

3.19 Cervix

Table 3-19.1
Overview of key epidemiological parameters for Germany, ICD-10 C53

Incidence	2017	2018	Prediction for 2022
	Women	Women	Women
Incident cases	4,430	4,320	4,100
Crude incidence rate ¹	10.6	10.3	9.7
Age-standardised incidence rate ^{1,2}	8.8	8.6	8.1
Median age at diagnosis	55	55	
Mortality	2017	2018	2019
	Women	Women	Women
Deaths	1,588	1,612	1,597
Crude mortality rate ¹	3.8	3.8	3.8
Age-standardised mortality rate ^{1,2}	2.5	2.6	2.5
Median age at death	64	65	65
Prevalence and survival rates	5 years	10 years	25 years
	Women	Women	Women
Prevalence	16,600	30,900	69,800
Absolute survival rate (2017–2018) ³	62 (60–73)	55 (53–63)	
Relative survival rate (2017–2018) ³	65 (62–76)	61 (58–70)	

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

Epidemiology

In 2018, about 4,320 women were diagnosed with cervical cancer in Germany. In about seven out of ten women, invasive tumours originated from the squamous epithelial tissue of the cervical mucosa. Adenocarcinomas tend to occur more proximally at the transition between the body of the uterus and the cervix. The rates of new invasive carcinoma of the cervix in women have been declining slightly for the last 10 years, after a very sharp decline in the three decades before the 2000s, and stable rates until 2010. The median age at diagnosis with an invasive carcinoma is 55 years. About four out of ten women are diagnosed in an early tumour stage (stage I). The much more frequent in situ carcinoma is usually discovered during screening in women who are on average 20 years younger. Around 1,600 women currently die of cervical cancer in Germany every year; 30 years ago, the number was more than twice as high. The relative 5-year survival rate after diagnosis of an invasive cervical tumour is 65%. In an international comparison, the mortality rates in countries with long-standing, well-organised screening programs are significantly lower than in countries without such 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. Persistent infection with one or more of 12 high-risk viruses (primarily HPV 16 and 18) can lead to cervical cancer. Other risk factors include smoking, other sexually transmitted pathogens, early onset of sexual activity, a large number of childbirths and immunosuppression, for example after organ transplantation. Long-term use of oral contraceptives also slightly increases the risk of development of cervical cancer.

The statutory cancer screening programme offers women 20 years of age and older an annual cell test taken from the cervix (PAP smear) and its cytological examination. From the age of 35, an HPV test combined with the PAP smear is offered every three years since the beginning of 2020. The Standing Commission on Vaccination (STIKO) recommends that girls and boys be vaccinated against HPV, primarily between the ages of 9 and 14 years. Statutory health insurers cover the costs of vaccination for young people up to the age of 18 years. However, vaccination does not replace screening, as it does not protect against all high-risk HP viruses.

Figure 3.19.1a
 Age-standardised incidence and mortality rates, ICD-10 C53, Germany 1999–2018/2019, projection (incidence) through 2022
 per 100,000 (old European Standard)

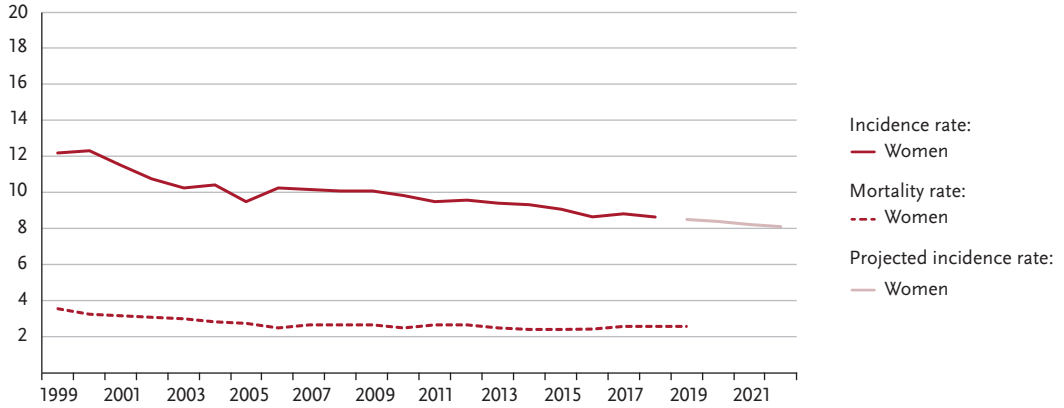


Figure 3.19.1b
 Absolute numbers of incident cases and deaths, ICD-10 C53, Germany 1999–2018/2019, projection (incidence) through 2022

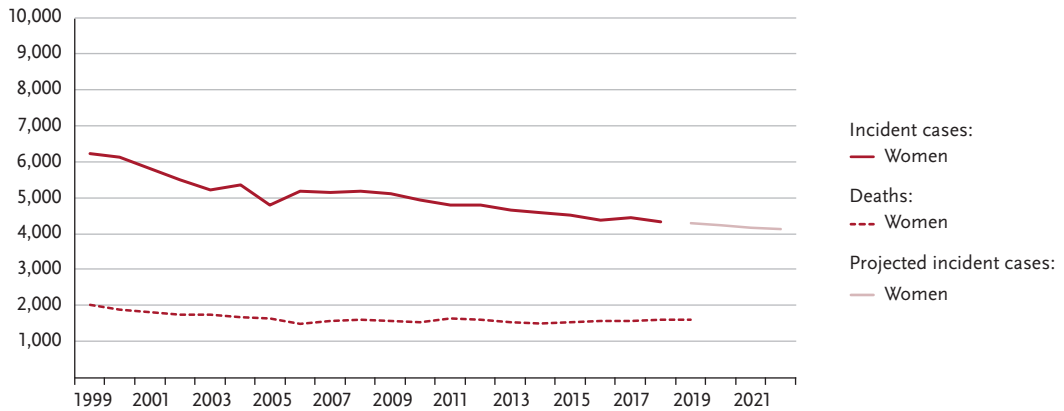


Figure 3.19.2
 Age-specific incidence rates, ICD-10 C53, Germany 2017–2018
 per 100,000

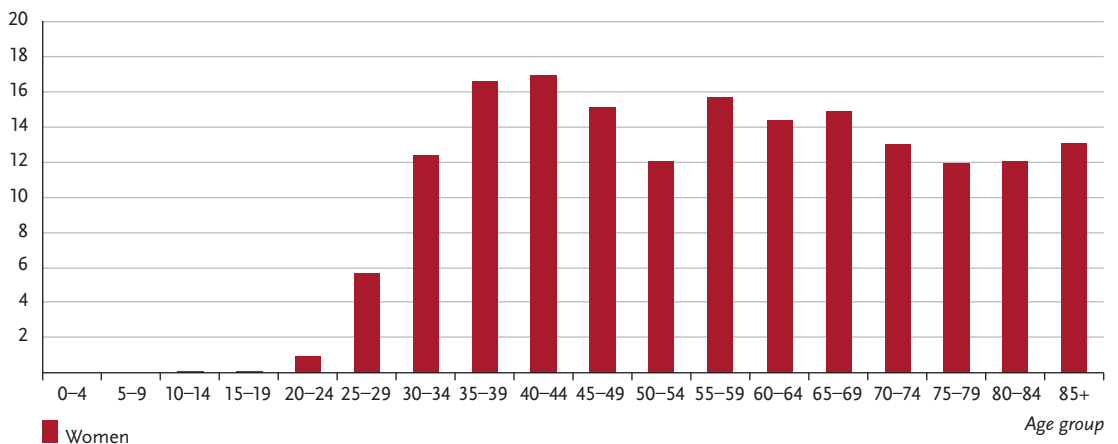


Table 3.19.2
Cancer incidence and mortality risks in Germany by age, ICD-10 C53, database 2018

Women aged	Risk of developing cancer		Mortality risk	
	in the next 10 years	ever	in the next 10 years	ever
15 years	< 0.1 % (1 in 12,300)	0.8 % (1 in 130)	< 0.1 % (1 in 437,900)	0.3 % (1 in 340)
25 years	0.1 % (1 in 1,100)	0.8 % (1 in 130)	< 0.1 % (1 in 11,500)	0.3 % (1 in 340)
35 years	0.2 % (1 in 620)	0.7 % (1 in 150)	< 0.1 % (1 in 4,600)	0.3 % (1 in 350)
45 years	0.1 % (1 in 730)	0.5 % (1 in 190)	< 0.1 % (1 in 2,500)	0.3 % (1 in 380)
55 years	0.1 % (1 in 700)	0.4 % (1 in 250)	0.1 % (1 in 1,600)	0.2 % (1 in 440)
65 years	0.1 % (1 in 740)	0.3 % (1 in 370)	0.1 % (1 in 1,400)	0.2 % (1 in 570)
75 years	0.1 % (1 in 1,000)	0.2 % (1 in 650)	0.1 % (1 in 1,500)	0.1 % (1 in 860)
Lifetime risk		0.8 % (1 in 130)		0.3 % (1 in 340)

Figure 3.19.3
Distribution of UICC stages at diagnosis, ICD-10 C53, Germany 2017–2018
top: according to 7th edition TNM; bottom: according to 8th edition TNM.
The DCO proportion was 4%. For 43% of the remaining cases, no UICC stage could be assigned.

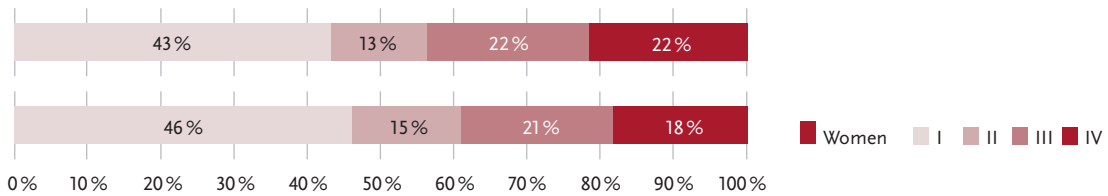


Figure 3.19.4
Absolute and relative survival rates up to 10 years after diagnosis, ICD-10 C53, Germany 2017–2018

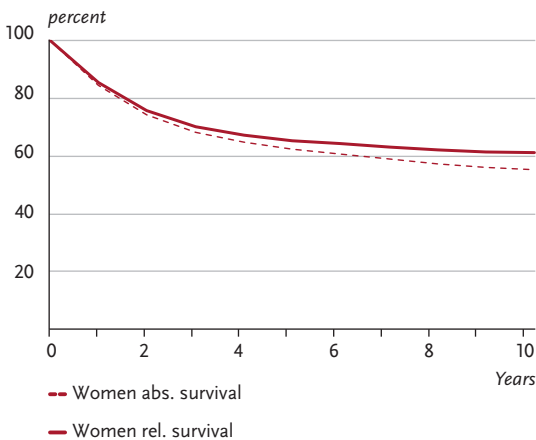


Figure 3.19.5
Relative 5-year survival by UICC stage (7th edition TNM), ICD-10 C53, Germany 2016–2018

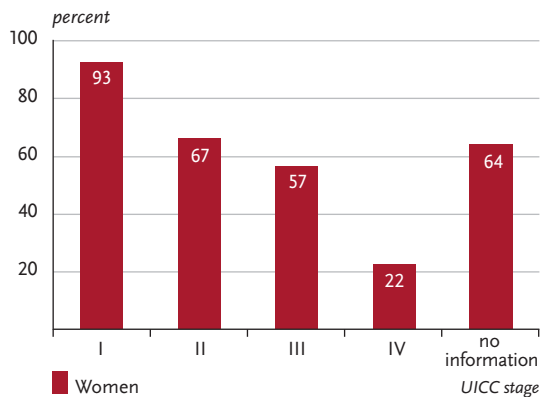


Figure 3.19.6
Age-standardised incidence and mortality rates in German federal states, ICD-10 C53, 2017–2018
per 100,000 (old European Standard)

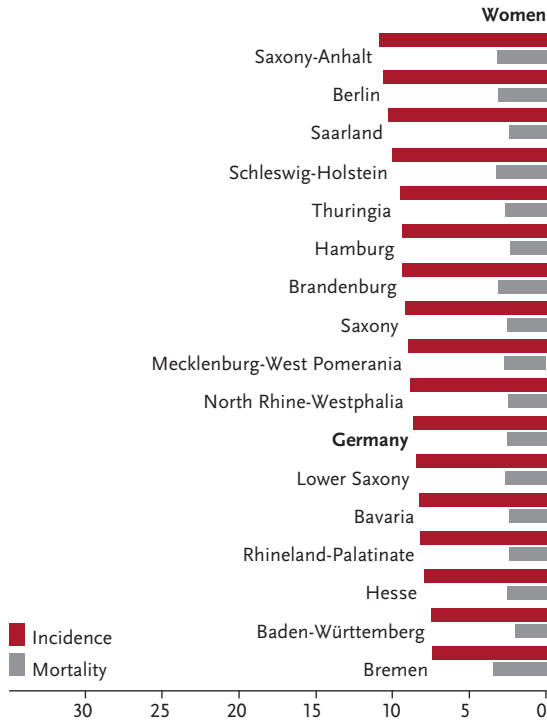


Figure 3.19.7
International comparison of age-standardised incidence and mortality rates, ICD-10 C53, 2017–2018 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)

