

3.15 Cervix

Table 3.15.1

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

	2009	2010	Prediction for 2014
	Women	Women	Women
Incident cases	4,780	4,660	4,600
Crude incidence rate ¹	11.5	11.2	11.2
Standardised incidence rate ^{1,2}	9.5	9.3	9.6
Median age at diagnosis	52	53	
Deaths	1,581	1,524	
Crude mortality rate ¹	3.8	3.7	
Standardised mortality rate ^{1,2}	2.6	2.5	
5-year prevalence	17,800	17,800	
Absolute 5-year survival rate (2009-2010) ³		66 (61-69)	
Relative 5-year survival rate (2009-2010) ³		69 (65-73)	

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 2010 about 4,700 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 age distribution is slightly distorted by cases registered by death certificate only (DCO) which are found in the eldest age groups in particular. 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 some two to three times more often than invasive carcinomas, a result of the cervical cancer early detection examinations, aimed at identifying and treating cancer precursors. International comparison shows there are significant differences between countries like Switzerland and Finland with low incidence rates on the one hand and Denmark, the Czech Republic and Poland on the other, with significantly higher incidence rates.

Currently, about 1,500 women in Germany die of cervical cancer every year. 30 years ago this figure was more than twice as high. The relative 5-year survival rate after diagnosis of an invasive cervical tumour is 69 %. Over half of invasive carcinomas are diagnosed at an early tumour stage (T1).

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 effects, 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 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 12 and 17 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 Papillomaviruses.

Figure 3.15.1a
Age-standardised incidence and mortality rates,
ICD-10 C53, Germany 1999 – 2010
per 100,000 (European standard)

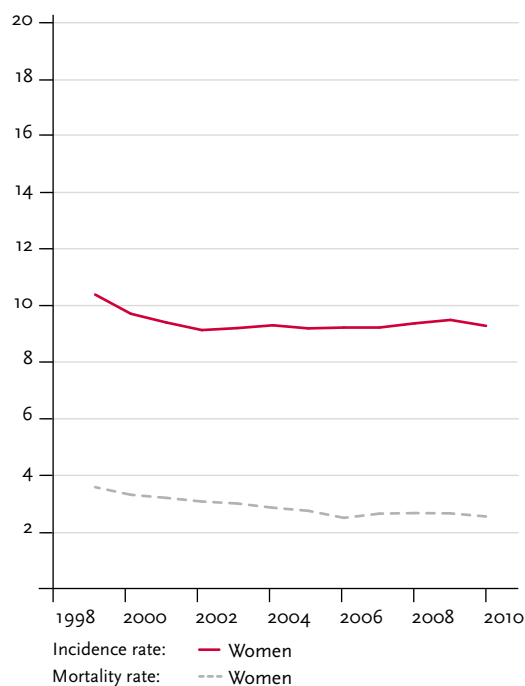


Figure 3.15.1b
Absolute numbers of incident cases and deaths,
ICD-10 C53, Germany 1999 – 2010

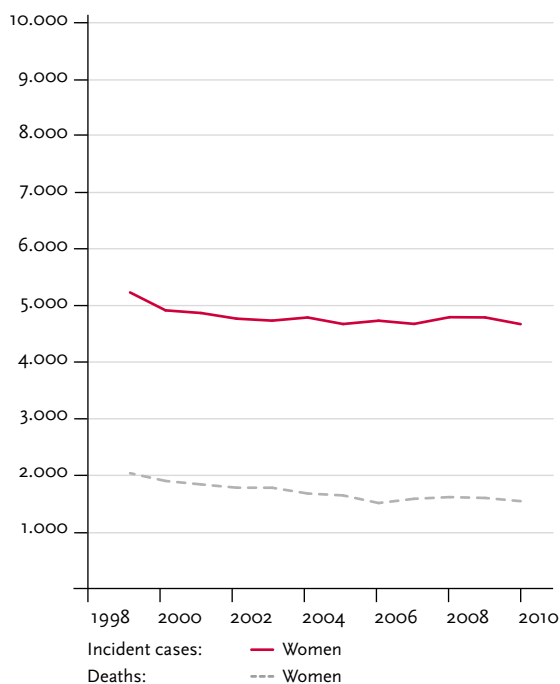


Figure 3.15.2
Age-specific incidence rates, ICD-10 C53, Germany 2009 – 2010
per 100,000



Table 3.15.2
Cancer incidence and mortality risks in Germany by age, ICD-10 C53, database 2010

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 16,000)	0.8%	(1 in 120)	<0.1%	(1 in 186,000)	0.3%	(1 in 350)
25 years	0.1%	(1 in 1,200)	0.8%	(1 in 120)	<0.1%	(1 in 16,000)	0.3%	(1 in 350)
35 years	0.2%	(1 in 580)	0.8%	(1 in 130)	<0.1%	(1 in 4,200)	0.3%	(1 in 360)
45 years	0.2%	(1 in 620)	0.6%	(1 in 170)	<0.1%	(1 in 2,100)	0.3%	(1 in 390)
55 years	0.2%	(1 in 620)	0.4%	(1 in 230)	0.1%	(1 in 1,800)	0.2%	(1 in 460)
65 years	0.1%	(1 in 790)	0.3%	(1 in 350)	0.1%	(1 in 1,700)	0.2%	(1 in 590)
75 years	0.1%	(1 in 850)	0.2%	(1 in 550)	0.1%	(1 in 1,400)	0.1%	(1 in 800)
Lifetime risk			0.8%	(1 in 120)			0.3%	(1 in 350)

Figure 3.15.3
Distribution of T-stages at first diagnosis (top: all cases; bottom: only valid reports)
ICD-10 C53, Germany 2009 – 2010

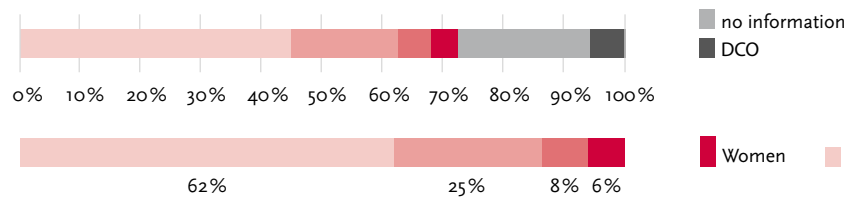


Figure 3.15.4a
Absolute survival rates up to 5 years after first diagnosis,
ICD-10 C53, Germany 2009 – 2010

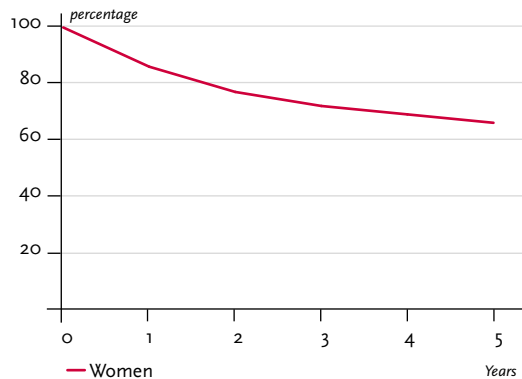


Figure 3.15.4b
Relative survival rates up to 5 years after first diagnosis,
ICD-10 C53, Germany 2009 – 2010

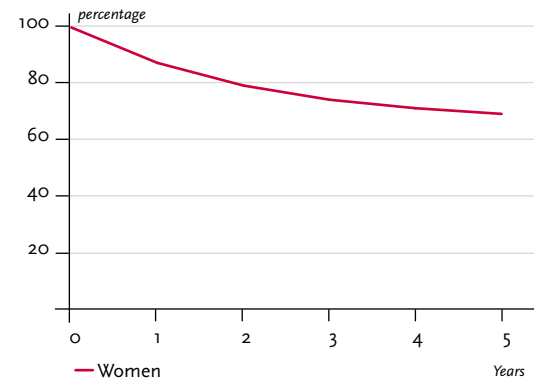


Figure 3.15.5
Registered age-standardised incidence and mortality rates in German federal states,
ICD-10 C53, 2009 – 2010
per 100,000 (European standard)

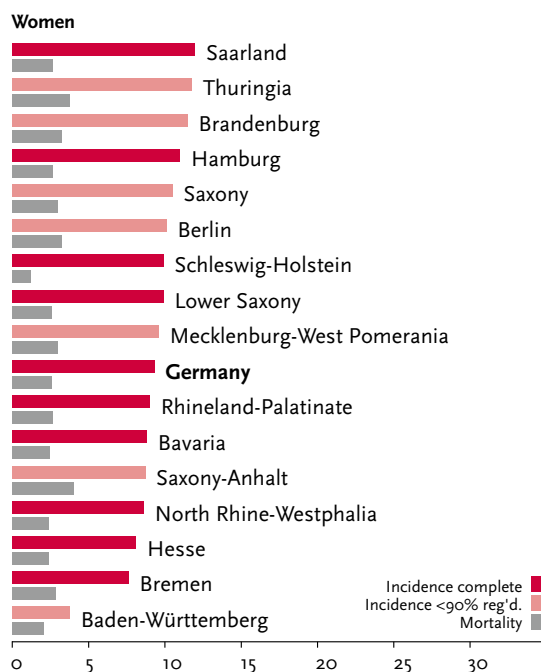


Figure 3.15.6
International comparison of age-standardised incidence and mortality rates,
ICD-10 C53, 2009 – 2010 or latest available year (details and sources, see appendix)
per 100,000 (European standard)

