

SURVEILLANCE REPORT

Cholera

Annual Epidemiological Report for 2017

Key facts

- Cholera is a rare travel-associated disease in the EU/EEA.
- In 2017, five EU/EEA countries reported 17 laboratory-confirmed cases of cholera, which was in the range of previous years.
- All cases were infected outside of Europe.

Methods

This report is based on data for 2017 retrieved from The European Surveillance System (TESSy) on 11 September 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, all EU/EEA countries except Liechtenstein reported cholera data. Twenty-four countries used EU case definitions and the remaining six used other or unknown case definitions. In all countries except the United Kingdom, reporting of cholera was compulsory. All countries had a comprehensive surveillance system. All countries except Belgium reported case-based data.

Epidemiology

In 2017, five EU countries reported 17 confirmed cases of cholera, with the United Kingdom, like in previous years, accounting for more than half of the cases (Table 1). All 17 cases were reported with travel history. Five were infected in India, four each in Iraq and Pakistan, two in Thailand and one each in Sri Lanka or Tanzania.

Unlike previous years, the majority of cases were reported with dates of onset outside the summer period (Figure 1). Fifteen of the 17 cases occurred in adults older than 24 years (Figure 2).

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

Stockholm, January 2019

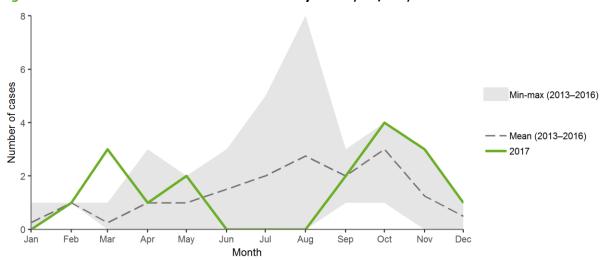
© European Centre for Disease Prevention and Control, 2019. Reproduction is authorised, provided the source is acknowledged.

Table 1. Distribution of confimed cholera cases and rates per 100 000 population by country and year, EU/EEA, 2013–2017

Country	2013	2014	2015	2016	2017
	Confirmed cases				
Austria	1	0	0	0	0
Belgium	0	0	1	1	0
Bulgaria	0	0	0	0	0
Croatia	0	0	0	0	0
Cyprus	0	0	0	0	0
Czech Republic	0	0	0	0	1
Denmark	0	0	0	1	0
Estonia	0	0	0	0	0
Finland	0	0	0	0	0
France	1	1	1	0	0
Germany	1	1	3	1	2
Greece	0	0	0	0	0
Hungary	0	0	0	0	0
Iceland	0	0	0	0	0
Ireland	0	0	0	0	0
Italy	0	0	0	0	0
Latvia	0	0	0	0	0
Liechtenstein					
Lithuania	0	0	0	0	0
Luxembourg	0	0	0	0	0
Malta	0	0	0	0	0
Netherlands	0	0	0	0	0
Norway	0	0	1	1	0
Poland	0	0	0	0	0
Portugal	0	0	0	0	0
Romania	0	0	0	0	0
Slovakia	0	0	0	0	0
Slovenia	0	0	0	0	0
Spain	1	0	2	3	1
Sweden	0	0	1	0	1
United Kingdom	5	10	15	16	12
EU/EEA	9	12	24	23	17

.: no data reported.

Figure 1. Distribution of confirmed cholera cases by month, EU/EEA, 2013-2016 and 2017



Source: Country reports from the Czech Republic, Germany, Spain, Sweden and the United Kingdom.

Male Female

Male Female

Figure 2. Distribution of confirmed cholera cases, by age and gender, EU/EEA, 2017

Source: Country reports from the Czech Republic, Germany, Spain, Sweden and the United Kingdom.

Discussion

Cholera is endemic in many tropical countries in Asia and Africa and was reintroduced into the Caribbean region in 2010 [4,5]. In the EU/EEA, cholera is rare and primarily associated with travel to endemic countries.

Cholera can be prevented by adhering to basic drinking water and food hygiene rules [6]. Cholera vaccination is safe and moderately effective for at least five years depending on the vaccine [4]. WHO does not recommend cholera vaccination for international workers and travellers in general, but only 'for emergency and relief workers who are likely to be directly exposed to cholera patients or to contaminated food or water, particularly those staying in areas with poor access to healthcare facilities [7].

Public health implications

European travellers to cholera-endemic destinations should follow the same hygiene rules as for any country with lack of clean water. Cholera vaccination should be considered for emergency and relief workers at risk of direct exposure to cholera patients or contaminated food or water in line with national and international guidelines.

References

- 1. European Centre for Disease Prevention and Control. Introduction to the Annual Epidemiological Report. In: ECDC. Annual epidemiological report for 2017 [Internet]. Stockholm: ECDC; 2018 [cited 11 September 2018]. Available from: http://ecdc.europa.eu/annual-epidemiological-reports/methods
- 2. European Centre for Disease Prevention and Control. Surveillance systems overview [Internet, downloadable spreadsheet]. Stockholm: ECDC; 2018 [cited 11 September 2018]. Available from: http://ecdc.europa.eu/publications-data/surveillance-systems-overview-2017
- 3. European Centre for Disease Prevention and Control. Surveillance atlas of infectious diseases [Internet]. Stockholm: ECDC; 2018 [cited 11 September 2018]. Available from: http://atlas.ecdc.europa.eu
- 4. Clemens JD, Nair GB, Ahmed T, Qadri F, Holmgren J. Cholera. Lancet. 2017 Sep 23;390(10101):1539-1549.
- Ali M, Nelson AR, Lopez AL, Sack DA. Updated global burden of cholera in endemic countries. PLoS Negl Trop Dis. 2015 Jun;9(6):e0003832. Available from: http://journals.plos.org/plosntds/article?id=10.1371/journal.pntd.0003832
- Harris JB, LaRocque RC, Qadri F, Ryan ET, Calderwood SB. Cholera. Lancet. 2012 Jun 30;379(9835):2466-2476.
- 7. World Health Organization. Cholera vaccine: WHO position paper, August 2017 Recommendations. Vaccine. 2018 Jun 7;36(24)3418-3420.