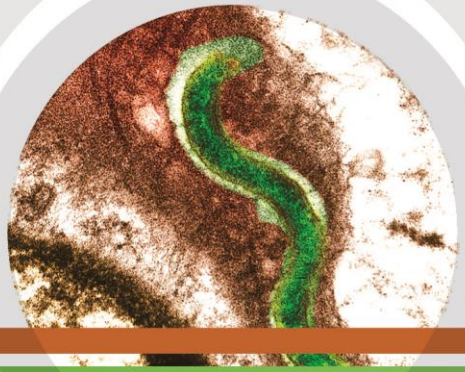


SURVEILLANCE REPORT

Annual Epidemiological Report for 2015

Congenital syphilis

Key facts

- In 2015, 42 congenital syphilis cases were reported in 25 EU/EEA Member States, at a crude rate of 1.1 cases per 100 000 live births.
- The trend for reported congenital syphilis cases has remained stable in recent years, but some countries reported small increases compared with 2014.
- It is suspected that there is significant underreporting: six countries did not contribute to the reporting of congenital syphilis, and a further 15 reported zero cases in 2015.
- The low rates of congenital syphilis and decreasing rates of reported syphilis among women suggest that most Member States have programmes that aim at the elimination of congenital syphilis. Better indicator data are needed, however, to assess the effectiveness of antenatal screening programmes in all EU/EEA countries.

Methods

This report is based on data for 2015 retrieved from The European Surveillance System (TESSy) on 8 November 2016. TESSy is a system for the collection, analysis and dissemination of data on communicable diseases. EU Member States and EEA countries contribute to the system by uploading their infectious disease surveillance data at regular intervals.

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].

Additional data on this disease are accessible from ECDC's online *Surveillance atlas of infectious diseases* [3].

In 2015, the majority of countries (19) reported data using the standard EU case definitions [4]: ten countries reported using the 2012 EU case definitions, five the 2008 definitions, and four the 2002 definitions. The remaining six countries reported either using national case definitions (3) or did not specify the case definition in use (3).

Suggested citation: European Centre for Disease Prevention and Control. Congenital syphilis. In: ECDC. Annual epidemiological report for 2015. Stockholm: ECDC; 2017.

Stockholm, November 2017

All reporting countries have comprehensive surveillance systems for congenital syphilis. Reporting of congenital syphilis infection was compulsory in all countries except for the United Kingdom. Cases are analysed by date of diagnosis.

Epidemiology

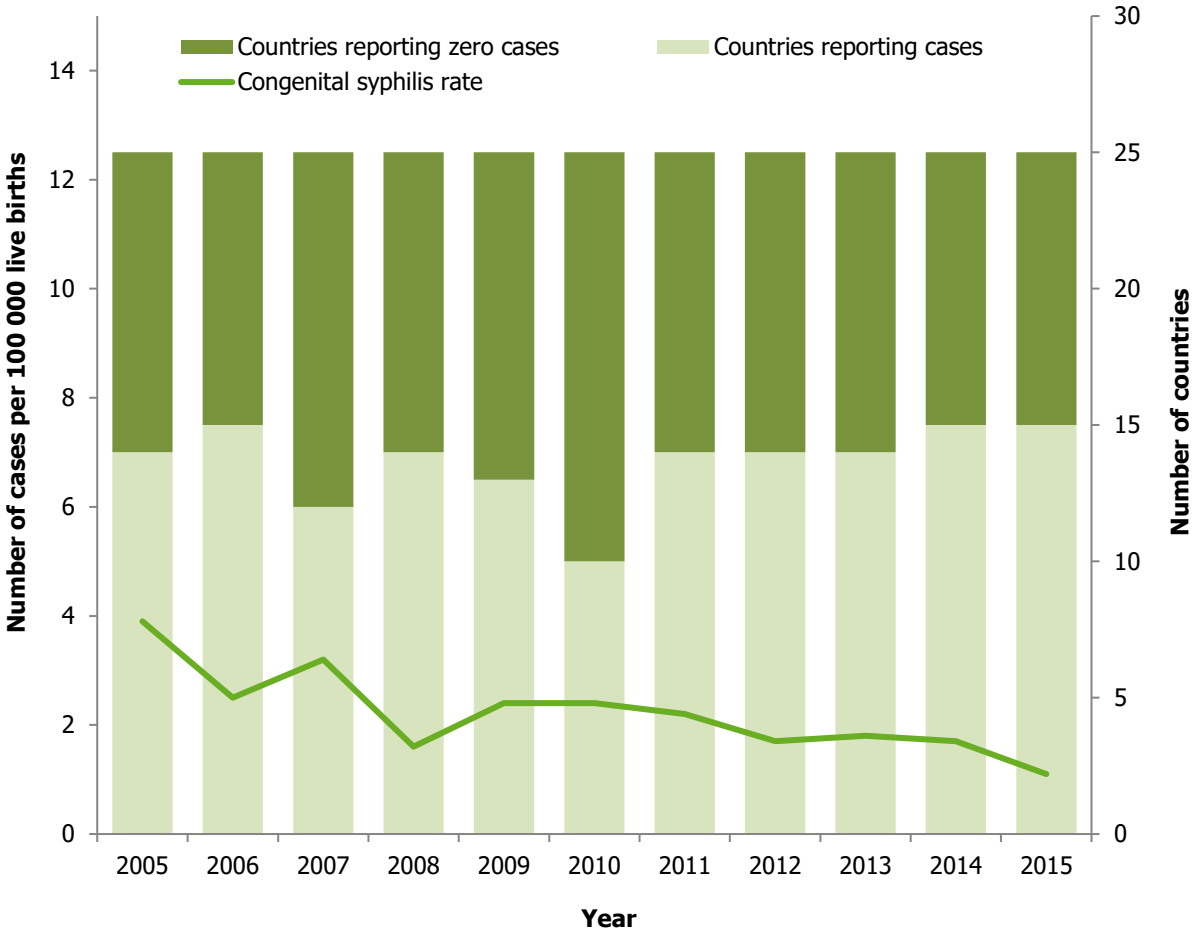
In 2015, 42 confirmed cases of congenital syphilis were reported in 10 countries. Fifteen countries reported zero cases. Bulgaria reported the largest number of cases (10 cases), followed by Portugal (6). The total number of reported congenital syphilis cases decreased in 2015 compared with 2014 (67 cases). Fewer cases were reported by Bulgaria and Portugal in particular. Cases were reported by three countries which did not report any in 2014 (the Czech Republic, Germany and Greece) (Table 1). The crude rate of reported congenital syphilis infection in the EU/EEA was 1.1 cases per 100 000 live births, a decrease from 1.7 per 100 000 reported in 2014, continuing the decreasing trend observed since reporting started (Figure 1). The highest rates were observed in Bulgaria (15.2 cases per 100 000 live births) and Lithuania (9.5 cases per 100 000).

Table 1. Number and rate of congenital syphilis cases per 100 000 live births, EU/EEA, 2011–2015

Country	2011		2012		2013		2014		2015		
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Surveillance system	Number	Rate
Austria											
Belgium											
Bulgaria	38	53.6	29	42	27	40.6	24	35.5	Co	10	15.2
Croatia			0	0	0	0	0	0	Co	0	0
Cyprus	0	0	0	0	0	0	0	0	Co	0	0
Czech Republic	0	0	1	0.9	1	0.9	0	0	Co	3	2.7
Denmark	0	0	0	0	1	1.8	1	1.8	Co	0	0
Estonia	0	0	0	0	0	0	0	0	Co	0	0
Finland											
France											
Germany	2	0.3	5	0.7	3	0.4	0	0	Co	3	0.4
Greece	3	2.8	0	0	1	1.1	0	0	Co	2	2.2
Hungary	0	0	0	0	2	2.2	1	1.1	Co	0	0
Ireland	0	0	0	0	0	0	0	0	Co	0	0
Italy	7	1.3	5	0.9	7	1.4	4	0.8	Co	5	1
Latvia	0	0	1	5	0	0	0	0	Co	0	0
Lithuania	0	0	1	3.3	2	6.7	1	3.3	Co	3	9.5
Luxembourg	0	0	0	0	0	0	0	0	Co	0	0
Malta	0	0	0	0	0	0	0	0	Co	0	0
Netherlands											
Poland	11	2.8	7	1.8	16	4.3	8	2.1	Co	4	1.1
Portugal	10	10.3	12	13.4	5	6	13	15.8	Co	6	7
Romania	10	5.1	6	3	3	1.6	7	3.6	Co	5	2.7
Slovakia	1	1.6	0	0	0	0	2	3.6	Co	0	0
Slovenia	0	0	0	0	0	0	0	0	Co	0	0
Spain	4	0.9	1	0.2	3	0.7	6	1.4	Co	1	0.2
Sweden	1	0.9	1	0.9	0	0	0	0	Co	0	0
United Kingdom	1	0.1	0	0	0	0	0	0	Co	0	0
EU	**88**	**2.3**	**69**	**1.8**	**71**	**1.9**	**67**	**1.7**		**42**	**1.1**
Iceland	0	0	0	0	0	0	0	0	Co	0	0
Liechtenstein											
Norway	0	0	0	0	0	0	0	0	Co	0	0
EU/EEA	**88**	**2.2**	**69**	**1.7**	**71**	**1.8**	**67**	**1.7**		**42**	**1.1**

Source: Country reports
Legend: Co = comprehensive

Figure 1. Number of confirmed congenital syphilis cases per 100 000 live births; number of countries reporting congenital syphilis data, by year, 25 EU/EEA countries, 2005–2015



Discussion

Eight of the 10 countries which reported congenital syphilis cases in 2014 reported a decrease in cases for 2015. In some of these countries, for example in Bulgaria and Poland, this decrease is mainly attributed to improvements in the surveillance and assessment of reported cases, which led to the exclusion of cases not meeting the reporting criteria.

Overall congenital syphilis rates in the EU/EEA have been decreasing or stable since 2005. During this time, rates of syphilis among women have decreased consistently in the EU/EEA, contributing to the reduction of the risk of congenital transmission of syphilis. Data on the number of syphilis diagnoses during pregnancy are not collected routinely at the European level, which makes it difficult to assess the efficiency of antenatal screening programmes from an EU perspective. In addition, underreporting of congenital syphilis is likely in parts of Europe.

Additional data on the performance of antenatal screening programmes in the EU/EEA are available through an ECDC survey performed in 2013. The survey results show that all participating EU/EEA countries (26/26) have implemented antenatal screening for syphilis. Most countries (22/24) test pregnant women for syphilis during the first trimester of pregnancy. Seven countries reported repeat testing during the third trimester of pregnancy as a general recommendation. Another three countries offer repeat testing for women in risk groups. The reported coverage of antenatal screening of syphilis was high: 14/18 countries reported a coverage of ≥95%, while three reported a coverage of ≥90%. Access to antenatal screening for vulnerable groups is still an issue in a number of countries [7].

Public health implications

Validation of the elimination of congenital syphilis in Europe is underway through efforts by the World Health Organization. Better surveillance data, including more information on the status of mothers of infants affected by congenital syphilis, is essential in order to understand where antenatal screening programmes need to be improved. An updated European congenital syphilis case definition has been agreed upon by the European

surveillance network and will be implemented in the near future. A key change is the inclusion of stillbirths related to syphilis infections in pregnancy. This will ensure optimal sensitivity for cases, which is essential at this stage of the elimination process.

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