

SURVEILLANCE REPORT

Anthrax

Annual Epidemiological Report for 2018

Key facts

- Anthrax continues to be an uncommon disease in humans in Europe, with only a few cases reported every year.
- For 2018, three confirmed anthrax cases were reported, one each in Netherlands, Romania and Spain.
- Twenty-seven EU/EEA countries notified zero confirmed cases.

Methods

This report is based on data for 2018 retrieved from The European Surveillance System (TESSy) on 12 August 2019. TESSy is a system for the collection, analysis and dissemination of data on communicable diseases in the EU/EEA.

For a detailed description of the methods used to produce this report, please 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 tool, 'Surveillance Atlas of Infectious Diseases' [3].

Epidemiology

For the purpose of this report, only tables and figures are presented. Please refer to the 2019 report and the more recent annual epidemiological reports for the most up-to-date information regarding anthrax.

Table 1. Distribution of confirmed anthrax cases by country and year, EU/EEA, 2014–2018

Country	2014	2015	2016	2017	2018
	Confirmed cases	Confirmed cases	Confirmed cases	Confirmed cases	Confirmed cases
Austria	0	0	0	0	0
Belgium	0	0	0	0	0
Bulgaria	0	2	0	1	0
Croatia	0	0	0	0	0
Cyprus	0	0	0	0	0
Czechia	0	0	0	0	0
Denmark	0	0	0	0	0
Estonia	0	0	0	0	0
Finland	0	0	0	0	0
France	0	0	0	0	0
Germany	0	0	0	0	0
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	1
Norway	0	0	0	0	0
Poland	0	0	0	0	0
Portugal	0	0	0	0	0
Romania	0	2	5	5	1
Slovakia	0	0	0	0	0
Slovenia	0	0	0	0	0
Spain	1	0	1	0	1
Sweden	0	0	0	0	0
United Kingdom	0	0	0	0	0
EU/EEA	1	4	6	6	3

Source: Country reports from Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

Public health implications

People most at risk of cutaneous anthrax are butchers, farmers, veterinarians, or people working in the animal hide industry. Anthrax can be treated with antibiotics. Inhalational anthrax requires respiratory support in an intensive care unit.

Control measures include the appropriate handling of dead animals: disinfection, decontamination and disposal of contaminated materials and decontamination of the environment. Anthrax spores may remain infective for decades in the soil. Workers handling infected carcasses must use protective equipment [4, 5].

There remains a presumable risk of exposure for heroin users in EU countries, and it cannot be excluded that additional cases among injecting drug users will be identified in the future. Information on anthrax should be disseminated to healthcare workers, drug treatment and harm reduction centres, supporting an early diagnosis and treatment. The provision of appropriately dosed opiate substitution treatment could also further prevent anthrax cases [6]. In addition, the development of a syringe filter for spore-forming bacteria could be a new tool for the prevention of infections in injecting drug users [7].

Vaccines against anthrax are available. National and international guidelines recommend vaccination for veterinarians, abattoir workers, those working with animal hides or furs, laboratory workers and armed forces in areas with a high risk of exposure. Animals can be vaccinated to prevent them from being infected and passing the spores on to humans. In areas prone to the disease, particularly those that experience outbreaks or sporadic cases in livestock, annual vaccination of susceptible animals is commonly performed. The usual peracute clinical symptoms observed in unvaccinated animals lead to rapid death and make it very unlikely that meat from such animals enters the food chain [8]. Meat-borne transmission of anthrax in the EU is considered a very rare event [9].

References

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