First Autochthonous Vector-Borne Cases

In epidemiological week (EW) 47 of 2015, the Paraguay International Health Regulations (IHR) National Focal Point (NFP) reported to PAHO/WHO the first autochthonous vector-borne transmission of Zika virus identified in Paraguay.

Geographic Distribution

In 2015, six confirmed cases were reported in Pedro Juan Caballero, Amambay Department, which borders Ponta Porá, Brazil. At the time of the report, no further information on geographic case distribution was available.
TREND

Since the introduction of Zika virus in Paraguay, a large number of cases were reported between EW 1 and EW 13 of 2016 (Figure 1). After a period of decline, a low number of cases were reported between EW 15 and EW 39 of 2016. However, an increase in cases has been observed between EW 47 of 2016 and EW 3 of 2017 with an average of ten cases reported per week in the last 8 weeks (EW 48 of 2016 to EW 3 of 2017).

CIRCULATION OF OTHER ARBOVIRUSES

In 2016, the Paraguay health authorities reported a cumulative total of 173,709 probable cases (incidence rate of 2,470 cases per 100,000 population) and 2,556 confirmed cases (36 cases per 100,000 population) of dengue in Paraguay.³ As of EW 4 of 2017, 2,141 probable cases (30 cases per 100,000 population) and 16 confirmed cases of dengue have been reported.⁴

In 2016, a total of 880 suspected and 38 laboratory-confirmed cases (14 cases per 100,000 population) of chikungunya have been reported in Paraguay.⁵ As of EW 4 of 2017, four cases of chikungunya have been reported by the Paraguay health authorities.⁶

ZIKA VIRUS DISEASE IN PREGNANT WOMEN

As of EW 46 of 2016, the Paraguay IHR NFP reported two pregnant women laboratory-confirmed for Zika virus infection.

ZIKA COMPLICATIONS

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

As of EW 3 of 2017, 92 cases of Guillain-Barré syndrome (GBS) were reported. This represents an increase in GBS cases compared to the annual average between 2011 and 2015 (27 cases). None of the cases have been laboratory-confirmed for Zika virus. There is a temporal association of increased GBS cases and increased Zika cases (Figure 3).
CONGENITAL SYNDROME ASSOCIATED WITH ZIKA VIRUS INFECTION

As of EW 39 of 2016, the Paraguay Ministry of Public Health and Social Wellness reported two laboratory-confirmed cases of congenital syndrome associated with Zika virus infection. The first case is a live newborn male from the department of Alto Parana which neighbors Brazil. The second case is a live newborn female from the department of Paraguari. Both mothers reported a history of rash during pregnancy. The cases were laboratory confirmed by the Laboratorio Central de Salud Pública.7

DEATHS AMONG ZIKA CASES

As of EW 5 of 2017, no deaths among Zika cases have been reported by the Paraguay Ministry of Public Health and Social Wellness.

NATIONAL ZIKA SURVEILLANCE GUIDELINES

Paraguay has published a Surveillance Protocol on Zika virus infection, which is available at: http://vigisalud.gov.py/wp-content/uploads/2016/05/Vigilancia-Zika-Paraguay-2016-1.pdf.

LABORATORY CAPACITY

Laboratory confirmation of suspected cases of Zika virus is performed by molecular detection (real time RT-PCR) by the Laboratorio Central de Salud Pública at the Paraguay Ministry of Public Health and Social Wellness. The laboratory has also implemented the serology diagnosis based on ELISA IgM detection.


INFORMATION-SHARING

The latest information shared by the Paraguay International Health Regulations (IHR) National Focal Point (NFP) with PAHO/WHO was from EW 39 of 2016. Information on Zika virus is also available through the epidemiological bulletin reported on a weekly basis by the Paraguay General Directorate of Health Surveillance (DGVS) website. At the time of this report, the latest information was available as of EW 3 of 2017.