

### 3.19 Cervix

Table 3.19.1  
Overview of key epidemiological parameters for Germany, ICD-10 C53

Incidence	2015	2016	Prediction for 2020
	Women	Women	Women
Incident cases	4,470	4,380	4,400
Crude incidence rate <sup>1</sup>	10.8	10.5	10.5
Age-standardised incidence rate <sup>1,2</sup>	9.0	8.7	8.7
Median age at diagnosis	54	55	
Mortality	2015	2016	2017
	Women	Women	Women
Deaths	1,541	1,562	1,588
Crude mortality rate <sup>1</sup>	3.7	3.7	3.8
Age-standardised mortality rate <sup>1,2</sup>	2.4	2.4	2.5
Median age at death	66	66	64
Prevalence and survival rates	5 years	10 years	
	Women	Women	
Prevalence	17,400	32,900	
Absolute survival rate (2015–2016) <sup>3</sup>	64 (59–67)	57 (55–60)	
Relative survival rate (2015–2016) <sup>3</sup>	67 (62–70)	63 (61–67)	

<sup>1</sup> per 100,000 persons <sup>2</sup> age-standardised (old European Standard) <sup>3</sup> in percentages (lowest and highest value of the included German federal states)

► Additional information under [www.krebsdaten.de/cancer-sites](http://www.krebsdaten.de/cancer-sites)

#### Epidemiology

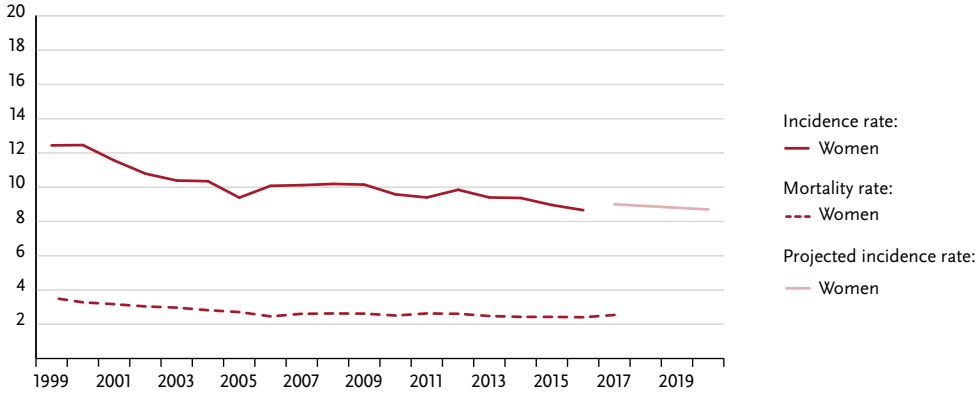
In 2016, around 4,380 women were diagnosed with cervical cancer in Germany. In about seven out of ten of these cases, invasive tumours originated from the squamous epithelial tissue of the cervical mucosa. Adenocarcinomas tend to occur more proximally at the transition between the uterus and cervix. Although the incidence of invasive carcinomas of the cervix has remained largely stable over the past 15 years, a very sharp decline in incidence occurred during the three preceding decades. About four out of ten women are diagnosed at an early stage (stage I). Median age at diagnosis with an invasive carcinoma is 55 years. In situ carcinomas are much more common and are usually discovered during screening among women 20 years younger on average. Around 1,590 women die from cervical cancer in Germany every year; however, 30 years ago this number was twice as large. The relative 5-year survival rate for women with invasive tumours of the cervix is 67%. International comparisons demonstrate that incidence and mortality are substantially lower in countries with long-standing, well-organised screening programs.

#### Risk factors, early detection and prevention

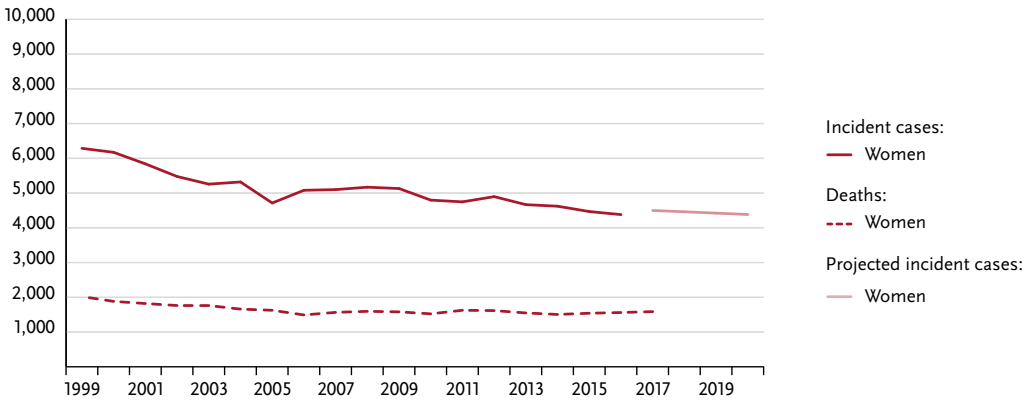
The main cause of cervical cancer is a persistent infection with a sexually-transmitted human papillomavirus (HPV). Asymptomatic HPV infections are common and usually clear up. Prolonged infection with high-risk viruses such as HPV 16 and 18, however, can lead to cervical cancer. Other risk factors include smoking, sexually transmitted pathogens (such as herpes simplex and chlamydia), early onset of sexual activity, a large number of childbirths and a severely weakened immune system. Long-term use of oral contraceptives also comes with a slightly increased risk. Furthermore, some hereditary factors are also thought to promote the development of cervical cancer.

The statutory screening programme offers women 20 years and older with an annual cell test taken from the cervix (PAP smear). As of 2020, women 35 years and older will be able to have a PAP smear combined with an HPV test every three years. The Standing Committee on Vaccination (STIKO) recommends that girls and boys be vaccinated against HPV, primarily between the ages of 9 and 14 years. Furthermore, statutory health insurers also cover the costs of a catch-up vaccination for young people until the age of 17. However, vaccination should not be viewed as a replacement for screening because it does not protect against all high-risk HPV viruses.

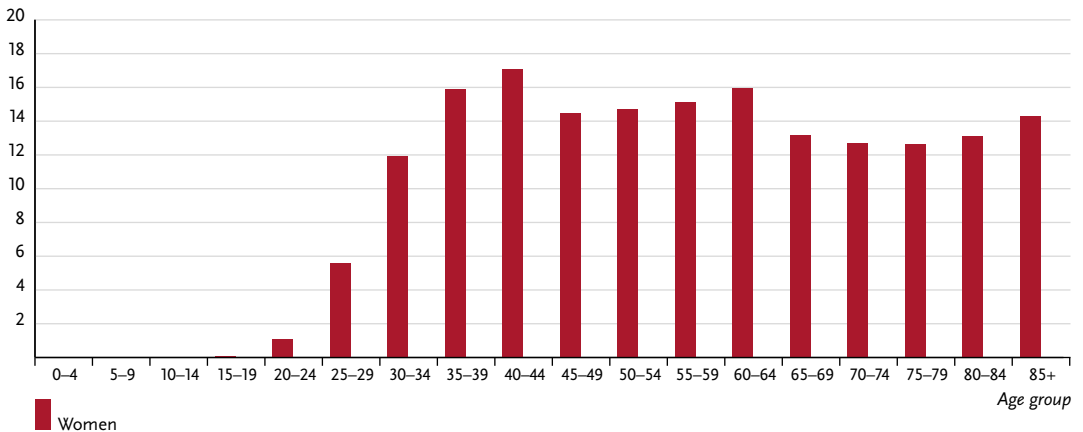
**Figure 3.19.1a**  
 Age-standardised incidence and mortality rates, ICD-10 C53, Germany 1999–2016/2017, projection (incidence) through 2020 per 100,000 (old European Standard)



**Figure 3.19.1b**  
 Absolute numbers of incident cases and deaths, ICD-10 C53, Germany 1999–2016/2017, projection (incidence) through 2020



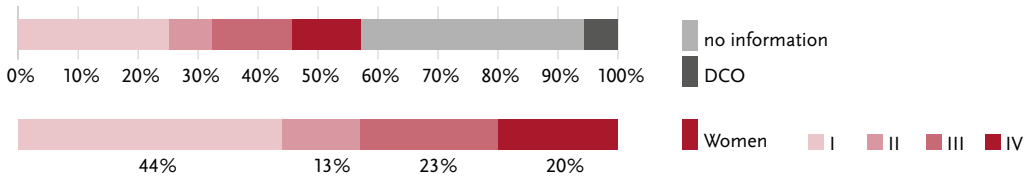
**Figure 3.19.2**  
 Age-specific incidence rates, ICD-10 C53, Germany 2015–2016 per 100,000



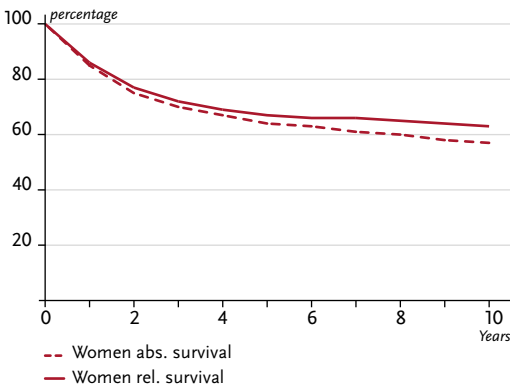
**Table 3.19.2**  
Cancer incidence and mortality risks in Germany by age, ICD-10 C53, database 2016

Women aged	Risk of developing cancer				Mortality risk			
	in the next ten years		ever		in the next ten years		ever	
15 years	< 0.1%	(1 in 11,900)	0.8%	(1 in 130)	< 0.1%	(1 in 499,100)	0.3%	(1 in 340)
25 years	0.1%	(1 in 1,200)	0.8%	(1 in 130)	< 0.1%	(1 in 15,100)	0.3%	(1 in 340)
35 years	0.2%	(1 in 640)	0.7%	(1 in 140)	< 0.1%	(1 in 4,600)	0.3%	(1 in 350)
45 years	0.1%	(1 in 700)	0.6%	(1 in 180)	< 0.1%	(1 in 2,600)	0.3%	(1 in 370)
55 years	0.1%	(1 in 670)	0.4%	(1 in 240)	0.1%	(1 in 1,600)	0.2%	(1 in 420)
65 years	0.1%	(1 in 790)	0.3%	(1 in 360)	0.1%	(1 in 1,700)	0.2%	(1 in 540)
75 years	0.1%	(1 in 880)	0.2%	(1 in 570)	0.1%	(1 in 1,300)	0.1%	(1 in 690)
Lifetime risk			0.8%	(1 in 130)			0.3%	(1 in 340)

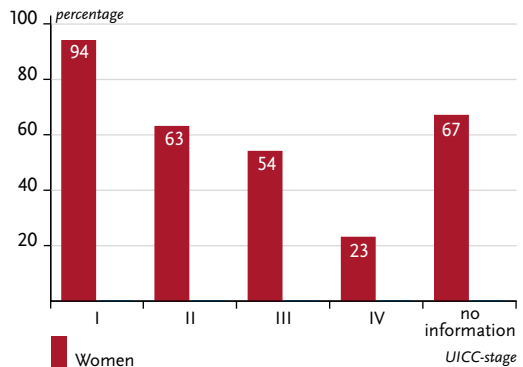
**Figure 3.19.3**  
Distribution of UICC-stages at first diagnosis, ICD-10 C53, Germany 2015–2016  
(top: all cases; bottom: only valid reports)



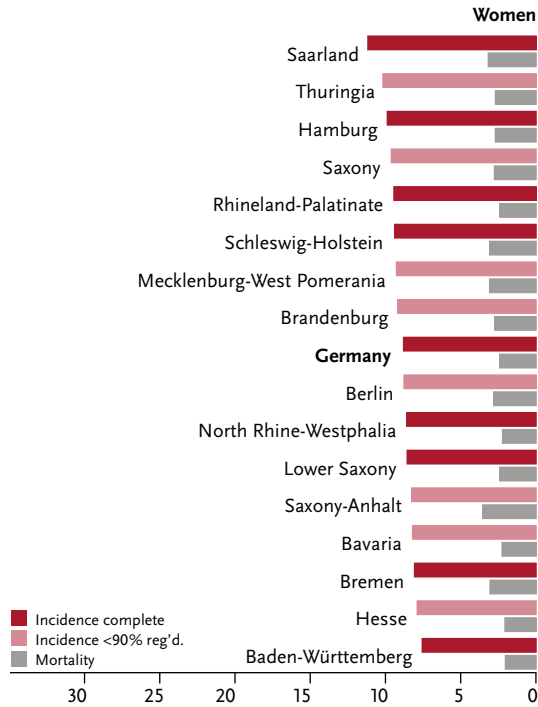
**Figure 3.19.4**  
Absolute and relative survival rates up to 10 years after first diagnosis, ICD-10 C53, Germany 2015–2016



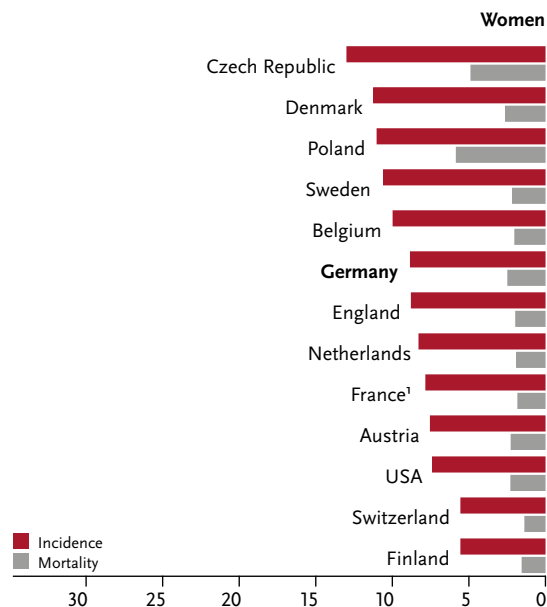
**Figure 3.19.5**  
Relative 5-year survival by UICC-stage, ICD-10 C53, Germany 2015–2016



**Figure 3.19.6**  
**Age-standardised incidence and mortality rates in German federal states, ICD-10 C53, 2015–2016**  
 (Incidence in Bremen for 2014 and 2016, incidence in eastern Germany for 2014 to 2015)  
 per 100,000 (old European Standard)



**Figure 3.19.7**  
**International comparison of age-standardised incidence and mortality rates, ICD-10 C53, 2015–2016 or latest available year (details and sources, see appendix)**  
 per 100,000 (old European Standard)



<sup>1</sup> Mortality figures from Eurostat, Statistical Office of the European Union