

Trichinellosis

Annual Epidemiological Report for 2018

Key facts

- For 2018, nine European Union/European Economic Area (EU/EEA) countries reported 85 cases of trichinellosis, 66 of which were confirmed.
- Bulgaria and Romania accounted for 83% of all confirmed cases.
- The overall EU/EEA notification rate was 0.01 cases per 100 000 population in 2018; this is the lowest notification rate ever reported since the beginning of EU-level trichinellosis surveillance in 2007.
- The highest risk for acquiring trichinellosis in the EU/EEA comes from the consumption of undercooked meat from pigs raised under non-controlled housing conditions, or hunted wild boar.

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.

For a detailed description of 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 *Surveillance atlas of infectious diseases* [3].

Epidemiology

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

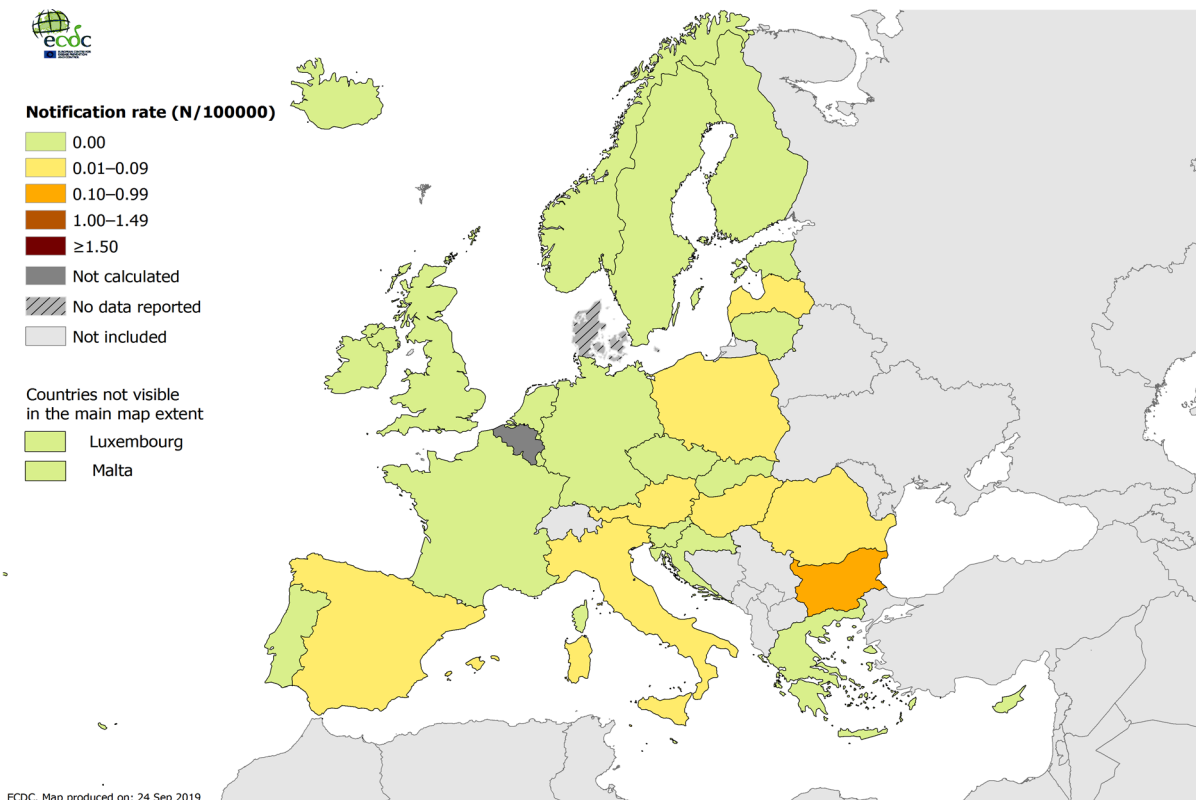
Table 1. Number of confirmed trichinellosis cases and rates per 100 000 population by country, EU/EEA, 2014–2018

Country	2014		2015		2016		2017		2018			
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Confirmed cases	Rate	ASR	Reported cases
Austria	0	0.00	0	0.00	2	0.02	3	0.03	2	0.02	0.03	2
Belgium	16	NR	0	NR	0	NR	0	NR	0	NR	NR	3
Bulgaria	60	0.83	22	0.31	35	0.49	55	0.77	45	0.64	0.66	45
Croatia	3	0.07	3	0.07	5	0.12	21	0.51	0	0.00	0.00	0
Cyprus	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00	0
Czech Republic	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00	0
Denmark	ND	NR	ND	NR	ND	NR	ND	NR	ND	NR	NR	ND
Estonia	0	0.00	2	0.15	0	0.00	0	0.00	0	0.00	0.00	0
Finland	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00	0
France	0	0.00	3	0.00	3	0.00	8	0.01	0	0.00	0.00	0
Germany	1	0.00	3	0.00	4	0.00	2	0.00	0	0.00	0.00	0
Greece	0	0.00	0	0.00	0	0.00	1	0.01	0	0.00	0.00	0
Hungary	0	0.00	0	0.00	0	0.00	0	0.00	2	0.02	0.02	2
Iceland	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00	0
Ireland	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00	0
Italy	4	0.01	36	0.06	5	0.01	4	0.01	2	0.00	NR	2
Latvia	5	0.25	4	0.20	1	0.05	1	0.05	1	0.05	0.05	1
Liechtenstein	ND	NR	ND	NR	ND	NR	ND	NR	ND	NR	NR	ND
Lithuania	5	0.17	21	0.72	1	0.03	9	0.32	0	0.00	0.00	0
Luxembourg	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00	0
Malta	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00	0
Netherlands	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00	0
Norway	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00	0
Poland	6	0.02	1	0.00	4	0.01	9	0.02	2	0.01	0.00	2
Portugal	0	0.00	0	0.00	0	0.00	1	0.01	0	0.00	0.00	0
Romania	221	1.11	55	0.28	26	0.13	48	0.24	10	0.05	0.05	25
Slovakia	0	0.00	1	0.02	1	0.02	1	0.02	0	0.00	0.00	0
Slovenia	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00	0
Spain	1	0.00	3	0.01	12	0.03	5	0.01	2	0.00	0.00	3
Sweden	1	0.01	1	0.01	2	0.02	0	0.00	0	0.00	0.00	0
United Kingdom	1	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0.00	0
EU/EEA	324	0.06	155	0.03	101	0.02	168	0.03	66	0.01	0.01	85

Source: country reports.

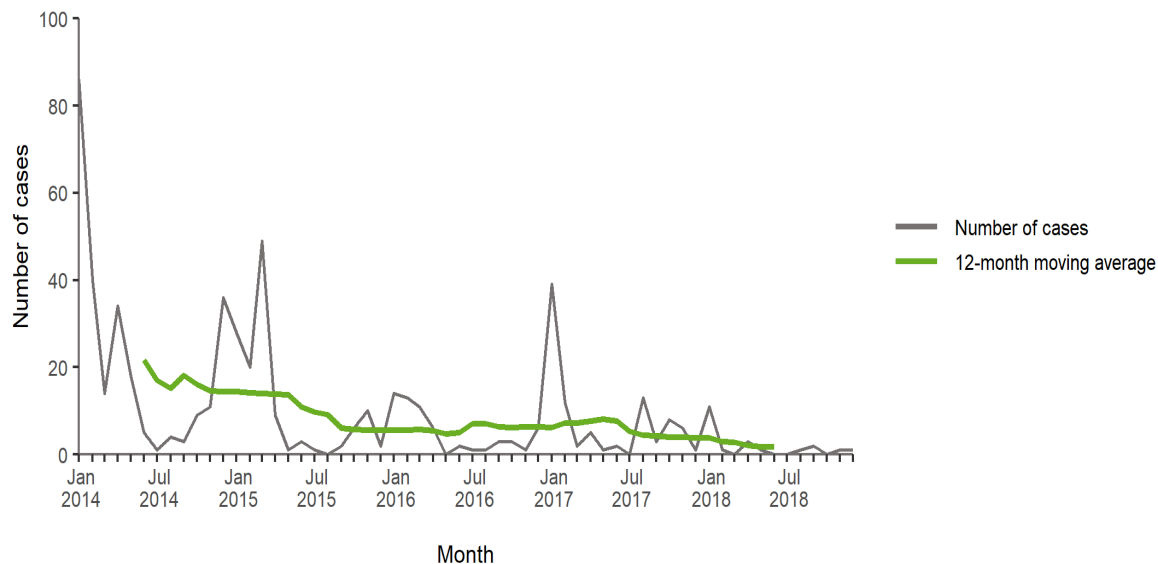
ND: no data reported, NR: no rate calculated, ASR: age-standardised rate No surveillance system for trichinellosis exists in Denmark. Data were not reported by Liechtenstein for all years; the reasons for this are unclear.

Figure 1. Distribution of confirmed trichinellosis cases per 100 000 population by country, EU/EEA, 2018



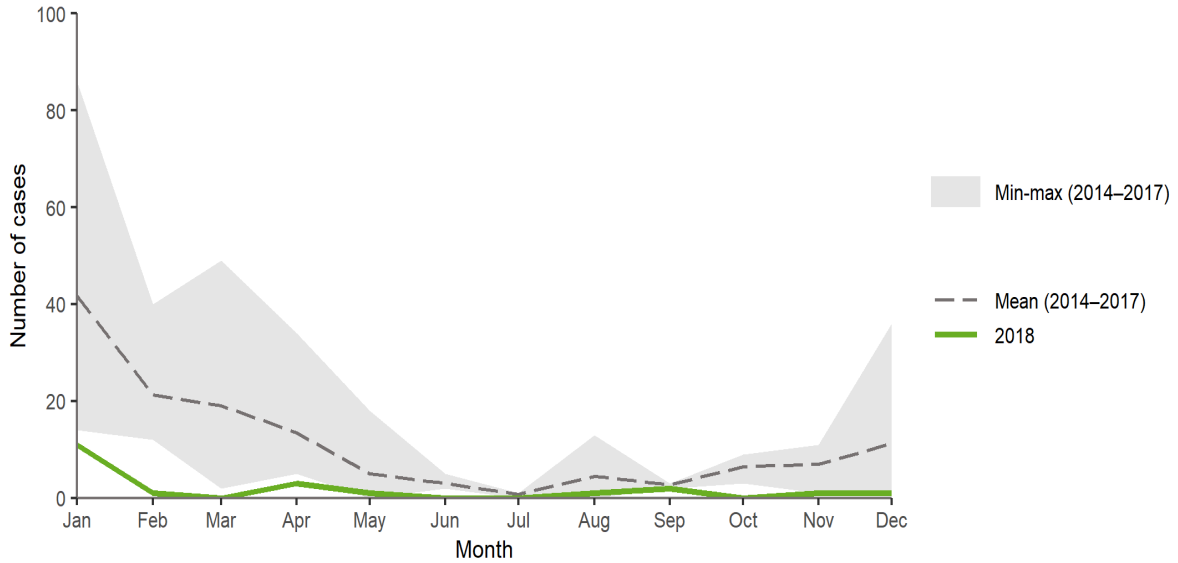
Sources: Country reports from Austria, Belgium, Bulgaria, Croatia, Cyprus, the Czechia, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom. No rate calculated for Belgium.

Figure 2. Distribution of confirmed trichinellosis cases by month, EU/EEA, 2014–2018



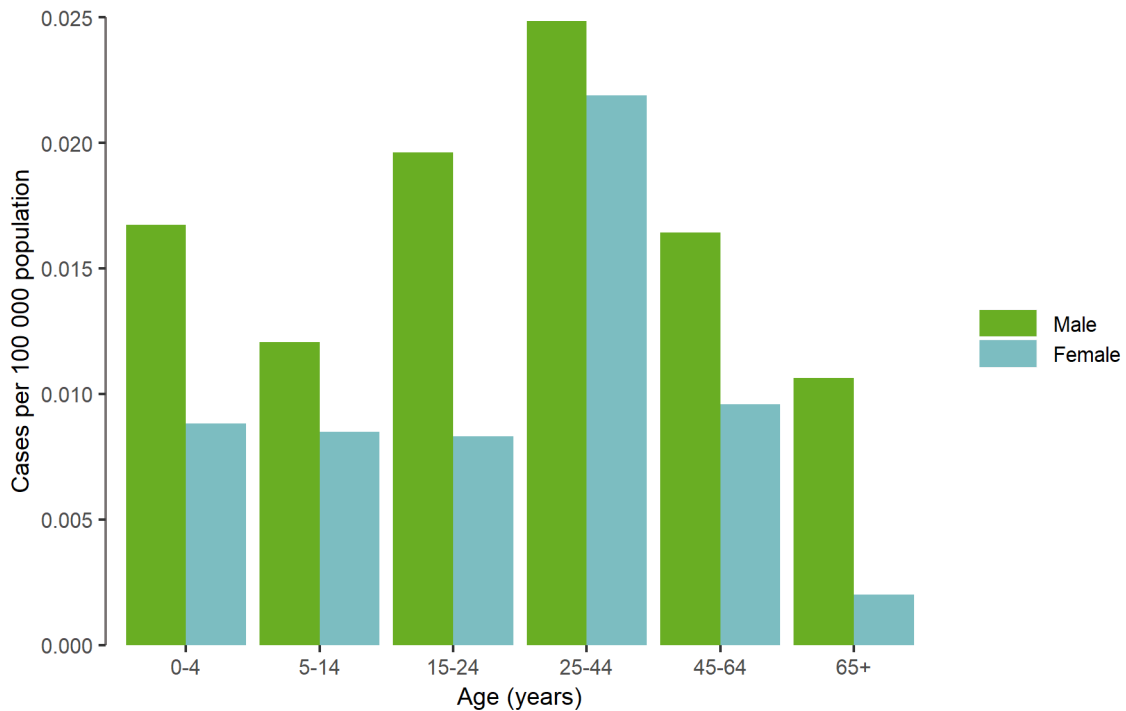
Sources: country reports from Austria, Belgium, Cyprus, the Czechia, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Iceland, Italy, Lithuania, Luxembourg, Latvia, Malta, Netherlands, Norway, Poland, Portugal, Romania, Spain, Slovakia, Slovenia, Sweden, and the United Kingdom.

Figure 3. Distribution of confirmed trichinellosis cases by month, EU/EEA, 2018 and 2014–2017



Sources: country reports from Austria, Cyprus, the Czechia, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, and the United Kingdom.

Figure 4. Distribution of confirmed trichinellosis cases per 100 000 population, by age and sex, EU/EEA, 2018



Public health implications

Products derived from pig and wild boar meat remain the most important sources of human trichinellosis in the EU/EEA. Consuming undercooked meat from pigs or hunted wild boar which have not been tested for *Trichinella* is an important risk factor for trichinellosis [4] and it is important that those who engage in such activities receive the relevant information.

References

1. European Centre for Disease Prevention and Control (ECDC). Introduction to the Annual Epidemiological Report. In: ECDC. Annual epidemiological report. Stockholm: ECDC. Available from: <http://ecdc.europa.eu/annual-epidemiological-reports/methods>
2. European Centre for Disease Prevention and Control (ECDC). Surveillance systems overview [downloadable spreadsheet]. Stockholm: ECDC. Available from: <https://www.ecdc.europa.eu/en/publications-data/surveillance-systems-overview-2018>
3. European Centre for Disease Prevention and Control (ECDC). Surveillance atlas of infectious diseases. Stockholm: ECDC. Available from: <http://atlas.ecdc.europa.eu/public/index.aspx?Dataset=27&HealthTopic=8>
4. European Food Safety Authority (EFSA) and European Centre for Disease Prevention and Control (ECDC). The European Union One Health 2018 Zoonoses Report. EFSA Journal. 2019;17(12):5926. Available from: <https://doi.org/10.2903/j.efsa.2019.5926>.