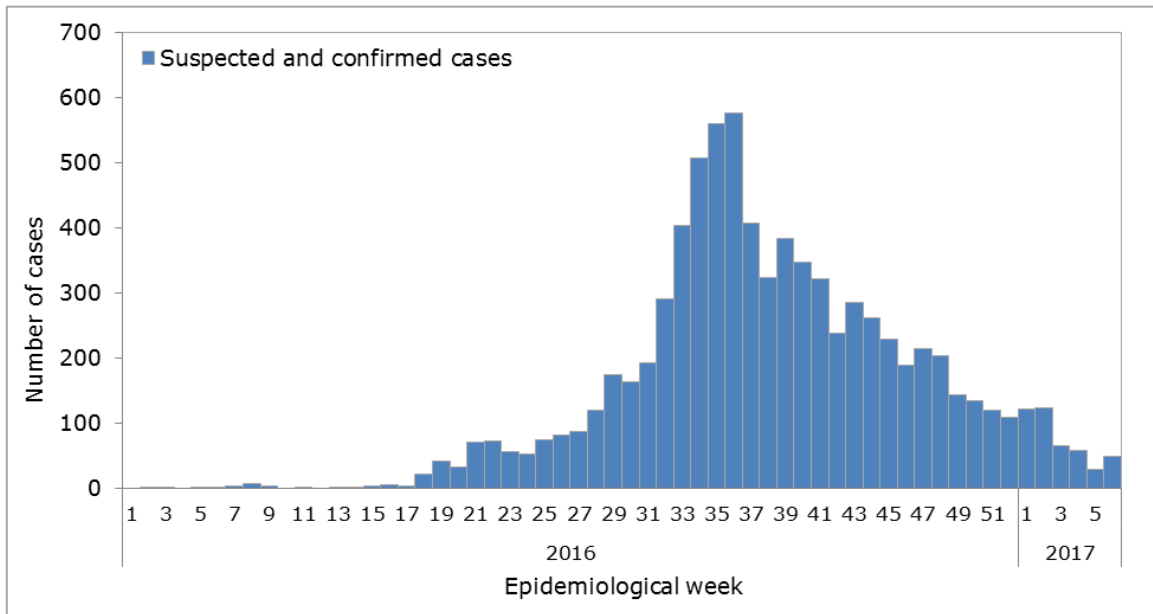


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Figure 1. Suspected and confirmed Zika cases. Costa Rica. EW 1 of 2016 to EW 6 of 2017.



Source: Data reported by the Costa Rica Ministry of Health¹

FIRST AUTOCHTHONOUS VECTOR-BORNE CASES

In epidemiological week (EW) 4 of 2016, the detection of the first autochthonous vector-borne transmission of Zika virus was reported in Costa Rica. The first confirmed autochthonous cases of Zika virus disease was in a pregnant woman, resident of Guanacaste province. The sample was confirmed by the national reference laboratory on EW 8 of 2016.²

GEOGRAPHIC DISTRIBUTION

As of EW 5 of 2017, 1,722 confirmed cases of Zika have been reported in Costa Rica.^{3,4} As of EW 50 of 2016, the cantons reporting the highest cumulative rate per 10,000 population are Garabito (289), Orotina (266), and Esparza (235).⁵

¹ Costa Rica Ministry of Health. Health Surveillance. Health Situation Analysis of Zika. EW 6 of 2017. Available at: <https://www.ministeriodesalud.go.cr/index.php/vigilancia-de-la-salud/analisis-de-situacion-de-salud/3206-situacion-de-zika-2017/file>

² Official Website of the President of the Republic of Costa Rica. Health Declares Sanitary Emergency in Nicoya for Zika virus. 22 February 2016. Available at: <http://presidencia.go.cr/prensa/comunicados/salud-declara-emergencia-sanitaria-en-nicoya-por-virus-del-zika/>

³ Costa Rica Ministry of Health. Epidemiological Bulletin. EW 5 of 2017. Available at: <https://www.ministeriodesalud.go.cr/index.php/biblioteca-de-archivos/vigilancia-de-la-salud/analisis-de-situacion-de-salud/3201-boletin-epidemiologico-no-05-2017-zika-chikungunya-y-dengue/file>

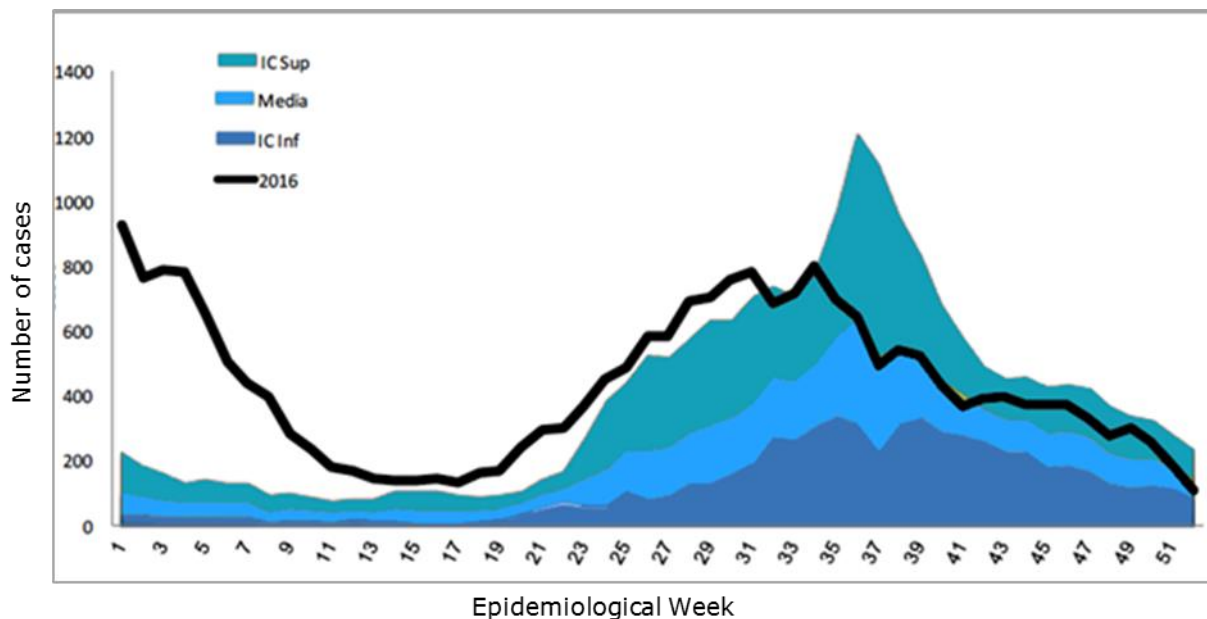
TREND

Since the emergence of Zika in Costa Rica, weekly numbers of suspected and confirmed cases increased steadily up to EW 36 of 2016, after which a decreasing trend has been observed (**Figure 1**). In the last 8 weeks (EW 51 of 2016 to EW 6 of 2017) an average 84 Zika cases were reported per week.

CIRCULATION OF OTHER ARBOVIRUSES

Between EW 1 and EW 5 of 2017, a total of 599 cases of dengue have been reported in Costa Rica.³ By contrast, between EW 1 and EW 5 of 2016, a total of 3,913 cases were detected. Since the beginning of 2016, up to EW 31 of 2016, reported dengue cases have been above the national threshold.⁴ From EW 32 up to EW 52, a decreasing trend of dengue cases is observed (**Figure 2**). DENV-1, DENV-2 and DENV-3 have circulated during in Costa Rica this year.

Figure 2. Dengue endemic channel. Cost Rica. EW 1 to EW 52 of 2016.



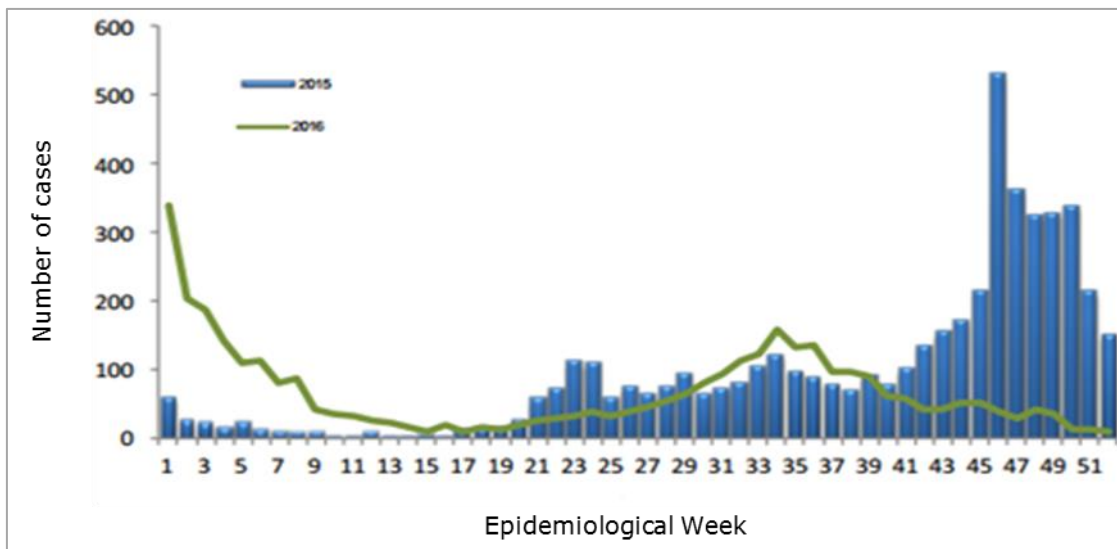
Source: Data published by the Costa Rica Ministry of Health and reproduced by PAHO/WHO

In regard to chikungunya, between EW 1 and EW 5 of 2017, a total of 72 cases have been identified in Costa Rica.³ Over the same period in 2016, there were 970 cases of chikungunya reported. From the beginning of the year in 2016, up to EW 16, the number of chikungunya cases was higher than those reported during 2015.⁴ In the last 13 weeks of 2016, the number of chikungunya cases was lower than those reported during 2015 (**Figure 3**).

⁴ Costa Rica Ministry of Health. Epidemiological Bulletin. EW 52 of 2016. Available at: <https://www.ministeriodesalud.go.cr/index.php/biblioteca-de-archivos/3189-resumen-de-la-situacion-en-america-del-zika-chikungunya-y-dengue-para-el-ano-2016/file>

⁵ Costa Rica Ministry of Health. Epidemiological Bulletin. EW 50 of 2016. Available at: <https://www.ministeriodesalud.go.cr/index.php/biblioteca-de-archivos/3187-boletin-epidemiologico-no-44-2016-zika-chikungunya-y-dengue/file>

Figure 3. Number of chikungunya cases. Costa Rica. 2015 and 2016 (up to EW 52).



Source: Data published by the Costa Rica Ministry of Health and reproduced by PAHO/WHO

ZIKA VIRUS DISEASE IN PREGNANT WOMEN

As of EW 5 of 2017, a total of 155 confirmed cases of Zika virus infection in pregnant women have been reported by the Costa Rica Ministry of Health.^{3,4}

ZIKA COMPLICATIONS

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

As of EW 5 of 2017, two confirmed case of Guillain-Barré syndrome (GBS) associated with Zika virus infection has been reported by the Costa Rica Ministry of Health.³

CONGENITAL SYNDROME ASSOCIATED WITH ZIKA VIRUS INFECTION

As of EW 5 of 2017, two confirmed cases of congenital syndrome associated with Zika virus infection have been reported by the Costa Rica Ministry of Health.^{3,4} In the first case reported the mother reported being in Nicaragua at the beginning of her pregnancy, but did not recall symptoms compatible with Zika virus infection.⁶

DEATHS AMONG ZIKA CASES

As of EW 5 of 2017, no deaths among Zika cases have been reported by the Costa Rica Ministry of Health.²

⁶ Reported to PAHO/WHO from the Costa Rica International Health Regulation (IHR) National Focal Point (NFP) on 23 August 2016

NATIONAL ZIKA SURVEILLANCE GUIDELINES

The Costa Rica Ministry of Health published the national guidelines for Zika disease and its complication on 27 December 2016. The Guidelines are available at:

<https://www.ministeriodesalud.go.cr/index.php/vigilancia-de-la-salud/normas-protocolos-y-guias/3186-protocolo-de-vigilancia-de-enfermedad-por-virus-zika-y-sus-principales-complicaciones/file>

LABORATORY CAPACITY

The diagnosis of Zika virus by molecular detection (real time RT-PCR) is performed by the *Instituto Costarricense de Investigación y Enseñanza en Nutrición y Salud* (INCIENSA) at the Ministry of Health of Costa Rica. Currently, the laboratory is also implementing serology diagnosis based on ELISA IgM detection as well as the PCR multiplex system from the United States Centers for Disease Control and Prevention (CDC) (Trioplex).⁷

INFORMATION-SHARING

Information on Zika virus is available through the epidemiological bulletin published by the Costa Rica Ministry of Health on a weekly basis. At the time of this report, the latest available information was from EW 5 of 2017.

⁷ Costa Rica Ministry of Health, Lineamientos Nacionales de vigilancia epidemiológica y laboratorial para la Enfermedad por Virus ZIKA y sus complicaciones principales. 27 December 2016. Available at: <https://www.ministeriodesalud.go.cr/index.php/vigilancia-de-la-salud/normas-protocolos-y-guias/3186-protocolo-de-vigilancia-de-enfermedad-por-virus-zika-y-sus-principales-complicaciones/file>