

# Ebola and Marburg fevers

## Annual Epidemiological Report for 2018

### Key facts

For 2018, no cases of Ebola virus disease and Marburg haemorrhagic fever were reported in the EU/EEA.

### Methods

This report is based on data for 2018 retrieved from The European Surveillance System (TESSy) on 10 September 2019. 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 2018, 29 EU/EEA countries reported case-based data (Liechtenstein and the Netherlands did not report). Twenty countries used the EU case definition, five countries (the Czech Republic, Denmark, Germany, Italy and the United Kingdom) used an alternative case definition and four countries (Belgium, Cyprus, Finland and France) did not specify the case definition used. Reporting is compulsory in 27 countries, 'not specified' in Cyprus and voluntary in the United Kingdom. Surveillance is mostly comprehensive and passive ('not specified' in Cyprus). The Czech Republic, Portugal, Slovakia and the United Kingdom conduct active disease surveillance.

### Epidemiology

For 2018, no cases of Ebola virus disease or Marburg haemorrhagic fever were reported in the EU/EEA.

### Outbreaks and other threats

On 1 August 2018, the Ministry of Health of the Democratic Republic of the Congo (DRC) declared the tenth outbreak of Ebola virus disease affecting North Kivu, South Kivu and Ituri Provinces in the north-east of the country, close to the border with Uganda [4]. As of 27 November 2019, 3 309 cases and 2 201 deaths had been reported according to the Ministry of Health of the DRC. To date, this outbreak of Ebola virus disease is the largest ever recorded in DRC and the second largest worldwide [5].

Suggested citation: European Centre for Disease Prevention and Control. Ebola and Marburg fevers. In: ECDC. Annual epidemiological report for 2018. Stockholm: ECDC; 2019.

Stockholm, December 2019

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## Discussion

Isolation of infected patients and other non-pharmaceutical countermeasures have been shown to effectively stop the spread of Ebola and Marburg viruses in previous outbreaks [6,7]. Implementation of appropriate infection prevention and control measures in healthcare settings, including use of personal protective equipment, is effective in minimising the risk for transmission of filoviruses [6].

Given the absence of a licensed vaccine to protect against Ebola virus disease or a specific drug for treatment of infected patients, a non-licensed recombinant vaccine (rVSVΔG-ZEBOV-GP) is being used on a compassionate basis in the current outbreak in DRC [8]. Data available in May 2019 demonstrate an efficacy of 97.5% (95% CI 95.8–98.5%) for the rVSVΔG-ZEBOV-GP vaccine. Vaccine efficacy against illness 10 days or more post-vaccination is 97.5% (95% CI: 92.4–99.1%) while it is 88.1% (95% CI: 79.9–92.9%) against Ebola virus disease regardless of the timing of illness onset [9].

## Public health implications

No travel-associated Ebola virus disease cases have been reported among travellers returning to Europe from the DRC in 2018. Although the risk at local and regional level is very high, the probability that EU/EEA citizens living or travelling in affected areas of the DRC to be exposed to the virus remains low, provided that they adhere to the recommended precautionary measures [5].

The main goal of Ebola virus disease and Marburg haemorrhagic fever outbreak control is to interrupt direct human-to-human transmission through early identification and isolation of cases, timely contact tracing, proper personal protection, safely conducted burials and improved community awareness about risk factors of infection.

Since the Ebola virus disease outbreak in West Africa, ring vaccination has become a relevant additional tool for preventing and controlling this disease. Use of the vaccine needs to be adapted to the context and the vaccine supply available. It can include, but is not limited to, contacts and contacts of contacts of Ebola virus disease cases, local and international healthcare and front-line workers in affected areas and healthcare and front-line workers in areas where the outbreak is at risk of expanding [8].

## References

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