

Summary of the situation in the Americas

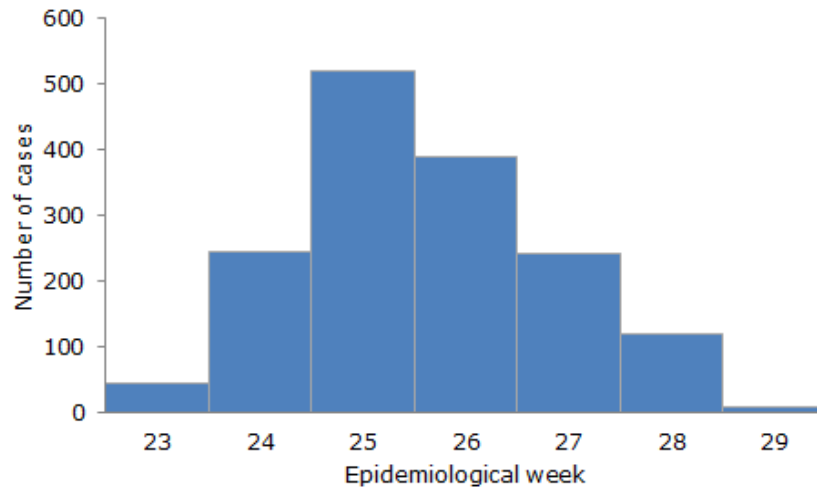
As of epidemiological week (EW) 29 of 2017, thirteen countries and territories of the Americas reported increases in conjunctivitis cases: the Bahamas, Brazil, Costa Rica, Dominica, the Dominican Republic, Guadeloupe, Martinique, Mexico, Panama, Saint Lucia, Saint Martin, Suriname, and the Turks and Caicos Islands.

In the **Bahamas**,¹ between EW 18 and EW 23 of 2017, a total of 240 conjunctivitis cases were reported, which is a 28% increase compared to those reported during the same period in 2016 (187 cases).

In **Brazil**,² in addition to the cases reported by the Amazonas state, in EW 26 of 2017, the municipality of Porto Velho, Rondônia State reported an increase in conjunctivitis cases. Tested samples were positive for adenovirus, enterovirus, and Coxsackie virus.³ In EW 27, the municipality of Fernandópolis, São Paulo State, reported an increase in conjunctivitis cases with 325 cases reported since the beginning of 2017, of which 49 were reported in EW 26. In EW 29 of 2017, the municipality of Santiago do Sul, Santa Catarina State reported an outbreak of conjunctivitis with 40 reported cases, mostly in the school population.⁴

In **Costa Rica**, the International Health Regulations (IHR) National Focal Point informed PAHO/WHO of the increase in conjunctivitis cases in the canton of Garabito, Puntarenas Province, with a cumulative total of 1,559 cases being reported between EW 24 and EW 29 of 2017 (**Figure 1**). The age groups with the highest number of cases (40%) are 10-19 years of age (309 cases) and 30-39 years of age (307 cases). In the canton of Garabito, the town of Herradura reported the highest incidence rate with 834 cases per 10,000 population, followed by the towns of Jacó Centro, Quebrada Ganado, Quebrada Amarilla and Tárcoles, with an incidence rate ranging between 300 and 700 cases per 10,000 population. Of seven cases with samples analyzed by laboratory, two were positive for enteroviruses.

Figure 1. Number of conjunctivitis cases by date of report. Garabito Canton, Costa Rica, EW 23 to EW 29 of 2017.

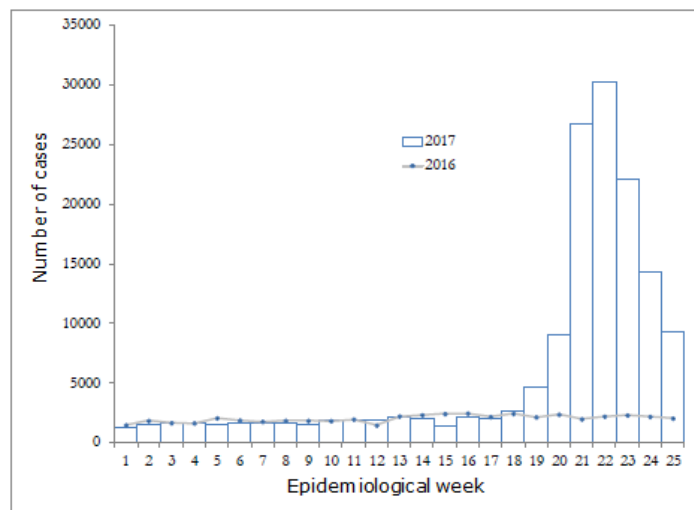


Source: Data provided by the Costa Rica IHR National Focal Point and reproduced by PAHO/WHO

In **Dominica**, the IHR National Focal Point informed PAHO/WHO of an outbreak of conjunctivitis reported between May and June 2017, affecting 7 health districts. The cases occurred in all age groups. Health authorities have strengthened health education, surveillance, and case management.

In the **Dominican Republic**,⁵ as of EW 26 of 2017, a total of 155,148 conjunctivitis cases were reported (incidence rate of 152 cases per 10,000 population), with the highest number of cases being reported in EW 22 of 2017 (**Figure 2**). Among those that sought health care, the highest incidence was reported in children younger than 5 years of age. The outbreak of conjunctivitis began in EW 18 of 2017 and is ongoing.

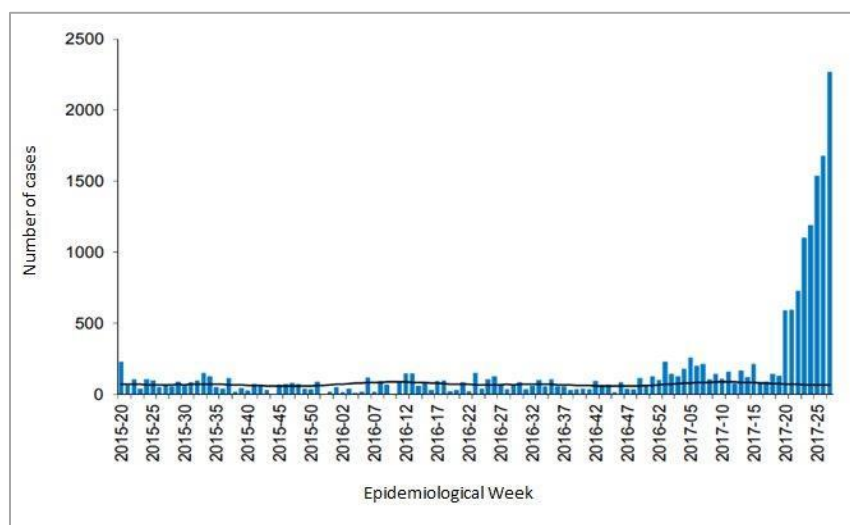
Figure 2. Number of conjunctivitis cases by EW of consultation. Dominican Republic, EW 1 to EW 25 of 2017.



Source: Published by the Dominican Republic Ministry of Health and reproduced by PAHO/WHO⁵

In **Guadeloupe**,⁶ from EW 20 to EW 27 of 2017, a total of 9,700 conjunctivitis cases were reported. In the last two weeks (EW 26 and EW 27 of 2017), the number of suspected cases increased considerably, with 1,680 and 2,270 reported weekly cases, respectively, and a cumulative incidence rate of 65 cases per 10,000 population (higher than observed in the preceding two weeks, EW 24 and 25 of 2017) (**Figure 2**). During the same period, the commune of Gourbeyre reported the highest incidence rate, with 187 cases per 10,000 population, followed by the communes of Petit Canal and Pointe-à-Pitre, with an incidence rate of 182 and 154 cases per 10,000 population, respectively. Of the laboratory tests performed on 14 samples of suspected cases, 13 were positive for enteroviruses and five were also positive for Coxsackie A24v virus.

Figure 3. Number of suspected conjunctivitis cases by EW. Guadeloupe, EW 20 of 2015 to EW 27 of 2017.



Source: Published by the Cire Antilles and reproduced by PAHO/WHO⁶

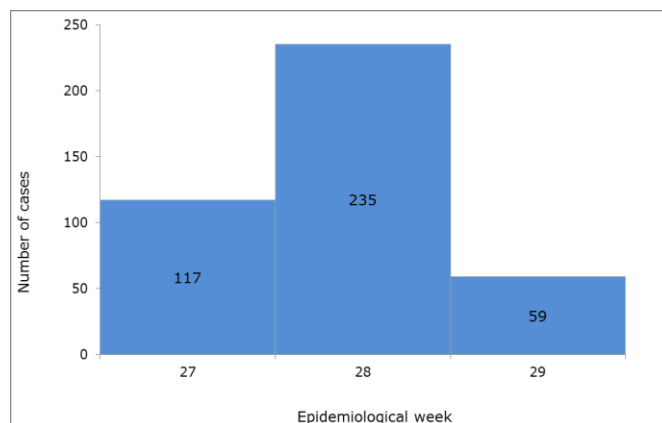
In **Martinique**,⁶ from EW 19 of 2017 to EW 27 of 2017, a total of 15,670 suspected conjunctivitis cases were reported. In the last two weeks (EW 26 and EW 27 of 2017), the number of suspected cases decreased, with 3,370 and 3,130 reported cases per week respectively and a cumulative incidence rate of 150 cases per 10,000 population. The highest incidence rates were reported in the commune of Robert with 370 cases per 10,000 population, and the communes of Diamant and Lamentin with 266 cases per 10,000 population. Laboratory tests performed on samples from suspected pediatric cases were positive for adenovirus and Coxsackie A24v virus.

In **Mexico**,⁷ there was an increase in the number of reported conjunctivitis cases between EW 1 and EW 26 of 2017 (163 cases of acute hemorrhagic conjunctivitis and 611,850 conjunctivitis cases) compared to cases reported in the same EW of 2016 (59 cases of acute hemorrhagic conjunctivitis and 494,709 conjunctivitis cases). With the exception of Campeche, Colima, Chiapas, Durango, Nayarit, and Sonora, all other states reported increases in conjunctivitis cases.

In **Panama**,⁸ in EW 27 of 2017, the IHR National Focal Point reported to PAHO/WHO an outbreak of conjunctivitis in the province of Colón. The outbreak began on 1 July in the district subdivisions of Palmas Bellas and Achiote, and subsequently spread to the rest of the

province and at least nine of the country's health regions. As of EW 29 of 2017, a total of 411 cases were reported in the province of Colón (**Figure 4**). The age groups that account for the highest number of cases (41%), are those of 25-34 years of age (77 cases), and 35-49 years of age (91 cases). Enterovirus was isolated from a patient sample.

Figure 4. Number of conjunctivitis cases by EW. Colón Province, Panama. EW 27 to EW 29 of 2017.



Source: Data provided by the Panama IHR National Focal Point and reproduced by PAHO/WHO

In **Saint Lucia**,⁹ in EW 28 of 2017, the Ministry of Health and Welfare reported an increase in conjunctivitis cases. Cases were reported by both public and private health services from all regions of the country. A total of 47 cases were reported in July compared to two cases reported in June 2017.¹⁰

In **Saint Martin**,⁶ from EW 22 to EW 27 of 2017, a total of 1,380 suspected conjunctivitis cases were reported. Between EW 26 and EW 27 of 2017, the number of suspected cases continued to increase, with 160 and 350 cases reported in those weeks, respectively.

In **Suriname**, the IHR National Focal Point reported to PAHO/WHO an increase in suspected conjunctivitis cases since EW 18 of 2017, with a peak of 1,333 cases reported in EW 20 of 2017. All 10 districts of Suriname have reported conjunctivitis cases. Laboratory tests performed on a set of samples of suspected cases were positive for Coxsackie A24 virus.

In the **Turks and Caicos Islands**,¹¹ in EW 23 of 2017, the Ministry of Health, Agriculture and Human Services reported an increase in conjunctivitis cases and called on the population to intensify hygiene measures to reduce transmission.

Cuba¹² is also reporting cases and implementing prevention and control actions. As of EW 26 of 2017, conjunctivitis cases were reported in seven provinces and 46 municipalities with a cumulative total of 1,427 cases. Throughout the island, the province reporting the highest number of cases was Guantanamo with 858 cases, followed by Santiago de Cuba with 359 cases, Havana with 154 cases, Ciego de Ávila with 35 cases, and Tunas with 21 cases. Laboratory tests performed on samples from Santiago de Cuba and Guantánamo were positive for Coxsackie A24 virus. The last known outbreak in Cuba occurred in 2003 with a total of 171,910 cases reported conjunctivitis cases across the country.¹³

Outbreaks of conjunctivitis in other countries and territories of the Region are under investigation.

Recommendations

In light of the continuous increase in transmission of conjunctivitis in countries and territories of the Region, the Pan American Health Organization / World Health Organization (PAHO / WHO) encourages Member States to strengthen surveillance and implement control measures to prevent the spread of the disease.

The following are the main recommendations related to surveillance, prevention, and management of contacts and treatment of patients.

Surveillance and epidemiological investigation

- Enhance surveillance for the timely detection of outbreaks, to adequately orient control measures.
- Promptly notify health authorities on the detection of an outbreak.
- Investigate contacts and sources of infection, and determine if there has been a common source of infection.
- Strengthen laboratory capacity for confirmation of diagnosis.
- Disseminate information and recommendations to health care workers.

Prevention measures, management of contacts and immediate environment

- Promote hand washing as well as meticulous cleaning and handling of any object that may come into contact with eye or respiratory secretions.
- Ensure the cleanliness of conjunctival exudates.
- Conduct health education campaigns for cases and contacts in order to avoid overcrowding and promote hygienic measures; instruct on the need to avoid touching eyes with hands or any object, and to frequently wash hands. Patients should not share any utensils and personal belongings with the rest of their families.
- Properly chlorinate pools.
- Organize diagnostic and case management services.
- Ensure adherence to asepsis and antisepsis standards in health care settings.

For health care workers

- Always wear gloves and gowns for patient care and use personal protective measures.
- Wash hands after providing care to an individual with probable or laboratory-confirmed conjunctivitis.
- Disinfect furniture and medical equipment to avoid contamination of other patients and / or staff.

Case management

- The management of conjunctivitis is symptomatic and should be limited to general measures, such as cold compresses and artificial tears with vasoconstrictors.
- Antimicrobial agents should not be indicated, unless there is an aggregated microbial infection. The effectiveness of antivirals has also not been documented.
- Steroidal anti-inflammatory medications should not be used as they significantly increase viral replication. Eye drops containing antibiotics should not be used.
- Isolation should be used to limit contact with cases during the active period of the disease; take precautions regarding exudates and secretions. Restrict contact with cases while the disease is active.

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