

3.14 Breast

Table 3.14.1
Overview of key epidemiological parameters for Germany, ICD-10 C50

	2011		2012		Prediction for 2016	
	Men	Women	Men	Women	Men	Women
Incident cases	600	70,190	620	69,550	700	65,500
Crude incidence rate ¹	1.5	170.8	1.6	169.1	1.7	158.1
Standardised incidence rate ^{1,2}	1.0	119.0	1.1	117.4	1.1	106.6
Median age at diagnosis	71	64	71	64		
Deaths	159	17,815	150	17,748		
Crude mortality rate ¹	0.4	43.4	0.4	43.2		
Standardised mortality rate ^{1,2}	0.3	24.6	0.3	23.9		
5-year prevalence	2,200	316,800	2,300	317,200		
	<i>after 5 years</i>		<i>after 10 years</i>			
Absolute survival rate (2011–2012) ³	64	80 (76–81)	43	66 (62–68)		
Relative survival rate (2011–2012) ³	78	88 (83–89)	65	82 (79–83)		

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

Epidemiology

With some 70,000 new cases currently being diagnosed annually, breast cancer is by far the most common form of cancer among women. There are also an additional 5,500 in situ tumours annually. According to current incidence figures, about one woman in eight will develop breast cancer in the course of her life. Almost three in every ten women are younger than 55 years at diagnosis.

The incidence and mortality rates in eastern Germany are still significantly lower than in the western part. Only the rates for women under 55 years have become more or less similar. Following the introduction of mammography screening in 2005, the incidence rates in Germany initially spiked, although since 2009 they have started to fall again slightly. It is very likely that through the screening some tumours that have been diagnosed would otherwise have gone unrecognised for the entire life of the patient (overdiagnosis). Despite the increased incidence, fewer women die of breast cancer now than ten years ago. The prospects of survival have improved considerably due to advances in therapy. It will be some years until it is possible to tell if screening leads to a further reduction in breast cancer mortality. So far, it seems that incidence rates of advanced tumours have declined slightly in the screening age groups, indicating that a reduction in mortality might follow.

Risk factors and early detection

Early first menses and late last menses, childless-ness, and having a first child late are all associated with an increased risk of breast cancer. Conversely, numerous or early births and longer periods of breast-feeding reduce the risk of breast cancer. Hormone replacement therapy during and after menopause increases the risk of breast cancer, especially if it involves a combination of oestrogen and progestogen. Ovulation inhibitors containing hormones (»the pill«), on the other hand, have only a minor influence on the incidence rate. Studies have shown an increased risk associated with being overweight and with lack of exercise after menopause, and alcohol is also a proven risk factor. There are indications that active and passive smoking increase the risk slightly before menopause.

In addition, women with very dense breast tissue or with certain benign breast neoplasms (lobular neoplasias and atypical ductal hyperplasias) have an increased risk. Having family clusters of breast or ovarian cancer is also a risk factor. In approximately half of these cases (5–10 % of all cases of breast cancer) the high family incidence results from a mutation in the »classic« breast cancer genes BRCA1 and BRCA2.

The statutory early detection programme offers women above 30 years of age an annual palpation examination by a physician. Between 2005 and 2009 the quality assured Mammography Screening Programme was introduced in Germany, and women between 50 and 69 years of age are invited to an X-ray examination of the breasts every two years.

Figure 3.14.1a
Age-standardised incidence and mortality rates,
by sex, ICD-10 C50, Germany 1999–2012
per 100,000 (European standard)

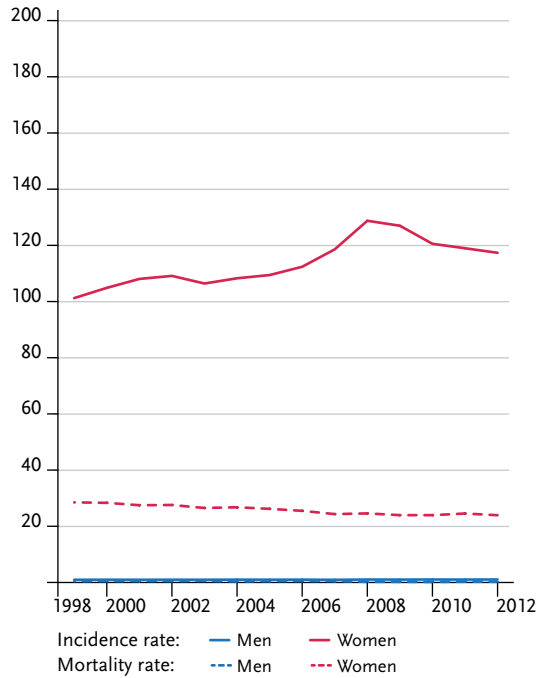


Figure 3.14.1b
Absolute numbers of incident cases and deaths,
by sex, ICD-10 C50, Germany 1999–2012

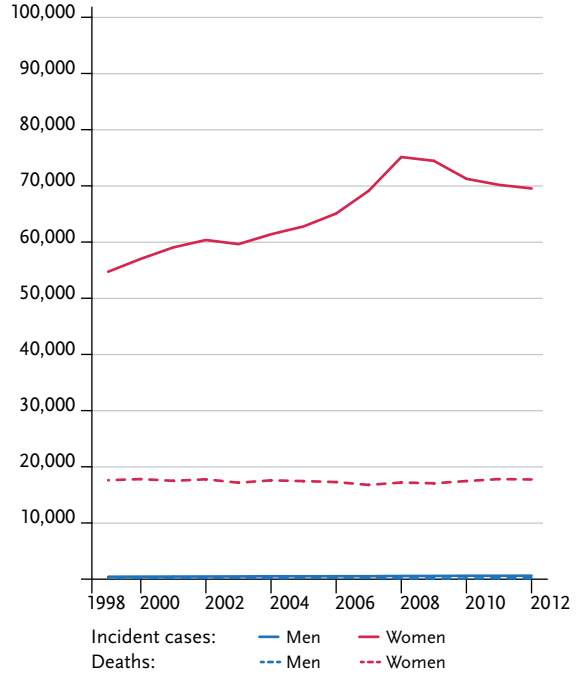


Figure 3.14.2
Age-specific incidence rates by sex, ICD-10 C50, Germany 2011–2012
per 100,000

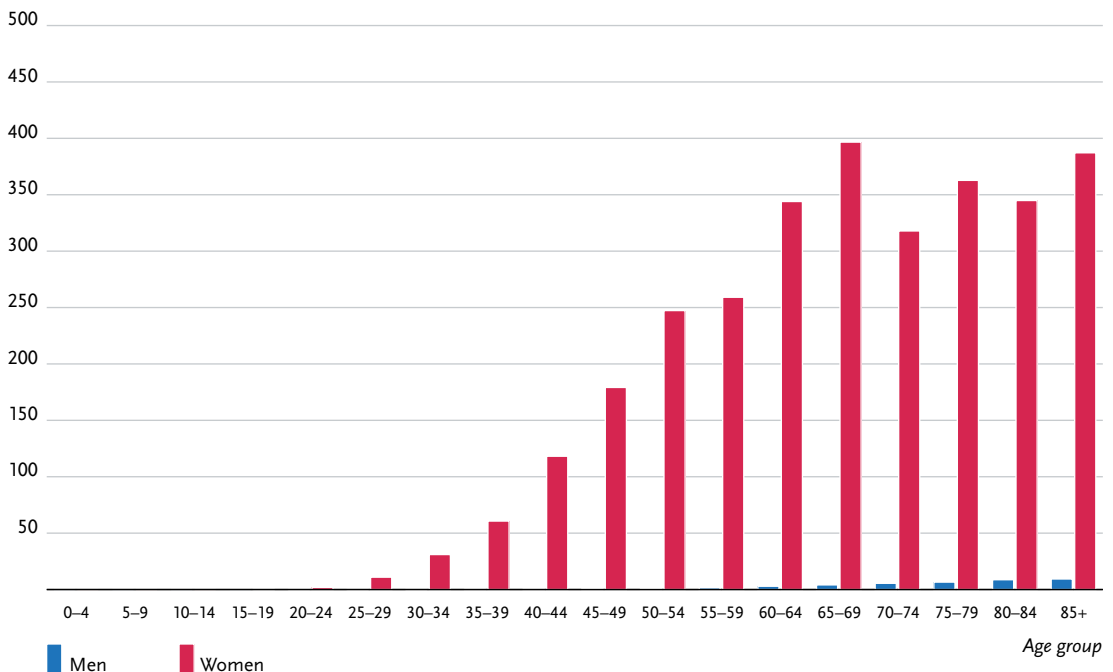


Table 3.14.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C50, database 2012

	Risk of developing cancer				Mortality risk			
	in the next ten years		ever		in the next ten years		ever	
Men aged								
35 years	<0.1%	(1 in 28,800)	0.1%	(1 in 790)	<0.1%	(1 in 92,800)	<0.1%	(1 in 3,100)
45 years	<0.1%	(1 in 11,600)	0.1%	(1 in 800)	<0.1%	(1 in 68,100)	<0.1%	(1 in 3,200)
55 years	<0.1%	(1 in 4,400)	0.1%	(1 in 820)	<0.1%	(1 in 21,700)	<0.1%	(1 in 3,200)
65 years	<0.1%	(1 in 2,400)	0.1%	(1 in 920)	<0.1%	(1 in 10,500)	<0.1%	(1 in 3,400)
75 years	0.1%	(1 in 1,900)	0.1%	(1 in 1,200)	<0.1%	(1 in 5,900)	<0.1%	(1 in 3,900)
Lifetime risk			0.1%	(1 in 790)			<0.1%	(1 in 3,100)
Women aged								
35 years	0.9%	(1 in 110)	12.7%	(1 in 8)	0.1%	(1 in 990)	3.5%	(1 in 28)
45 years	2.1%	(1 in 48)	12.0%	(1 in 8)	0.3%	(1 in 380)	3.4%	(1 in 29)
55 years	3.0%	(1 in 33)	10.3%	(1 in 10)	0.5%	(1 in 190)	3.2%	(1 in 31)
65 years	3.5%	(1 in 28)	7.9%	(1 in 13)	0.9%	(1 in 120)	2.9%	(1 in 35)
75 years	3.3%	(1 in 31)	5.1%	(1 in 20)	1.2%	(1 in 81)	2.3%	(1 in 44)
Lifetime risk			12.8%	(1 in 8)			3.5%	(1 in 29)

Figure 3.14.3
Distribution of T-stages at first diagnosis for all women and women between 50 and 69 years
(top: all cases; bottom: only valid reports) ICD-10 C50, Germany 2011–2012

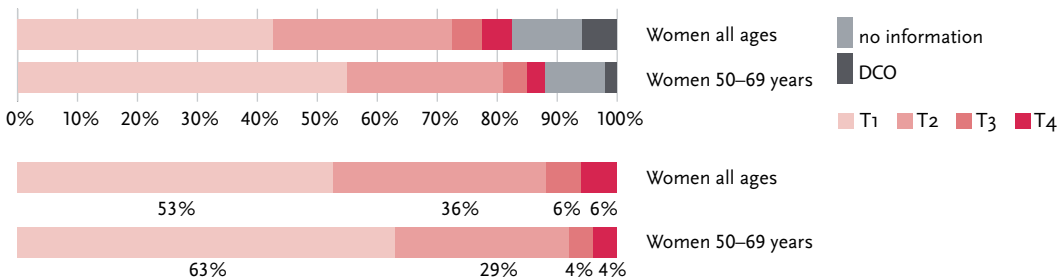


Figure 3.14.4a
Absolute survival rates up to 10 years after first diagnosis, women, ICD-10 C50, Germany 2011–2012

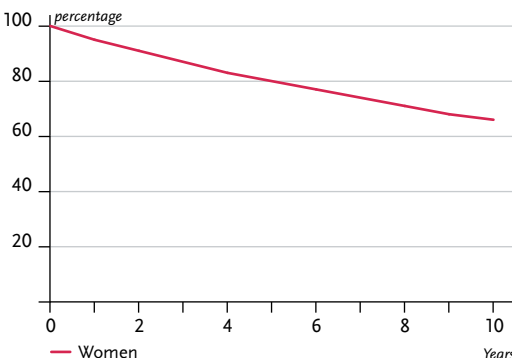


Figure 3.14.4b
Relative survival rates up to 10 years after first diagnosis, women, ICD-10 C50, Germany 2011–2012

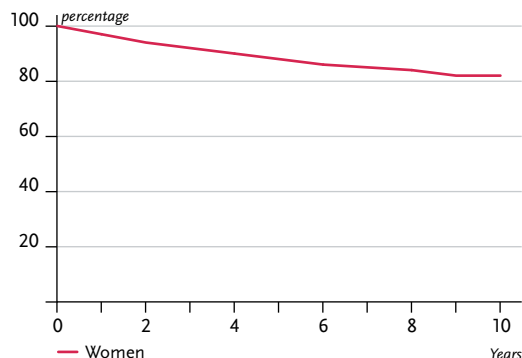


Figure 3.14.5
Registered age-standardised incidence and mortality rates in German federal states, women,
ICD-10 C50, 2011–2012
per 100,000 (European standard)

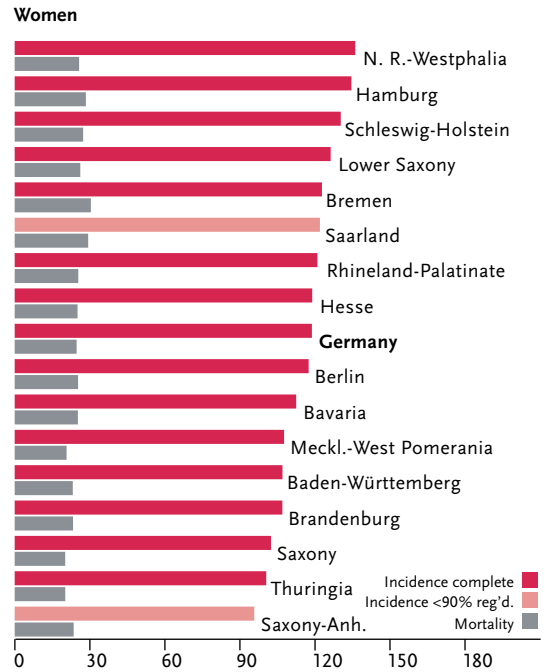


Figure 3.14.6
International comparison of age-standardised incidence and mortality rates, women,
ICD-10 C50, 2011–2012 or latest available year (details and sources, see appendix)
per 100,000 (European standard)

