25 September 2017

Figure 1. Suspected and confirmed Zika cases by epidemiological week (EW). Guatemala. EW 41 of 2015 to EW 31 of 2017.



Source: Data reported by the Guatemala Ministry of Public Health and Social Assistance¹

FIRST AUTOCHTHONOUS VECTOR-BORNE CASES

In epidemiological week (EW) 47 of 2015, Guatemala health authorities reported the detection of the first confirmed Zika case of autochthonous vector-borne transmission in Guatemala, in Zacapa Department.

GEOGRAPHIC DISTRIBUTION

In 2017, as of EW 28, Guatemala has reported suspected Zika cases in 20 health areas.^{2,3} The highest incidence rates were recorded in Guatemala Central (14 cases per 100,000 population), Chiquimula (6 cases per 100,000), and Santa Rosa (5 cases per 100,000). In 2016, instead, the highest incidence rates were recorded in the health areas of Santa Rosa (106 cases per 100,000), Zacapa (106 cases per 100,000), and Chiquimula (61 cases per 100,000).⁴

¹ Reported to PAHO/WHO by the Guatemala Ministry of Public Health and Social Assistance on 21 August 2017.

² Guatemala Ministry of Public Health and Social Assistance. Epidemiological Bulletin. EW 28. Available at: http://epidemiologia.mspas.gob.gt/files/Publicaciones%202017/SEMEPI%202017/SEMEPI_33_2017.pdf

³ Please note that information provided by the Guatemala Ministry of Public Health and Social Assistance is disaggregated by health area and not by department.

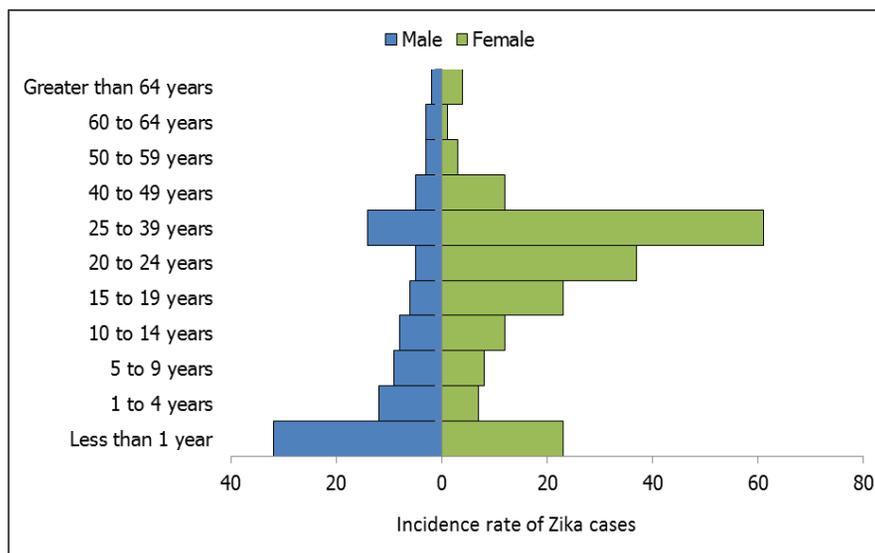
⁴ Guatemala Ministry of Public Health and Social Assistance. Epidemiological Bulletin. EW 52 of 2016. Available at: http://epidemiologia.mspas.gob.gt/files/Publicaciones%202016/SEMEPI/SEMEPI_52_2016.pdf

TREND

From the end of 2015 up to EW 6 of 2016, an increasing trend of Zika cases was observed in Guatemala. Since then a decrease of weekly number of cases has been observed, with a slight increase in the first weeks of 2017. In the last 8 reported weeks (EW 24 to EW 31 of 2017), an average of 7 suspected Zika cases per week has been reported (**Figure 1**).

With regard to the distribution of cases by age and gender, according to available data, in 2017 the highest Zika incidence rate was observed in women aged between 15 and 39 years, followed by women aged 20 to 24 years probable due to a bias in detection of pregnant women infected with Zika. In the majority of age groups, the incidence rate observed in women was higher than that among men, with the exception of those aged less than 1 year to 5 to 9 years and those aged 60 to 64 years (**Figure 2**).²

Figure 2. Rate of incidence of Zika cases per 100,000 population by age and gender. Guatemala. EW 1 to EW 28 of 2017.



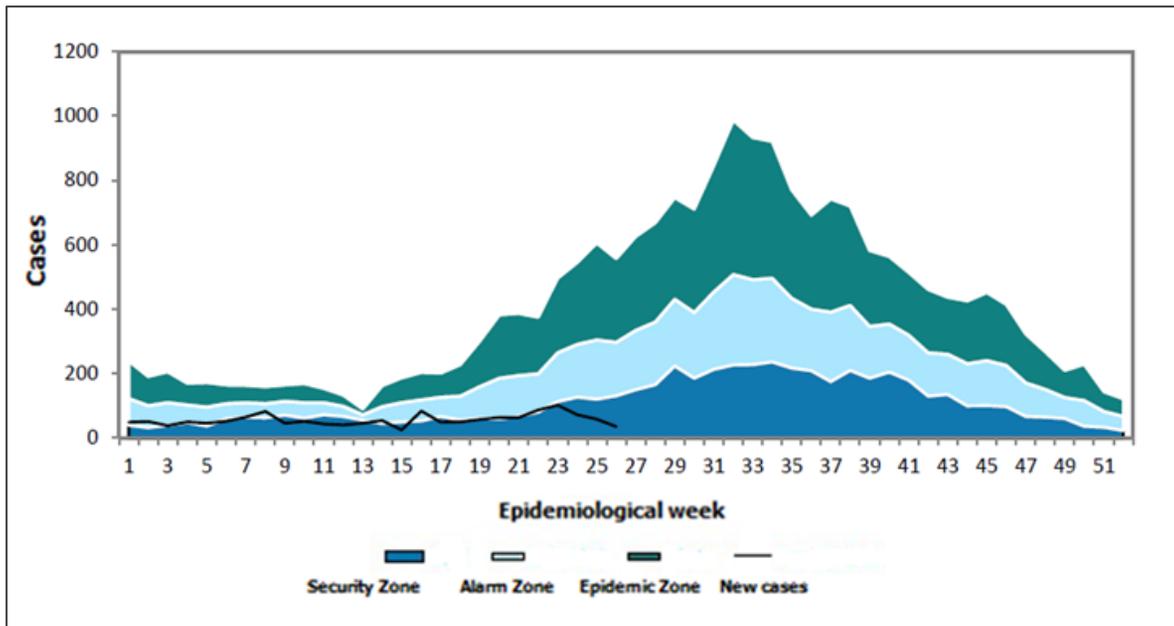
Source: Data reported by the Guatemala Ministry of Public Health and Social Assistance and reproduced by PAHO/WHO²

CIRCULATION OF OTHER ARBOVIRUSES

Between EW 1 and EW 28 of 2017, a total of 1,651 dengue cases (10 cases per 100,000) were reported, representing a 64% decrease compared to the 4,590 dengue cases (28 cases per 100,000) reported in the same period of 2016.⁵ As of EW 28 of 2017, the number of weekly dengue cases is below the epidemic threshold and on a downward trend (**Figure 3**).

⁵ Guatemala Ministry of Public Health and Social Assistance. Epidemiological Bulletin. EW 26. Available at: http://epidemiologia.mspas.gob.gt/files/Publicaciones%202017/SEMEPI%202017/SEMEPI_26_2017.pdf

Figure 3. Dengue, endemic corridor by EW. Historical data from 2009 to 2016 (excluding 2014). Guatemala. EW 1 to EW 28 of 2017.



Source: Data reported by the Guatemala Ministry of Public Health and Social Assistance and reproduced by PAHO/WHO⁵

In regard to chikungunya, from EW 1 to EW 28 of 2017, a total of 251 cases (2 cases per 100,000) were reported nationwide, which represents a significant decrease compared to the same period in 2016 when 3,031 cases were reported (18 cases per 100,000).²

ZIKA VIRUS DISEASE IN PREGNANT WOMEN

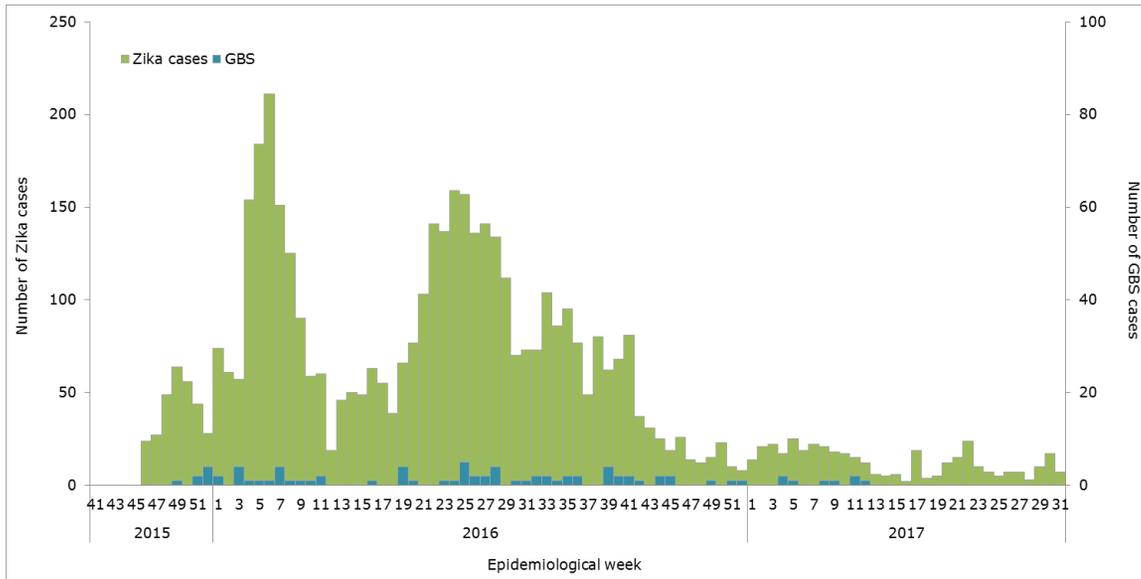
As of EW 31 of 2017, the Guatemala Ministry of Public Health and Social Assistance has reported 1,414 pregnant women with suspected Zika virus disease, including 341 confirmed cases.¹

ZIKA COMPLICATIONS

ZIKA-VIRUS-ASSOCIATED GUILLAIN-BARRÉ SYNDROME (GBS)

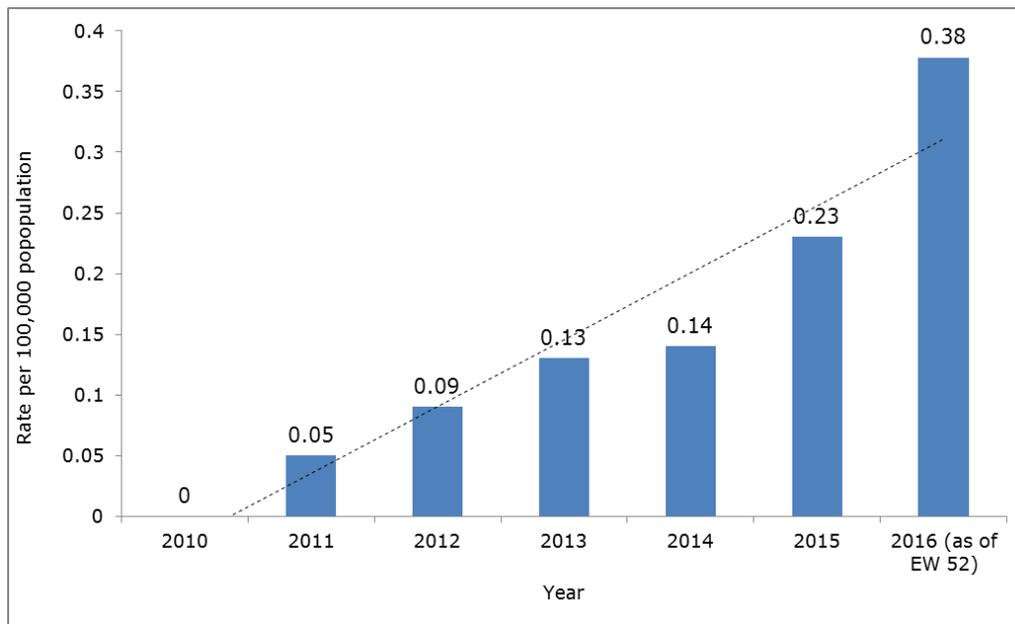
As of EW 31 of 2017, a total of 81 cases of Guillain-Barré syndrome (GBS), including 9 cases confirmed for Zika virus, have been reported by Guatemala health authorities to PAHO/WHO (Figure 4).¹ The incidence rate of GBS in 2016 (as of EW 52) was higher than the rates of GBS reported between 2011 and 2015 (Figure 5). As of EW 31 of 2017, eleven confirmed and 65 suspected cases of neurological syndrome associated with Zika virus infection have been reported.¹

Figure 4. Suspected and confirmed Zika and GBS cases by EW. Guatemala. EW 41 of 2015 to EW 31 of 2017.



Source: Data reported by the Guatemala Ministry of Public Health and Social Assistance to PAHO/WHO¹

Figure 5. Rate of GBS per 100,000 population. Guatemala. 2011 – 2016 (as of EW 52).



Source: Data obtained during a PAHO/WHO mission conducted in Guatemala

CONGENITAL SYNDROME ASSOCIATED WITH ZIKA VIRUS INFECTION

As of EW 21 of 2017, a total of 140 confirmed cases of congenital syndrome associated with Zika virus infection have been reported by the Guatemala health authorities to PAHO/WHO.⁶

DEATHS AMONG ZIKA CASES

As of EW 35 of 2017, no deaths among Zika cases have been reported by the Guatemala health authorities to PAHO/WHO.

NATIONAL ZIKA SURVEILLANCE GUIDELINES

The Ministry of Public Health and Social Assistance published a protocol for the epidemiological surveillance, prevention, control and care of Zika virus disease. The protocol is available at:

<http://epidemiologia.mspas.gob.gt/files/Protocolo%20Zica.pdf>

LABORATORY CAPACITY

The diagnosis of Zika virus is performed by molecular detection (real time RT-PCR) by the *Grupo Virología, Laboratorio Nacional de Salud* at the Ministry of Health of Guatemala. Currently, the laboratory is also implementing the serology diagnosis based on ELISA IgM detection as well as the PCR multiplex system from the United States Centers for Disease Control and Prevention (Triplex).

INFORMATION-SHARING

The Guatemala Ministry of Public Health and Social Assistance publishes a weekly epidemiological bulletin and the Guatemala IHR NFP shares data with PAHO/WHO regularly. At the time of this report, the latest information shared by the Guatemala IHR NFP with PAHO/WHO was from EW 31 of 2017, and the latest available information published online by the Guatemala Ministry of Public Health and Social Assistance was from EW 28 of 2017.

⁶ Reported to PAHO/WHO by the Guatemala Ministry of Public Health and Social Assistance on 25 May 2017.