27 Jan 2017

Yellow fever outbreak in Brazil: Update

Advice for travellers and health professionals

An outbreak of yellow fever is ongoing in Brazil. As of 26 January, three states (Minas Gerais, Espírito Santo and São Paulo) report confirmed cases [1]:

- Minas Gerais: 483 cases (415 suspected and 68 confirmed) in 51 municipalities, including 98 deaths (61 suspected and 37 confirmed).
- Espírito Santo: 33 cases (32 suspected and one confirmed) in 18 municipalities, including three deaths in suspected cases.
- São Paulo: three cases (three confirmed) in three municipalities, including three deaths.

Bahia state has reported six suspected cases in three municipalities; one suspected case has been reported in the state of Mato Grosso do Sul and one fatal suspected case has been reported in Goias state. The Federal District reported other suspected cases under investigation [1].

Currently all cases are regarded as sylvatic/jungle and no urban outbreaks have been reported. However, in the last week there have been multiple reports of cases exported from Minas Gerais to other southern Brazilian states. This highlights the possibility of an introduction of a viraemic individual (person with yellow fever virus in their blood stream) into an urban setting where widespread transmission by the Aedes mosquito may occur.

In view of the rapidly evolving situation, the World Health Organization (WHO) has revisited the areas at risk for yellow fever transmission in Brazil and extended the areas to include Espirito Santo state (with the exception of the urban area of Vitoria), the northern parts of Rio De Janeiro state, and new areas in south east Bahia state.

Yellow fever vaccination should now be considered for travellers visiting these additional areas following individual risk assessment. Detailed information is available on our Country Information pages; Pan American Health Organization (PAHO) and WHO have produced a map highlighting the extended areas of risk, see figure 2 page 4.

Local vaccine coverage rates are relatively low and could accelerate spread to neighbouring areas with favourable environments for yellow fever transmission [1, 2]. WHO is supporting Brazilian health authorities in implementing several measures to respond to the outbreak [2]. Response efforts are complicated by the fact that this outbreak is occurring in the context of simultaneous outbreaks of chikungunya, dengue and Zika.

Advice for travellers

Yellow fever is transmitted to humans via the bite of an infected mosquito. You should take insect bite avoidance measures, day and night, when visiting countries with a risk of any disease transmitted by insects.

If you are travelling to or through areas of Brazil or any other countries with risk of yellow fever; as well as mosquito bite avoidance, vaccination is recommended for your personal protection.
Full details of yellow fever vaccination recommendations for countries can be found on our Country Information pages. The information is reviewed and updated regularly, particularly during disease outbreaks. Details of the countries that require proof of yellow fever vaccination as a condition of entry under the International Health Regulations (IHR) (2005) are also provided. Travellers are reminded that countries may change their certificate requirements at short notice.

**Advice for health professionals**

When undertaking yellow fever risk assessment, health professionals should refer to the individual Country Information pages, where detail relating to risk areas, recommendation for yellow fever vaccination and IHR (2005) certificate requirements are available. Some travellers may require vaccination for certificate purposes. Note that the outbreak has extended to areas previously considered at low risk of yellow fever transmission. We will continue to monitor the situation and post updates as required.

Health professionals are also encouraged to monitor news items and access the Outbreak Surveillance Database, where the details of outbreaks are posted.

Under the International Health Regulations (2005), countries are no longer required to automatically report yellow fever outbreaks to the WHO and surveillance and reporting of yellow fever in risk countries can be poor.

**Resources**

- [WHO: International travel and health](https://www.who.int/ith/en/)
- [WHO: Yellow fever](https://www.who.int/mediacentre/factsheets/yellowfever/en/)
- [Yellow fever factsheet](https://www.who.int/mediacentre/factsheets/yellowfever/en/)

**References**