

In light of the circulation of yellow fever in several areas of the Region of the Americas, and considering current yellow fever outbreaks in countries outside of this Region, the Pan American Health Organization / World Health Organization (PAHO/WHO) advises Member States to maintain the capacity to detect and confirm cases of yellow fever, provide updated information, and train health professionals for proper detection and case management, especially in areas at risk for yellow fever circulation. In addition, Member States are encouraged to maintain high vaccination coverage in at risk populations.

Situation summary in the Americas

- In 2015, three countries in the Americas have confirmed yellow fever virus circulation (Bolivia, Brazil, and Peru).
- As of epidemiological week (EW) 17 of 2016, Brazil and Peru have confirmed human cases of yellow fever.
- In addition, in Brazil between 2015 and 2016, there were 20 epizootics reported in the state of Minas Gerais, which were detected as part of routine monitoring of epizootics in areas of historical circulation of yellow fever virus.

Epidemiological Situation

In **Brazil**, sporadic yellow fever cases have occurred in individuals without a history of yellow fever vaccination who were exposed to the virus circulating in historically endemic areas. Between July 2014 and June 2015, a total of 7 yellow fever cases, including 4 deaths, were laboratory confirmed. All of the cases were not vaccinated.

Between 2015 and 2016, the Brazil International Health Regulations (IHR) National Focal Point notified PAHO/WHO of the occurrence of two fatal cases of yellow fever. The first case was a woman in the city of Natal, whose exposure to the virus remains under investigation. The second case concerns a man who was exposed to the virus in an endemic area and who had not been vaccinated for yellow fever.

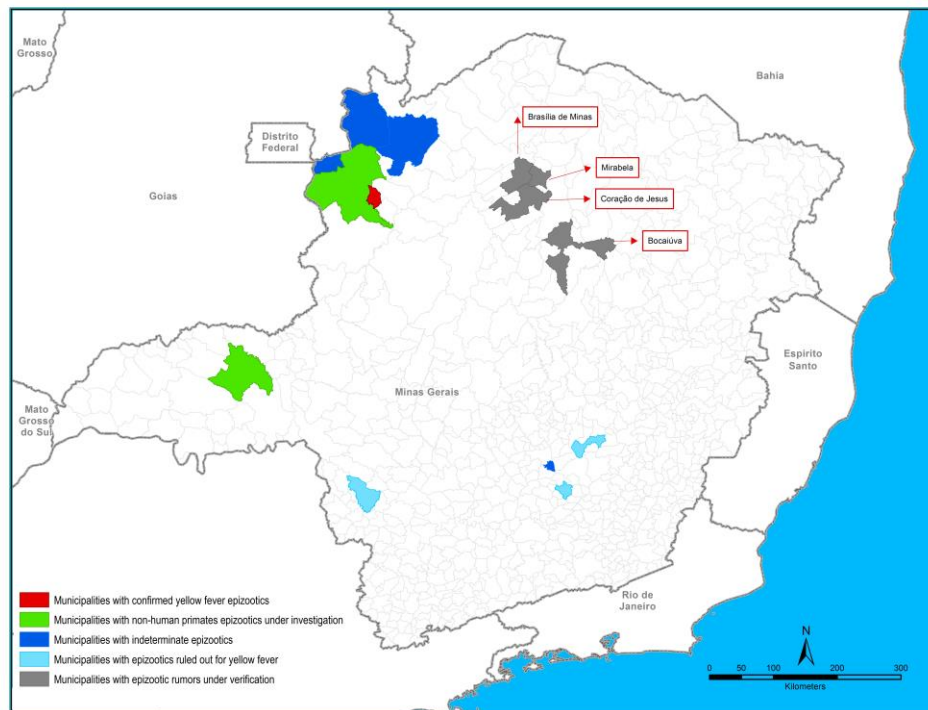
Additionally, in the same period 2015-2016, 36 epizootics in non-human primates (NHP) were recorded in the state of Minas Gerais. Of the total reported, one was confirmed for yellow fever in the municipality of Natalândia. The summary of the epizootics and their geographical distribution is presented in **Table 1** and **Figure 1**, respectively.

Table 1. Epizootics in non-human primates, 2015-2016, State of Minas Gerais, Brazil.

Number of Epizootics	Results
1	Confirmed for yellow fever
9	Under investigation
6	Discarded for yellow fever
20	Undetermined

Source: Reported by the Brazil IHR National Focal Point

Figure 1: Geographical distribution of epizootics. Minas Gerais state, Brazil, 2015 - 2016.

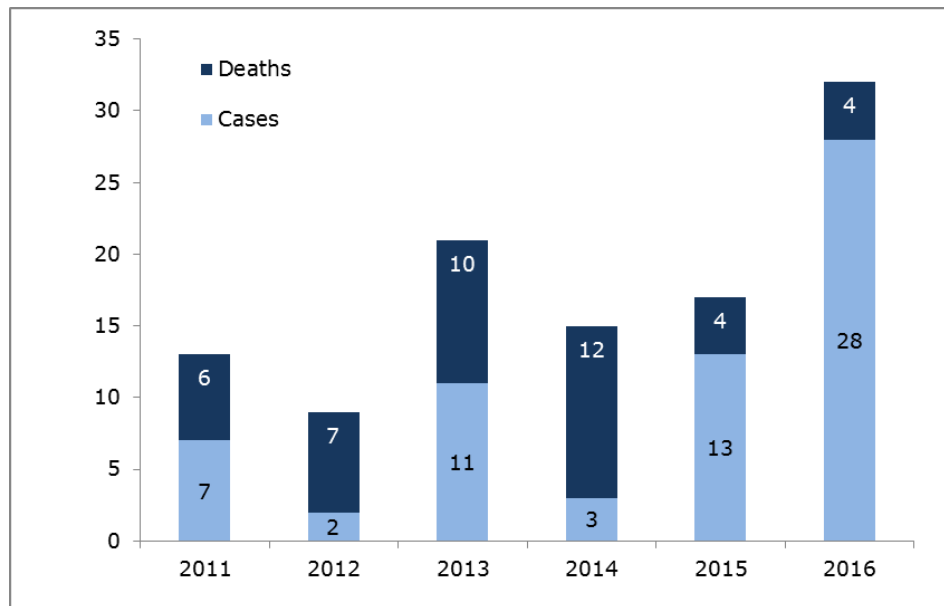


Source: Reported by the Brazil IHR National Focal Point

In **Peru**, up to epidemiological week (EW) 18 of 2016, there were 43 suspected cases of yellow fever reported, including four deaths. Of the reported cases, 14 were confirmed, 18 were classified as probable, and 11 were discarded. Out of the 25 departments in Peru, cases have been reported in 6 departments, with the department of Junin reporting the most cases (21 cases) confirmed and probable.

The number of confirmed and probable cases (32) reported in Peru up to EW 18 of 2016, exceeds twice the total annual number of cases (confirmed and probable) reported in the previous two years. **Figure 2.**

Figure 2. Yellow fever cases (probable and confirmed) and related deaths by year, Peru, 2011-2016*



*Up to EW 18 of 2016

Source: Published by the National Center for Epidemiology, Disease Control and Prevention in Peru and reproduced by PAHO/WHO.

Situation in other Regions

As indicated in the PAHO/WHO [Yellow Fever Epidemiological Alert of 22 April 2016](#), outside of the Region of the Americas, Angola, the Democratic Republic of Congo, and Uganda have reported yellow fever outbreaks in 2016. The largest outbreak continues to occur in Angola where from December 2015 through 15 May 2016, there have been 2,420 suspected cases reported (736 confirmed), including 258 deaths (96 confirmed for yellow fever).¹ Preliminary results by the Dakar Institute Pasteur of samples collected during the ongoing epidemic revealed that the yellow fever strain circulating is closely related to the virus strain identified during an outbreak in Angola in 1971.

As of 19 May 2016, the Democratic Republic of Congo had reported 44 confirmed and probable cases of yellow fever (42 imported from Angola and 2 autochthonous).

In Uganda, as of 30 April, a total of 60 suspected cases of yellow fever have been reported, 7 of those were laboratory confirmed. This outbreak does not appear to be related to the outbreak in Angola.²

In addition, cases of yellow fever were exported to China (11 cases) and Kenya (2 cases) due to the exposure of unvaccinated individuals to the yellow fever virus in Angola.

¹ Information available at: <http://www.afro.who.int/en/yellow-fever/sitreps/item/8636-situation-report-yellow-fever-outbreak-in-angola-15-may-2016.html>

² Information available at: <http://www.who.int/emergencies/yellow-fever/en/>

On 19 May, the Director General of the WHO convened the first meeting of the International Health Regulations Emergency Committee regarding yellow fever. Based on the recommendations of the Emergency Committee, the Director General determined that the urban yellow fever outbreaks in Angola and the Democratic Republic of Congo is a serious public health event which warrants intensified national action and enhanced international support. To date, the event has not been determined to be a Public Health Event of International Concern (PHEIC). The complete statement on the first meeting is available at: <http://www.who.int/mediacentre/news/statements/2016/ec-yellow-fever/en/>.

Unvaccinated travelers heading to areas with active yellow fever outbreaks pose a risk of introducing the virus in to areas where yellow fever risk factors (human susceptibility, prevalence of competent vector, and animal reservoirs) are present.

Vaccine Supply

The global supply of yellow fever vaccines has been insufficient for years. The PAHO/WHO Revolving Fund provides about 50% of the demand in the Region of the Americas. The Revolving Fund allocates vaccines based on country epidemiological risk. The Revolving Fund together with the WHO and UNICEF jointly undertake the actions needed to meet the challenge of vaccine supply.

The current outbreak in Angola has stretched existing yellow fever vaccine supplies. During outbreaks, available vaccines are prioritized for the emergency response. The yellow fever emergency vaccine stockpile was replenished in late March 2016 through the collaboration of partners such as the International Coordination Group (ICG) and UNICEF.

Recommendations

The recommendations issued in the PAHO/WHO [Yellow Fever Epidemiological Alert of 22 April 2016](#) remain in effect and are available online at: <http://bit.ly/215HUuK>.

References

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