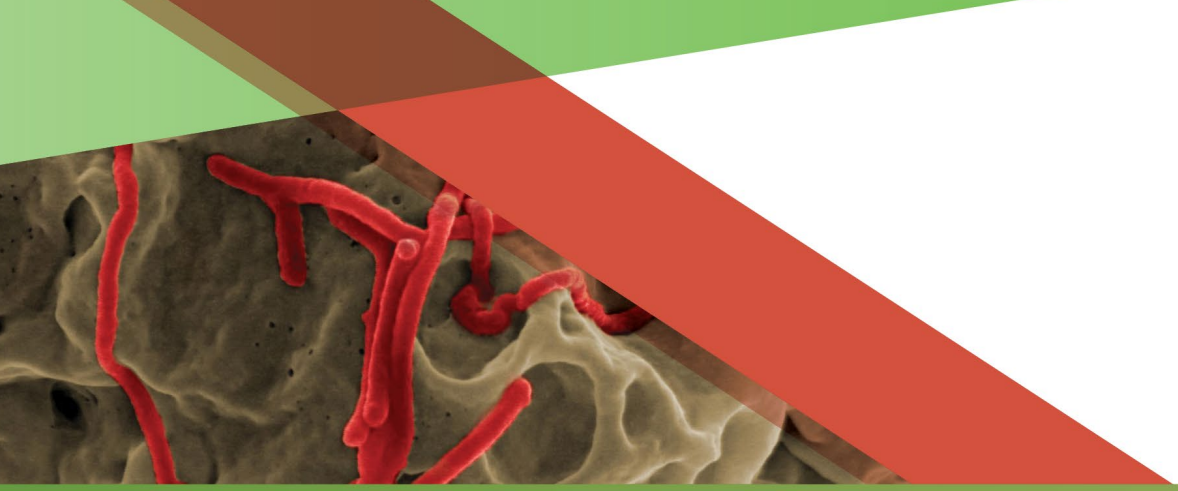

SURVEILLANCE REPORT

Ebola and Marburg fevers

Annual Epidemiological Report for 2017

Key facts

- For 2017, no cases of Ebola virus disease and Marburg haemorrhagic fever were reported in the EU/EEA.

Methods

This report is based on data for 2017 retrieved from The European Surveillance System (TESSy) on 11 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].

In 2017, 28 EU/EEA countries reported case-based data (Bulgaria, Liechtenstein and the Netherlands did not report). Nineteen 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 26 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 2017, no cases of Ebola virus disease and Marburg haemorrhagic fever were reported in the EU/EEA.

Outbreaks and other threats

In 2017, an Ebola virus disease outbreak was reported in the Democratic Republic of the Congo between May and July. The World Health Organization (WHO) was notified on 11 May 2017 by the Ministry of Health of the

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

Stockholm, July 2019

Democratic Republic of the Congo of an outbreak in the northern part of the country (Likati Health Zone in Bas-Uele Province [4]). WHO declared the end of the outbreak on 2 July 2017 [5]. According to the WHO, four people died due to the outbreak and four people survived. Five of these cases were laboratory-confirmed [6].

Separately, the WHO was notified of an outbreak of Marburg virus disease on 17 October 2017 by the Ministry of Health of Uganda [7]. This outbreak involved four cases (three confirmed, one probable) in Kween District. Three of the cases died (case fatality rate: 75%). The end of the outbreak was declared by WHO on 8 December 2017 [8].

Discussion

For 2017, no cases of Ebola virus disease and Marburg haemorrhagic fever were reported in the EU/EEA.

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

As of July 2019, there is no licensed vaccine for Ebola virus disease. During the outbreak in Guinea in 2015 and two other outbreaks in the Democratic Republic of the Congo in 2018–2019, a non-licenced recombinant vaccine (rVSVΔG-ZEBOV-GP) was used on a compassionate use basis [6]. During the outbreak in the Democratic Republic of the Congo in 2017, the vaccination was not implemented even though the protocol for a possible ring vaccination had been formally approved [9], mainly due to the remote location of the outbreak [10]. Although the vaccine has not yet been licenced, data available in May 2019 demonstrates an efficacy of 97.5%, 95% CI [95.8–98.5%] for the rVSVΔG-ZEBOV-GP vaccine. Vaccine efficacy for individuals with onset of illness 10 days or more post-vaccination is 97.5% [95% CI: 92.4–99.1%]. For those with Ebola virus disease regardless of timing of onset of illness, it is 88.1% [95% CI: 79.9–92.9%] [11].

Public health implications

The main goal of Ebola virus disase 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 viral infection. Since the Ebola virus disease outbreak in West Africa, ring vaccination administration strategy is a relevant additional tool for prevention and control of the Ebola virus disease epidemic. Use of the vaccine needs to be adapted to the context and the amount of vaccine supply available. It can include, but not be 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 at risk of expansion of the outbreak [6].

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