

Situation summary in the Americas

Between epidemiological week (EW) 1 of 2016 and EW 43 of 2017, **Brazil, Colombia, Ecuador, French Guiana, Peru**, the Plurinational State of **Bolivia**, and **Suriname** have reported suspected and confirmed yellow fever cases.

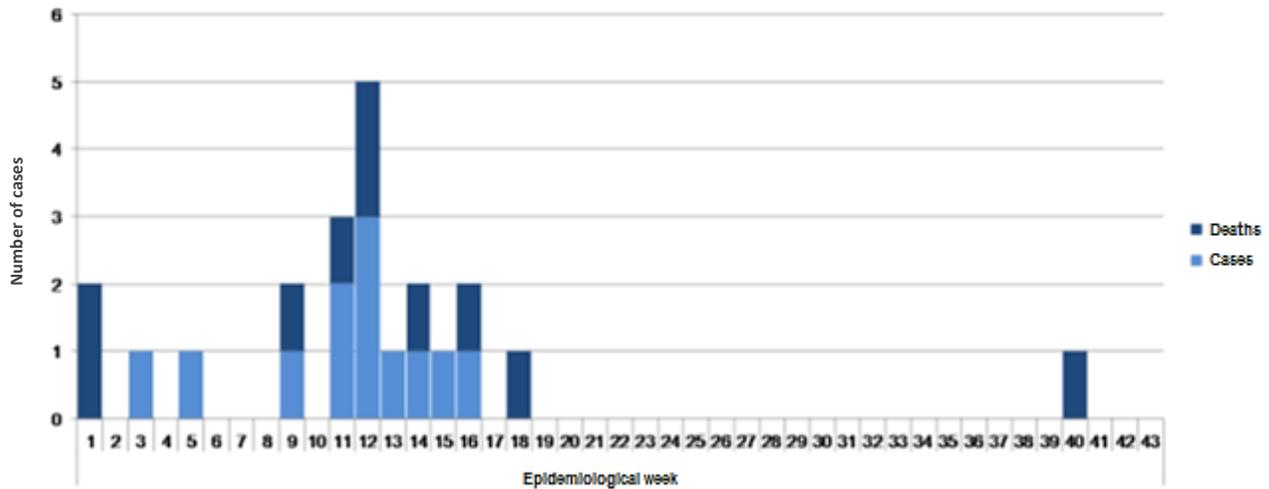
Since the [last yellow fever epidemiological update](#) published by the Pan American Health Organization / World Health Organization (PAHO/WHO) on 2 August 2017, **Brazil, French Guiana, and Peru** reported new yellow fever cases.

In **Brazil**, since July 2017, São Paulo state has reported 37 suspected yellow fever cases, of which 1 (fatal case) was confirmed, 3 are under investigation, and 33 were discarded. The confirmed case, which was reported in EW 40 of 2017, is a 76-year-old man who resides in the area between Itatiba and Jundiá.^{1,2} **Figure 1** shows the distribution of confirmed cases since the beginning of the year.

¹ São Paulo State Health Secretariat. Yellow fever Epidemiological bulletin (20/10/2017). Available at: http://www.saude.sp.gov.br/resources/cve-centro-de-vigilancia-epidemiologica/areas-de-vigilancia/doencas-de-transmissao-por-vetores-e-zoonoses/doc/famarela/fa17_201017boletim_epidemiologico.pdf

² Itatiba Municipality Prefecture. Communication of the Municipal Health Secretariat regarding yellow fever (17/10/2017). Available at: <http://www.itatiba.sp.gov.br/noticias/comunicado-da-secretaria-municipal-de-saude-sobre-febre-amarela.html>

Figure 1. Distribution of confirmed yellow fever cases according to epidemiological week. São Paulo state, EW 1 to EW 43 of 2017.¹



Source: Data published by the São Paulo State Health Secretariat and reproduced by PAHO/WHO

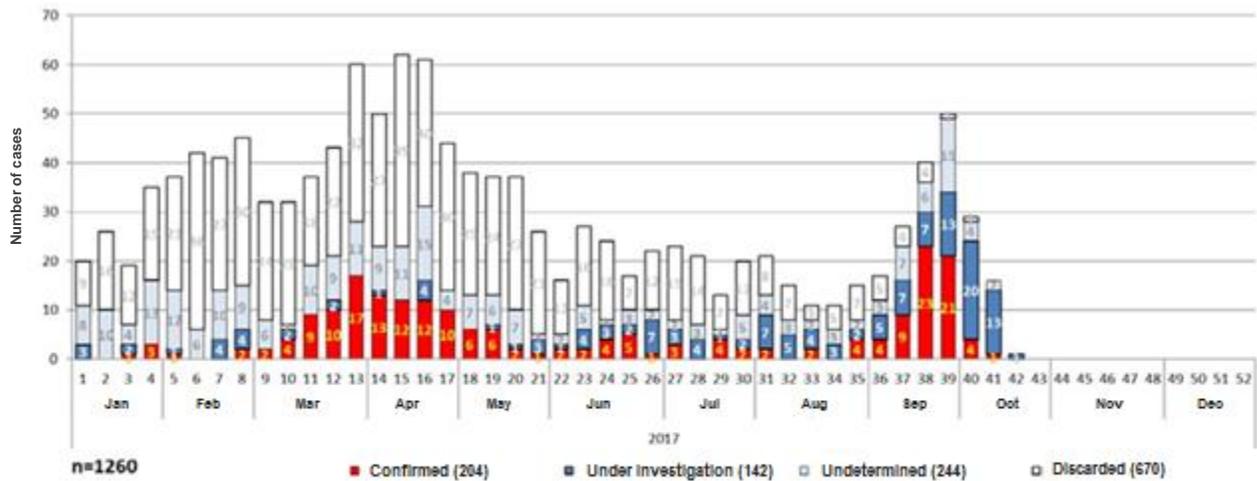
With regard to epizootics, between January and the first half of October 2017, the state of São Paulo reported 1,260 epizootics, with an increase in reporting from EW 37 of 2017 (**Figure 2**). Yellow fever was confirmed in 258 non-human primates (NHP), 248 (96%) of which were reported in the Campinas region.¹

There was also an expansion of the yellow fever virus to new areas of São Paulo state, with confirmation for the first time of NHP cases in the municipalities of Campo Limpo Paulista (EW 38), Atibaia (EW 39), Jarinu (EW 41) and in the city of São Paulo - urban area (EW 41).¹ As a result of these latest findings, the Municipal Health Secretariat together with the government of São Paulo state initiated the vaccination of people living around the area where the epizootic occurred.³

The epizootic in the municipality of São Paulo is occurring in a peripheral border area with fragments of forest where the components of the sylvatic virus transmission cycle are present. No human cases have been detected.

³ São Paulo Municipality Prefecture. Health Secretariat. São Paulo vaccinates 4.1 thousand people against yellow fever in the North Zone. Available at: <http://www.prefeitura.sp.gov.br/cidade/secretarias/saude/noticias/?p=243532>

Figure 2. Distribution of reported epizootics per epidemiological week according to classification. São Paulo state, EW 1 to EW 42 of 2017.¹



Source: Data published by the São Paulo State Health Secretariat and reproduced by PAHO/WHO

In EW 34 of 2017, the National IHR Focal Point for France notified a confirmed case of yellow fever in a 43-year-old Brazilian woman with unknown vaccination status in **French Guiana**. The patient was hospitalized on 7 August 2017 and died two days later at the Cayenne hospital from fulminant hepatitis. She may have visited a gold mining area near St. Elie (North center of the country). Investigations are currently ongoing in order to identify the patient's travel route. This is the first confirmed case diagnosed in this territory since 1998.

In **Peru**, between EW 1 to EW 41 of 2017, a total of 16 confirmed and probable cases of yellow fever were reported, including three deaths.⁴ Similarly to 2016, most cases occurred in the Junín department.

Recommendations

The Pan American Health Organization, Regional Office of the World Health Organization (PAHO/WHO) encourages Member States to take the necessary actions to keep travelers informed and vaccinated, when heading to areas where yellow fever vaccination is recommended.

Vaccination

The yellow fever vaccine is safe and affordable and provides effective immunity against the disease in the range of 80 to 100% of those vaccinated after 10 days and 99% immunity after 30 days. A single dose provides life-long protection against yellow fever disease. A booster dose of yellow fever vaccine is not needed.

⁴ Peru Ministry of Health. Situation Room for Health Situation Analysis 2017. Yellow fever EW 41 of 2017. Available at: http://www.cdc.gob.pe/portal/index.php?option=com_content&view=article&id=14&Itemid=121

Given the limitations on the availability of vaccines and with the aim of promoting the rational use, PAHO / WHO reiterates its recommendations to national authorities:

1. Conduct an assessment of vaccination coverage against yellow fever in areas at risk at the municipal level to guarantee at least 95% coverage⁵ among the resident population of these areas.
2. Member States that are not currently experiencing outbreaks should not conduct immunization campaign. Priority should be given to the use of vaccines in susceptible populations and to avoid revaccination.
3. Ensure vaccination of all travelers to endemic areas at least 10 days before traveling.
4. Depending on vaccine availabilities, Member States should have a small stock that allows them to respond to outbreaks.
5. Postpone routine vaccination in children in non-endemic areas until sufficient vaccines are available. Once there is availability, catch-up campaigns should be conducted to complete vaccination schedules.

Precautions

It is recommended to individually assess the epidemiological risk of contracting disease when faced with the risk of an adverse event occurring in persons over 60 years who have not been previously vaccinated.

- The vaccine can be offered to individuals with asymptomatic HIV infection with CD4+ counts ≥ 200 cells / mm³ requiring vaccination.
- Pregnant women should be vaccinated in an emergency situation and following recommendations of health authorities.
- Vaccination is recommended in nursing women who live in endemic areas, since the potential risk of transmitting the vaccine virus to the child is far lower than the benefits of breastfeeding.
- For pregnant or lactating women traveling to areas with yellow fever transmission, vaccination is recommended when travel cannot be postponed or avoided. They should receive advice on the potential benefits and risks of vaccination to make an informed decision. The benefits of breastfeeding are superior to those of other nutritional alternatives.

The following people are usually excluded from yellow fever vaccination:

⁵ Pan American Health Organization. Regional immunization action plan. 54th Directing Council of PAHO, 67th session of the WHO Regional Committee for the Americas; 28 September – 1 October 2015; Washington (DC), United States. Washington (DC): PAHO; 2015. Available from: http://www2.paho.org/hq/index.php?option=com_content&view=article&id=13101&Itemid=42296&lang=en

- Immunocompromised individuals (Including those with thymus disorders, symptomatic HIV, malignant neoplasms under treatment, and those that are receiving or have received immunosuppressive or immunomodulatory treatments, recent transplants, and current or recent radiation therapy).
- People with severe allergies to eggs and their derivatives.

Related Links

- PAHO/WHO Yellow Fever. Available at:
http://www.paho.org/hq/index.php?option=com_topics&view=rdmore&cid=5514&Itemid=40784&lang=en
- PAHO/WHO. Guidance on Laboratory Diagnosis of Yellow Fever Virus Infection. Available at:
http://www.paho.org/hq/index.php?option=com_docman&task=doc_download&Itemid=270&gid=38104&lang=en
- Brazil Ministry of Health. Situation report on the yellow fever outbreak. Available at:
<http://portalsaude.saude.gov.br/index.php/o-ministerio/principal/leia-mais-o-ministerio/619-secretaria-svs/11-svs/27300-febre-amarela-informacao-e-orientacao>
- PAHO/WHO. Requirements for the International Certificate of Vaccination or Prophylaxis (ICVP) with proof of vaccination against yellow fever. Available at:
http://www.paho.org/hq/index.php?option=com_topics&view=article&id=69&Itemid=40784&lang=en