

# Yellow fever

## Annual Epidemiological Report for 2017

### Key fact

- For 2017, EU/EEA countries reported one case of yellow fever. The travel-related case was reported by the Netherlands with exposure in Suriname.

### Methods

This report is based on data for 2017 retrieved from The European Surveillance System (TESSy) on 10 December 2018. TESSy is a system for the collection, analysis and dissemination of data on communicable diseases.

For a detailed description of methods used to produce this report, refer to the *Methods* chapter [1].

An overview of the national surveillance systems is available online [2].

A subset of the data used for this report is available through ECDC's online Surveillance atlas of infectious diseases [3].

For 2017, 30 EU/EEA countries reported case-based data (Liechtenstein did not report). Twenty-four countries used the EU case definition, four countries used an alternative case definition (Denmark, Germany, Italy and the United Kingdom) and two countries (Finland and France) did not specify which definition they used. Surveillance was compulsory in all EU/EEA countries except the United Kingdom, comprehensive in all countries and mostly passive.

### Epidemiology

For 2017, EU/EEA countries reported one case of yellow fever. This travel-related case was reported by the Netherlands with exposure in Suriname.

### Discussion

Yellow fever is endemic in tropical areas of Africa and Central and South America [4]. In 2016 and 2017, seven countries in the Americas reported the highest number of cases observed in decades [5]. From 2016–2017,

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Suggested citation: European Centre for Disease Prevention and Control. Yellow fever. In: ECDC. Annual epidemiological report for 2017. Stockholm: ECDC; 2019.

Stockholm, June 2019

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a major yellow fever outbreak was observed in Brazil, with 779 human cases and 262 deaths reported from July 2016–June 2017 [6]. In September 2017, the Ministry of Health in Brazil declared the end of the 2016–2017 outbreak, but an upsurge of human cases has been reported since December 2017 with continuous non-human primate epizootics since September 2017, indicating continued or resumed increase in virus circulation in Brazil [6]. The outbreak in Brazil, which was the most severe in the country in several decades, raised concerns about the potential emergence of an urban cycle of yellow fever due to its proximity to areas with high population density, especially in areas not considered at risk prior to 2017 [6,7]. In 2017, ECDC produced four rapid risk assessments related to yellow fever in South America [8–10].

The yellow fever case reported by the Netherlands in 2017 was the first human case reported from Suriname in several decades [11]. Although Suriname is considered to be an endemic area, with historic reports of yellow fever and the presence of mosquito vectors and animal reservoirs, the last human case was reported in 1971 [11]. The World Health Organization (WHO) recommends vaccination for travellers to countries with risk of yellow fever transmission, including Suriname [12]. Nevertheless, sporadic imported cases have been reported among unvaccinated EU/EEA travellers returning from these risk countries [9].

## Public health implications

Vaccination is the most important preventive measure against yellow fever. As described in WHO documents, the vaccine is safe, affordable and highly effective and a single dose is sufficient to confer sustained immunity and lifelong protection against yellow fever disease. The vaccine provides effective immunity within 30 days for 99% of vaccinees [4].

## References

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