

3.17 Breast

Table 3.17.1
Overview of key epidemiological parameters for Germany, ICD-10 C50

Incidence	2019		2020			
	Women	Men	Women	Men		
Incident cases	74,240	720	70,550	740		
Crude incidence rate ¹	176.4	1.7	167.5	1.8		
Age-standardised incidence rate ^{1,2}	118.7	1.1	112.7	1.1		
Median age at diagnosis	65	71	65	71		
Mortality	2019		2020		2021	
	Women	Men	Women	Men	Women	Men
Deaths	18,519	193	18,425	166	18,479	157
Crude mortality rate ¹	44.0	0.5	43.7	0.4	43.8	0.4
Age-standardised mortality rate ^{1,2}	22.3	0.3	21.8	0.2	21.5	0.2
Median age at death	76	75	77	75	78	76
Prevalence and survival rates	5 years		10 years		25 years	
	Women	Men	Women	Men	Women	Men
Prevalence	315,000	2,800	570,900	4,600	1,013,800	6,500
Absolute survival rate (2019–2020) ³	79 (77–81)	62	67 (63–70)	42		
Relative survival rate (2019–2020) ³	88 (86–90)	77	83 (79–88)	68		

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

With around 70,550 new cases every year, breast cancer is by far the most common cancer in women. In addition, around 6,000 women are diagnosed with an in situ tumour every year. Around 1% of all new cases affect men.

Based on current incidence rates, around one in eight women will develop breast cancer during their lifetime. One in six affected women develop the disease before the age of 50 and just under two in five after the age of 70.

Following the introduction of mammography screening between 2005 and 2009, the rates of new cases show a typical course with a significant increase at the beginning of the programme and a subsequent slow decline. It has been shown that fewer women in the screening age group now develop advanced tumours than before the introduction of screening.

Since the end of the 1990s, mortality rates from breast cancer have been falling continuously, in the last 10 years most strongly among women aged between 60 and 69.

Risk factors and early detection

Older age, a family history or hereditary changes in risk genes as well as radiotherapy of the breast in childhood or adolescence are important risk factors for breast

cancer. Dense mammary gland tissue and certain previous breast diseases are also considered risk factors.

Hormone replacement therapy with oestrogen and progestogen can increase the risk of breast cancer, especially if taken over a longer period of time. Hormone-containing ovulation inhibitors (“the pill”) increase the risk slightly. Women with an early first menstrual period and late onset of the menopause also have a statistically higher risk of developing (hormone-dependent) breast cancer. On the other hand, pregnancies carried to term reduce the risk of hormone-dependent breast cancer after the menopause: The younger a woman is when she gives birth to her first child, the greater the protective effect.

Exercise, a healthy diet, breastfeeding, a normal weight after the menopause and abstaining from alcohol and smoking reduce the risk of breast cancer.

The statutory cancer screening programme offers women over the age of 30 the opportunity to have a mammogram once a year. Currently, women between the ages of 50 and 69 are invited to have a mammogram every two years as part of the mammography screening programme; from mid-2024, the upper age limit will be raised to 75. There is an intensified early screening programme for women with a high risk of breast cancer, for example if they have a mutation of a risk gene.

Figure 3.17.1a
 Age-standardised incidence and mortality rates by sex, ICD-10 C50, Germany 1999 – 2020/2021
 per 100,000 (old European Standard)

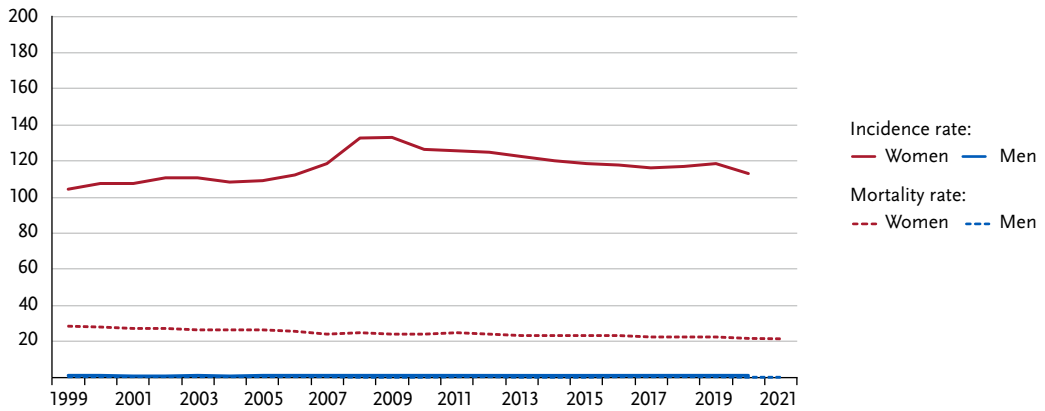


Figure 3.17.1b
 Absolute numbers of incident cases and deaths by sex, ICD-10 C50, Germany 1999 – 2020/2021

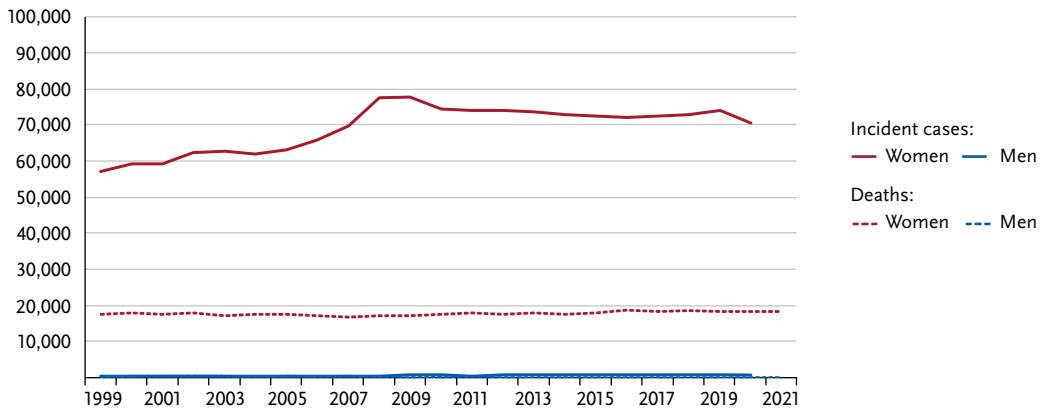


Figure 3.17.2
 Age-specific incidence rates by sex, ICD-10 C50, Germany 2019 – 2020
 per 100,000

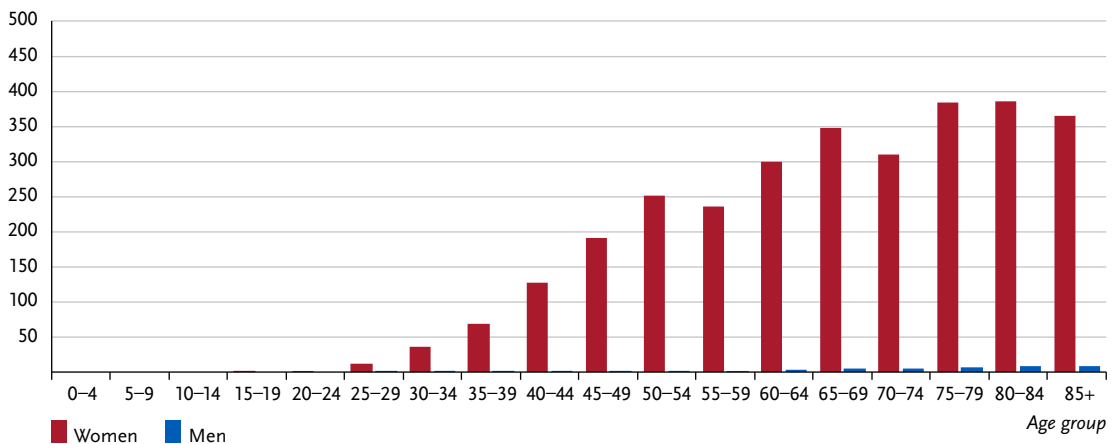


Table 3.17.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C50, database 2019

Women aged	Risk of developing cancer				Mortality risk			
	in the next 10 years		ever		in the next 10 years		ever	
35 years	1.0 %	(1 in 99)	13.1 %	(1 in 8)	0.1 %	(1 in 1,000)	3.5 %	(1 in 28)
45 years	2.2 %	(1 in 45)	12.3 %	(1 in 8)	0.2 %	(1 in 410)	3.5 %	(1 in 29)
55 years	2.8 %	(1 in 35)	10.4 %	(1 in 10)	0.4 %	(1 in 230)	3.3 %	(1 in 31)
65 years	3.4 %	(1 in 29)	8.2 %	(1 in 12)	0.8 %	(1 in 130)	3.0 %	(1 in 34)
75 years	3.6 %	(1 in 28)	5.6 %	(1 in 18)	1.3 %	(1 in 77)	2.5 %	(1 in 40)
Lifetime risk			13.2 %	(1 in 8)			3.5 %	(1 in 28)
Men aged	in the next 10 years		ever		in the next 10 years		ever	
35 years	< 0.1 %	(1 in 29,250)	0.1 %	(1 in 750)	< 0.1 %	(1 in 319,800)	< 0.1 %	(1 in 2,500)
45 years	< 0.1 %	(1 in 11,400)	0.1 %	(1 in 760)	< 0.1 %	(1 in 44,700)	< 0.1 %	(1 in 2,500)
55 years	< 0.1 %	(1 in 4,000)	0.1 %	(1 in 790)	< 0.1 %	(1 in 24,400)	< 0.1 %	(1 in 2,600)
65 years	< 0.1 %	(1 in 2,300)	0.1 %	(1 in 890)	< 0.1 %	(1 in 8,400)	< 0.1 %	(1 in 2,600)
75 years	0.1 %	(1 in 1,700)	0.1 %	(1 in 1,100)	< 0.1 %	(1 in 5,650)	< 0.1 %	(1 in 3,000)
Lifetime risk			0.1 %	(1 in 750)			< 0.1 %	(1 in 2,500)

Figure 3.17.3
Distribution of UICC stages at diagnosis for all women and women between 50 and 69 years of age, ICD-10 C50, Germany 2019 – 2020 (top: incl. missing data and DCO cases; bottom: valid values only)

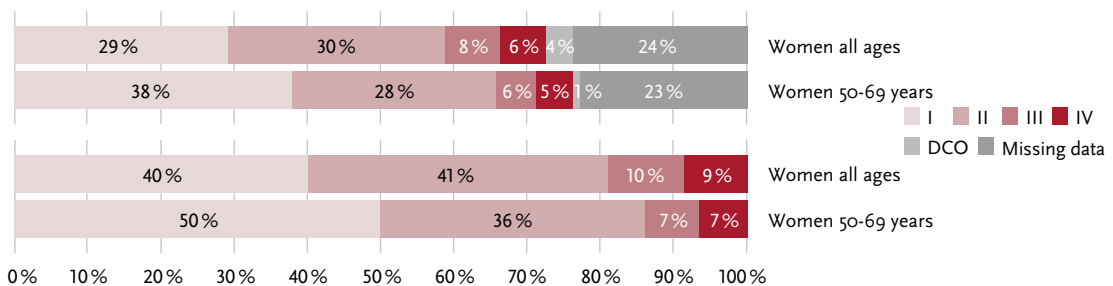


Figure 3.17.4
Absolute and relative survival rates up to 10 years after diagnosis, by sex, ICD-10 C50, Germany 2019 – 2020

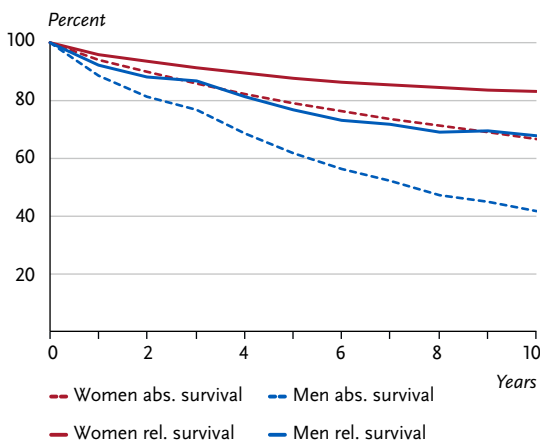


Figure 3.17.5
Relative 5-year survival by UICC stage (7th and 8th edition TNM), women, ICD-10 C50, Germany 2019 – 2020

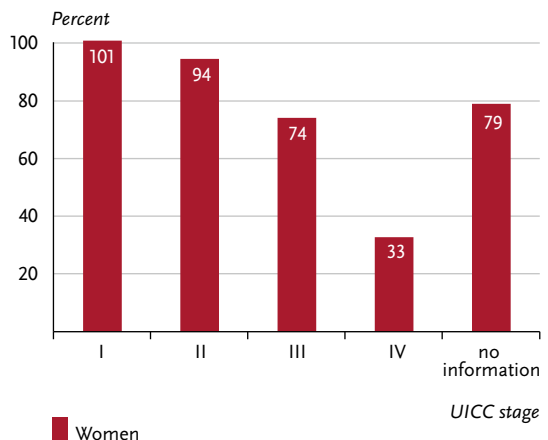


Figure 3.17.6
 Age-standardised incidence and mortality rates in German federal states, women, ICD-10 C50, 2019 – 2020
 per 100,000 (old European Standard)

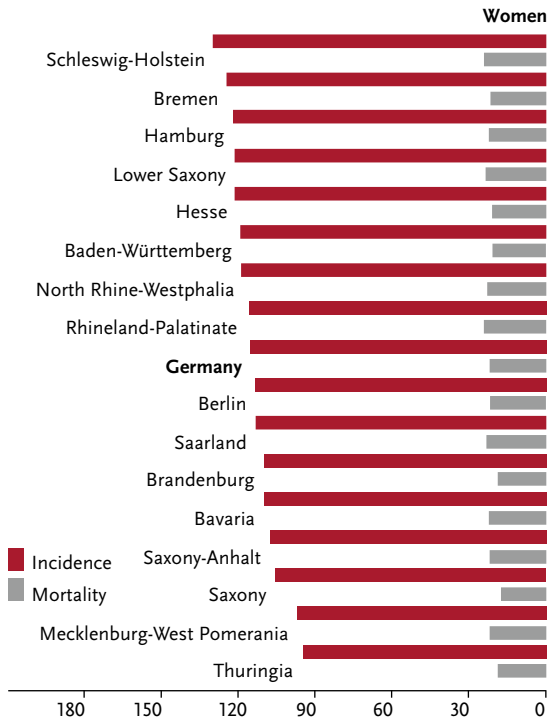
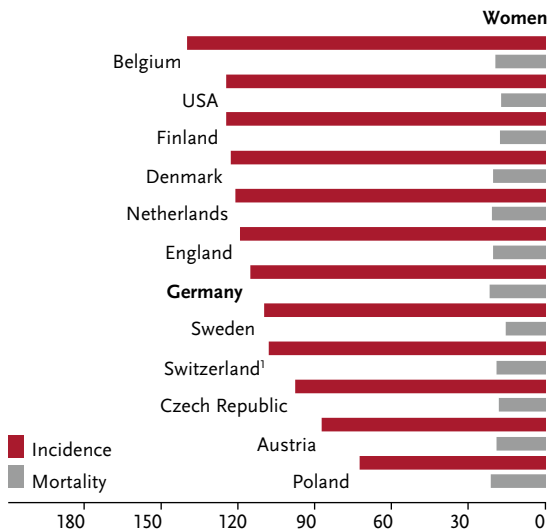


Figure 3.17.7
 International comparison of age-standardised incidence and mortality rates, women, ICD-10 C50, 2019 – 2020 or latest available year (details and sources, see appendix)
 per 100,000 (old European Standard)



¹ Switzerland: incidence data for 2015 – 2019