Pan American Health Organization

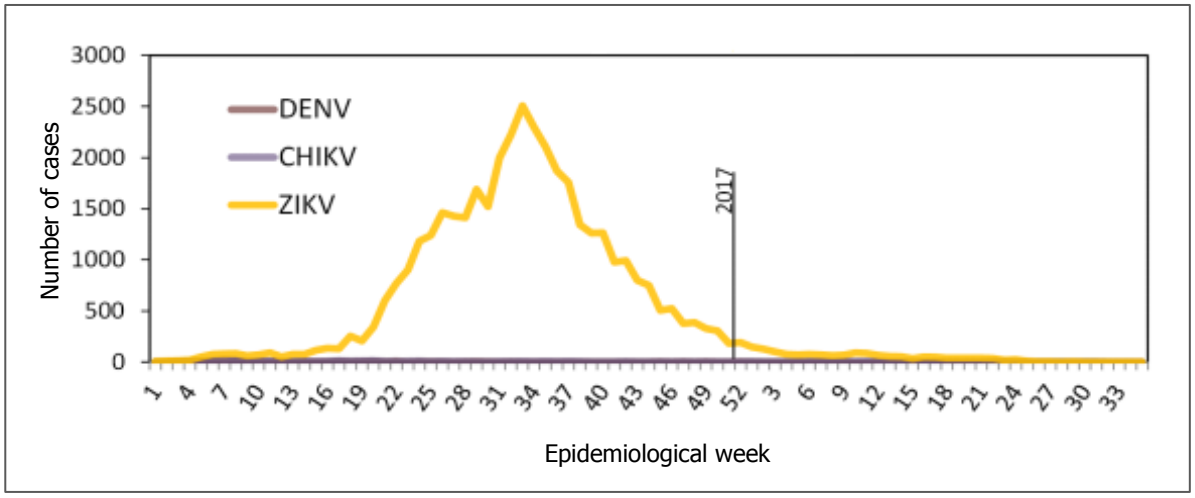
World Health Organization
REGIONAL OFFICE FOR THE Americas

Zika-Epidemiological Report

Puerto Rico

25 September 2017

Figure 1. Confirmed chikungunya, dengue, and Zika cases by epidemiological week (EW). Puerto Rico. EW 1 of 2016 to EW 35 of 2017.



Source: Data published by the Puerto Rico Department of Health and reproduced by PAHO/WHO [1]

FIRST AUTOCHTHONOUS VECTOR-BORNE CASES

In epidemiological week (EW) 52 of 2015, the United States International Health Regulations (IHR) National Focal Point (NFP) notified PAHO/WHO of the detection of the first laboratory-confirmed case of Zika in the Commonwealth of Puerto Rico, an unincorporated territory of the United States.

GEOGRAPHIC DISTRIBUTION

The first Zika cases in Puerto Rico were detected in Humacao, on the eastern coast of the island. Since then and up to EW 53 of 2016, confirmed cases were reported in all municipalities of Puerto Rico.[2] In the last eight reported weeks (EW 28 to EW 35 of 2017), confirmed cases have been reported in two of Puerto Rico's 78 municipalities (**Figure 2**).[1]

[1] Puerto Rico Department of Health. Arboviruses Weekly Report. EW 35 of 2017. Available at: http://www.salud.gov.pr/Estadisticas-Registros-y-Publicaciones/Informes%20Arbovirales/Reporte%20ArboV%20semana%2022-2017.pdfhttp://www.salud.gov.pr/Estadisticas-Registros-y-Publicaciones/Informes%20Arbovirales/Reporte%20ArboV%20semana%2035-2017.pdf

[2] Puerto Rico Department of Health. Arboviruses Weekly Report. EW 53 of 2016. Available at: http://www.salud.gov.pr/Estadisticas-Registros-y-Publicaciones/Informes%20Arbovirales/Reporte%20ArboV%20semana%2052-53%202016.pdf

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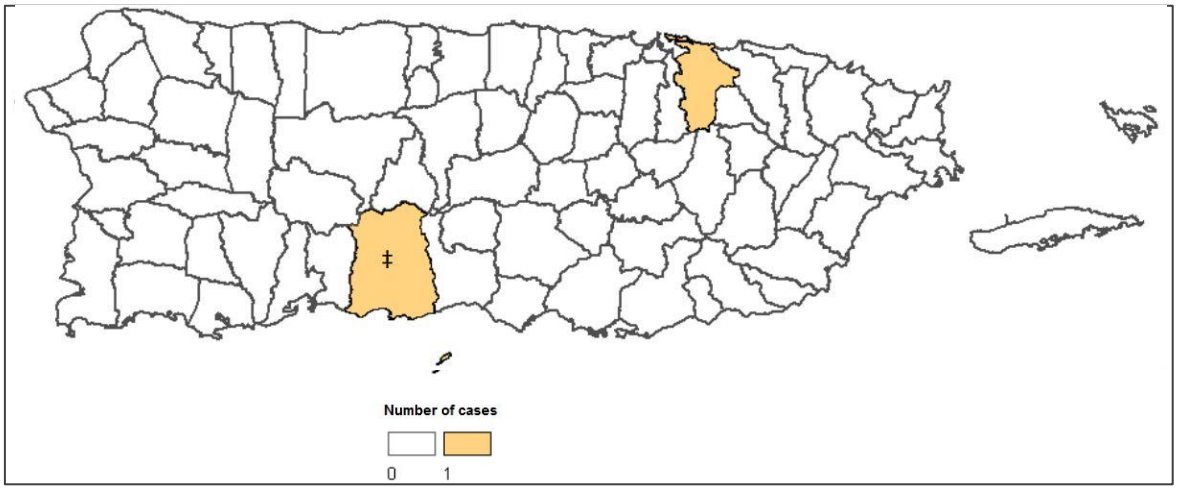
Figure 2. Confirmed Zika cases by municipality. Puerto Rico. EW 28 to EW 35 of 2017.



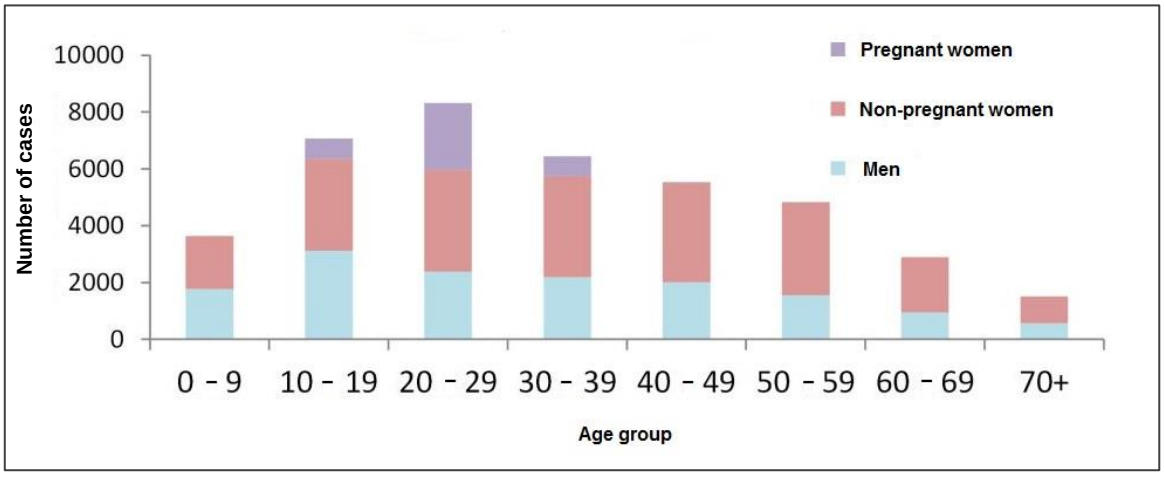
Source: Data published by the Puerto Rico Department of Health and reproduced by PAHO/WHO[1]

TREND

The outbreak picked in EW 34 of 2016 after which a decreasing trend has been observed with few cases in 2017 (**Figure 1**).

With regard to the distribution of Zika cases by age and gender, among confirmed cases, there is a preponderance of females while the highest numbers of cases are reported among those aged 10 - 39 years (**Figure 3**).[1]

Figure 3. Age group, gender, of laboratory-confirmed Zika virus cases. Puerto Rico, 2016 – 2017 (as of EW 35).



Source: Data published by the Puerto Rico Department of Health and reproduced by PAHO/WHO

CIRCULATION OF OTHER ARBOVIRUSES

Between 2016 and EW 35 of 2017, significantly fewer cases of dengue and chikungunya have been reported in Puerto Rico compared with Zika (**Figure 1**) and previous year. In 2016, 174 laboratory-confirmed cases of dengue were reported.[1] During the same period, 183 cases of chikungunya were detected.

Between EW 32 and EW 35 of 2017, no confirmed cases of dengue or chikungunya have been reported.

ZIKA VIRUS DISEASE IN PREGNANT WOMEN

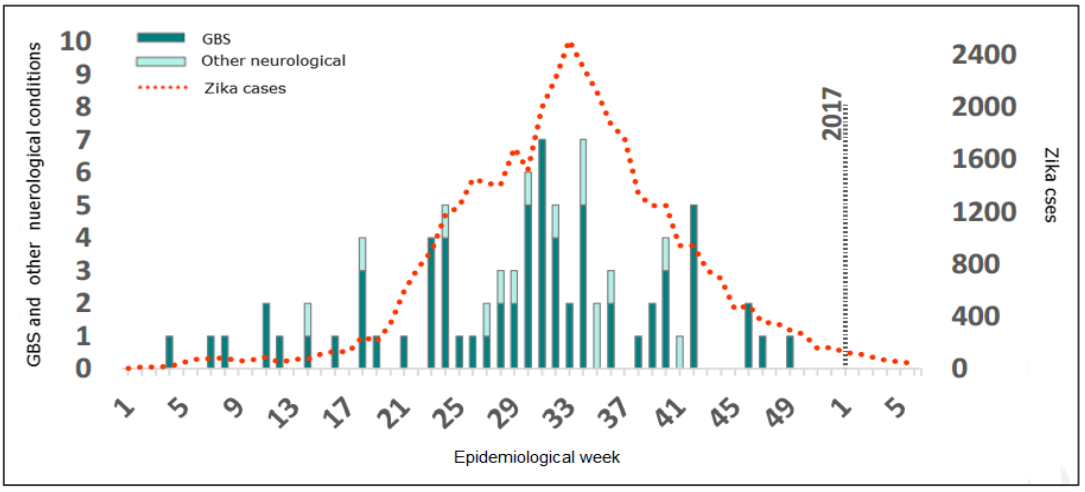
As of EW 35 of 2017, a total of 4,047 pregnant women have been laboratory-confirmed for Zika virus infection in Puerto Rico.[1] Of these, 1,940 (48%) were symptomatic and 2,107 (52%) were asymptomatic.

ZIKA COMPLICATIONS

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

Between EW 1 of 2016 and EW 6 of 2017, a total of 68 cases of Guillain-Barré syndrome (GBS) with evidence of infection by Zika or other flaviviruses were reported.[3] During this period, the distribution of Zika cases and GBS and other neurological syndrome cases followed a similar trend: both picked up between EW 31 and 34 of 2016, after which a gradual decline in the number of cases was observed (**Figure 4**).[3]

Figure 4. Cases of GBS with evidence of Zika virus or flavivirus infection by public health region. Puerto Rico. EW 1 of 2016 to EW 6 of 2017.



Source: Data published by the Puerto Rico Department of Health and reproduced by PAHO/WHO [3]

[3] Puerto Rico Department of Health. GBS weekly report. EW 6 of 2017. Available at: http://www.salud.gov.pr/Estadisticas-Registros-y-Publicaciones/Informe%20Sndrome%20GillainBarr/Informe%20de%20Casos%20del%20Síndrome%20de%20Guillain-Barré_24Febrero2017.pdf

Suggested citation: Pan American Health Organization / World Health Organization. Zika Epidemiological Report Puerto Rico. September 2017. Washington, D.C.: PAHO/WHO; 2017

CONGENITAL SYNDROME ASSOCIATED WITH ZIKA VIRUS INFECTION

As of EW 27 of 2016, a total of 65 infants were born to women with evidence of Zika virus infection during pregnancy, and two pregnancy losses were identified. Zika virus was identified in neural tissue by immunohistochemistry in one case of pregnancy loss.[3] As of EW 35 of 2017, a total of 48 cases of congenital syndrome associated with Zika virus infection among live births in Puerto Rico have been identified.[1]

DEATHS AMONG ZIKA CASES

As of EW 35 of 2017, five deaths among confirmed Zika virus cases (not associated with GBS) have been reported from Puerto Rico.[1] The first patient died to complications related to severe thrombocytopenia.[3] No additional information is available regarding the other four deaths.

NATIONAL ZIKA SURVEILLANCE GUIDELINES

The Surveillance guidelines for clinicians issued by the Puerto Rico Department of Health were updated as of EW 13 of 2016.[4]

Newborn screening guidelines for obstetric health care workers were issued in EW 3 of 2016.[5]

LABORATORY CAPACITY

The Public Health Laboratory from the Puerto Rico Department of Health is responsible for laboratory surveillance. PCR multiplex system, Trioplex, from the United States Centers for Disease Control and Prevention (CDC) is being used for Zika laboratory testing. The U.S. CDC, Dengue Branch also provides support for laboratory confirmation by molecular detection (real-time RT-PCR) and serology (ELISA IgM detection and Plaque Reduction Neutralization Test - PRNT).

INFORMATION-SHARING

The Puerto Rico Department of Health publishes a weekly epidemiological bulletin on Zika virus. At the time of this report, the latest Puerto Rico Department of Health epidemiological bulletin was from EW 35 of 2017.

[4] Puerto Rico Department of Health. Arbovirus Case Investigation Form. Available at: http://www.salud.gov.pr/Sobre-tu-Salud/Documents/NEW%20Arbovirus%20Case%20Investigation%20Form%20-%20March%2029%202016.pdf

[5] Puerto Rico Department of Health. Interim Guidelines ZIKA and Pregnant Women. Available at: http://www.salud.gov.pr/Sobre-tu-Salud/Documents/Interim%20Guidelines%20ZIKA%20and%20Pregnant%20Women.pdf

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