

3.16 Cervix

Table 3.16.1
Overview of key epidemiological parameters for Germany, ICD-10 C53

	2011	2012	Prediction for 2016
	Women	Women	Women
Incident cases	4,720	4,640	4,300
Crude incidence rate ¹	11.5	11.3	10.4
Standardised incidence rate ^{1,2}	9.4	9.3	8.5
Median age at diagnosis	54	53	
Deaths	1,626	1,617	
Crude mortality rate ¹	4.0	3.9	
Standardised mortality rate ^{1,2}	2.6	2.6	
5-year prevalence	18,200	17,900	
	<i>after 5 years</i>	<i>after 10 years</i>	
Absolute survival rate (2011–2012) ³	65 (60–71)	58 (55–65)	
Relative survival rate (2011–2012) ³	68 (62–74)	65 (60–71)	

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

Epidemiology

In 2012 about 4,600 women were diagnosed with cervical carcinoma in Germany. About three quarters of cervical carcinomas are of squamous-cell origin. Adenocarcinomas (approx. 20 %) have a more proximate origin at the transition from uterus to cervix.

The incidence rates for invasive cervical carcinomas have remained largely stable since the late 1990s at a markedly lower level than in the 1980s. The highest incidence rates are currently found among women between 40 and 59 years of age. The median age at diagnosis for invasive cancer is 53 years. The median age at diagnosis for in situ carcinomas is just 34 years. These are diagnosed considerably more often than invasive carcinomas, a result of the cervical cancer early detection examinations, aimed at identifying and treating cancer precursors.

Currently, about 1,600 women in Germany die of cervical cancer every year. The relative 5-year survival rate after diagnosis of an invasive cervical tumour is 68 %.

Incidence rates significantly differ between federal states within Germany as well as between countries. The federal state of Saarland has one of the highest cervical cancer incidence rates in Germany, comparable to incidence rates in Denmark. Denmark is one of the neighboring countries with the highest incidence rates at moderate mortality rates, whereas Switzerland and Finland have some of the lowest incidence rates and low mortality rates.

Risk factors and early detection

The main cause of cervical cancer is infection with the human papillomavirus (HPV). The majority of women are infected with HPV at some point in their life. Usually the infection is transient and disappears without further effect, but in some cases it persists and a cervical carcinoma can develop, especially with virus subtypes from the high risk group (e. g. HPV 16 or 18). Further risk factors are smoking, infections in the genital area with other sexually transmitted pathogens such as herpes simplex or chlamydia, becoming sexually active at a young age, numerous births, and a severely impaired immune system. Taking oral contraceptives (»the pill«) over a long period of time is also associated with a slightly higher risk of developing cervical cancer. However, the risk falls again when oral contraceptives are discontinued, and after approximately ten years these women seem no more at-risk than women who never took oral contraceptives.

Women in Germany aged 20 years and above are entitled to an annual cervical smear test (PAP smear). In March 2007, the German Standing Committee on Vaccination Recommendations (STIKO) proposed vaccinating girls between 9 and 14 years of age against HPV 16 and 18, which are responsible for about 70 % of all cervical carcinomas. It has been proved that the vaccination can prevent the development of preliminary stages of cervical cancer. However, the vaccination does not supersede the PAP smear, as it only protects against two of the most common high-risk papilloma viruses.

Figure 3.16.1a
Age-standardised incidence and mortality rates,
ICD-10 C53, Germany 1999–2012
per 100,000 (European standard)

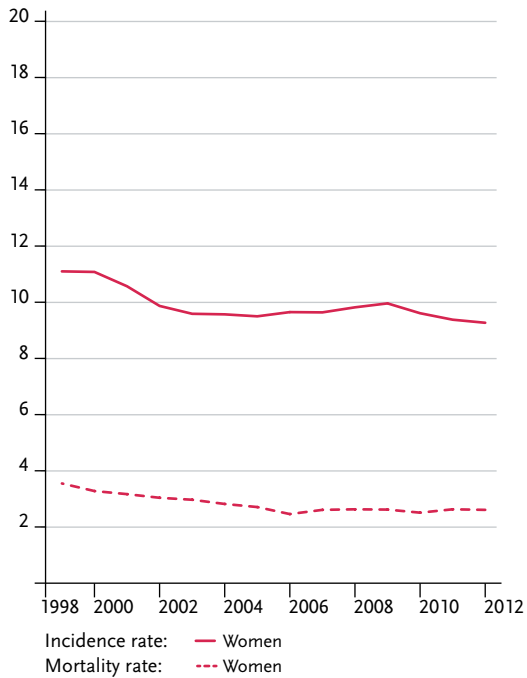


Figure 3.16.1b
Absolute numbers of incident cases and deaths,
ICD-10 C53, Germany 1999–2012

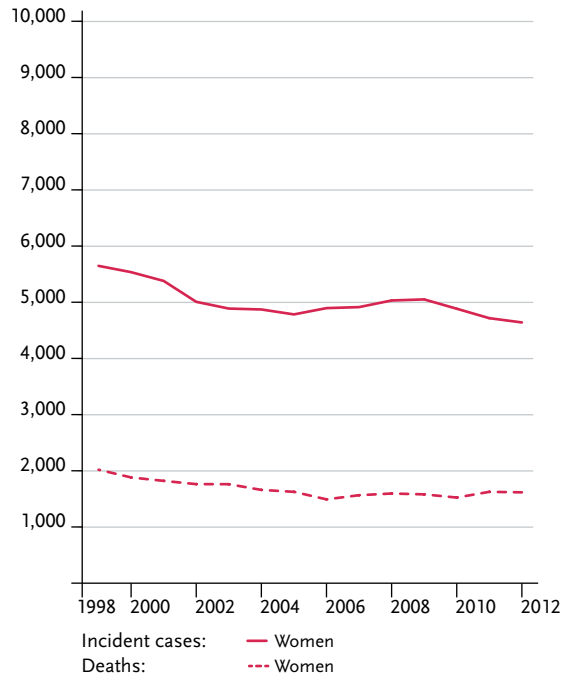


Figure 3.16.2
Age-specific incidence rates, ICD-10 C53, Germany 2011–2012
per 100,000

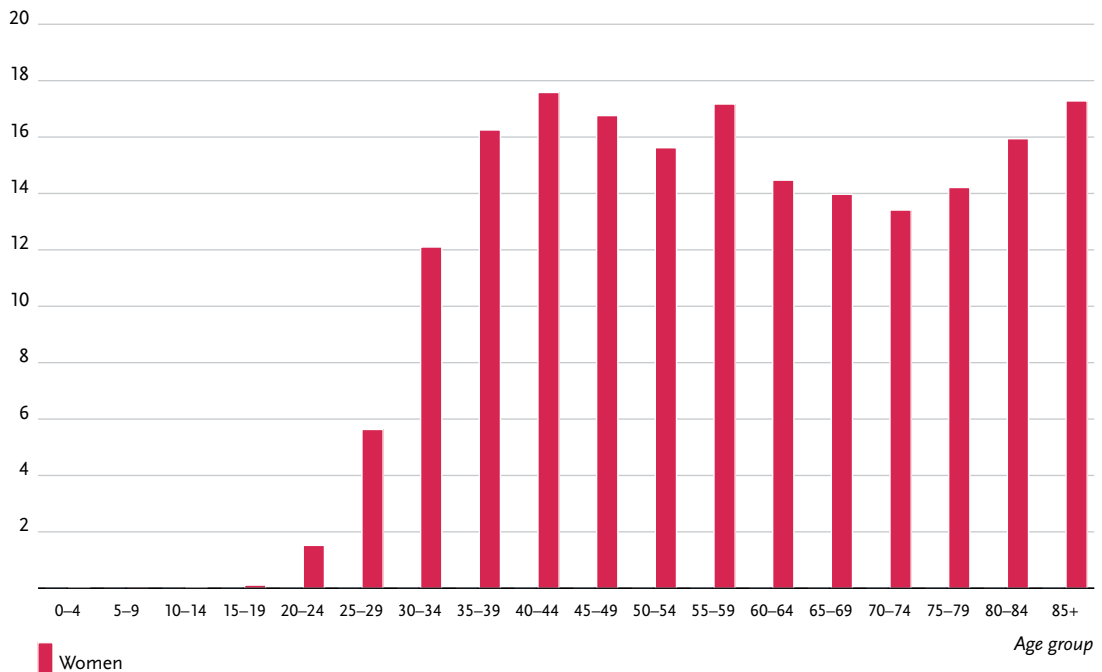


Table 3.16.2
Cancer incidence and mortality risks in Germany by age, ICD-10 C53, database 2012

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 9,100)	0.8%	(1 in 120)	<0.1%	(1 in 353,400)	0.3%	(1 in 330)
25 years	0.1%	(1 in 1,100)	0.8%	(1 in 120)	<0.1%	(1 in 12,700)	0.3%	(1 in 330)
35 years	0.2%	(1 in 620)	0.8%	(1 in 130)	<0.1%	(1 in 4,800)	0.3%	(1 in 340)
45 years	0.2%	(1 in 620)	0.6%	(1 in 170)	<0.1%	(1 in 2,200)	0.3%	(1 in 360)
55 years	0.2%	(1 in 650)	0.4%	(1 in 230)	0.1%	(1 in 1,600)	0.2%	(1 in 420)
65 years	0.1%	(1 in 750)	0.3%	(1 in 330)	0.1%	(1 in 1,600)	0.2%	(1 in 530)
75 years	0.1%	(1 in 820)	0.2%	(1 in 520)	0.1%	(1 in 1,300)	0.1%	(1 in 710)
Lifetime risk			0.8%	(1 in 120)			0.3%	(1 in 330)

Figure 3.16.3
Distribution of T-stages at first diagnosis (top: all cases; bottom: only valid reports)
ICD-10 C53, Germany 2011–2012

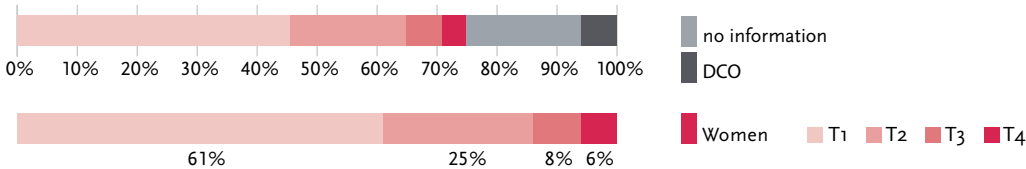


Figure 3.16.4a
Absolute survival rates up to 10 years after first diagnosis,
ICD-10 C53, Germany 2011–2012

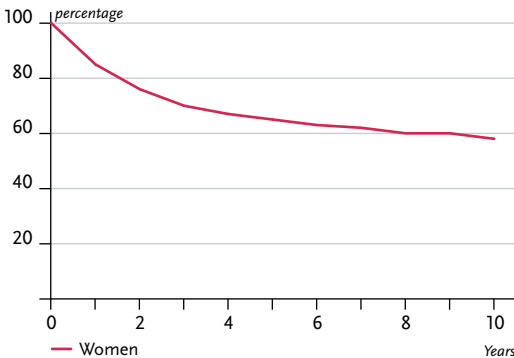


Figure 3.16.4b
Relative survival rates up to 10 years after first diagnosis,
ICD-10 C53, Germany 2011–2012

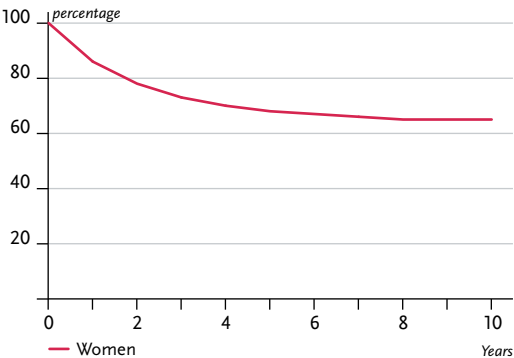


Figure 3.16.5
 Registered age-standardised incidence and mortality rates in German federal states,
 ICD-10 C53, 2011–2012
 per 100,000 (European standard)

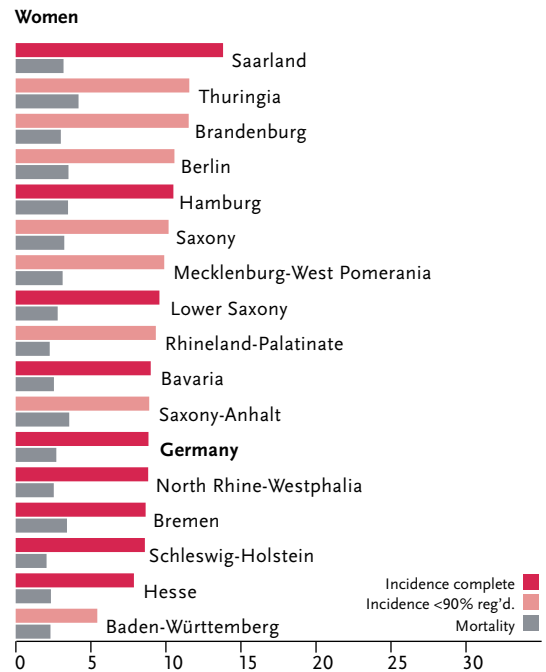


Figure 3.16.6
 International comparison of age-standardised incidence and mortality rates,
 ICD-10 C53, 2011–2012 or latest available year (details and sources, see appendix)
 per 100,000 (European standard)

