

3.25 Bladder

Table 3.25.1
Overview of key epidemiological parameters for Germany, ICD-10 C67

Incidence	2015		2016		Prediction for 2020	
	Women	Men	Women	Men	Women	Men
Incident cases ⁴	4,560 (7,560)	12,670 (23,370)	4,250 (7,220)	12,220 (22,760)	4,500 (7,600)	12,800 (23,800)
Crude incidence rate ^{1,4}	11.0 (18.2)	31.5 (58.2)	10.2 (17.3)	30.1 (56.0)	10.7 (18.3)	31.7 (58.8)
Age-standardised incidence rate ^{1,2,4}	5.3 (9.4)	19.4 (36.3)	5.0 (9.0)	18.4 (34.7)	4.9 (9.0)	17.7 (34.1)
Median age at diagnosis ⁴	77 (75)	74 (73)	77 (75)	74 (74)		
Mortality	2015		2016		2017	
	Women	Men	Women	Men	Women	Men
Deaths	1,872	3,963	1,897	4,049	1,858	3,848
Crude mortality rate ¹	4.5	9.9	4.5	10.0	4.4	9.4
Age-standardised mortality rate ^{1,2}	1.8	5.7	1.8	5.7	1.8	5.2
Median age at death	82	79	82	80	82	80
Prevalence and survival rates	5 years		10 years			
	Women	Men	Women	Men		
Prevalence ⁴	12,000 (25,900)	39,700 (88,400)	19,300 (44,200)	63,300 (147,000)		
Absolute survival rate (2015–2016) ³	37 (29–45)	44 (38–51)	26 (20–31)	29 (23–35)		
Relative survival rate (2015–2016) ³	45 (36–53)	55 (48–63)	41 (29–49)	49 (38–56)		

¹ per 100,000 persons ² age-standardised (old European Standard) ³ in percentages (lowest and highest value of the included German federal states)
⁴ in parentheses: including in situ tumours and neoplasms of uncertain or unknown behavior (D09.0, D41.4)

► Additional information under www.krebsdaten.de/cancer-sites

Epidemiology

Approximately 16,470 people were diagnosed with invasive bladder cancer in Germany in 2016; a quarter of whom were women. In addition, 13,500 people were diagnosed with non-invasive papillary carcinomas and in situ carcinomas of the bladder. These are associated with an increased risk of tumour progression and recurrence; this particularly applies to in situ bladder carcinomas. As such, both are of particular clinical relevance, although the ICD-10 system does not currently classify them as malignant neoplasms. Most cancers of the bladder are urothelial carcinomas, and they often occur together with carcinomas of the urinary tract.

Since the late 1990s, age-standardised incidence and mortality rates have declined significantly among men. This is probably due to a reduction in tobacco use, and possibly because of a decrease in occupational exposure to carcinogens. Rates among women have remained largely constant over time, although bladder cancer has always occurred in substantially lower levels among women than men.

The higher relative 5-year survival rates for men compared to women, however, are due to the fact that these tumours tend to be identified at earlier stages among men (36% identified at UICC I) than among women (24%).

Risk factors

Active and passive smoking are the main risk factors for bladder cancer. In addition, some chemicals, such as aromatic amines, increase risk. Although such substances have largely disappeared from European workplaces, the long latency period between exposure and the development of bladder cancer means that occupationally-related bladder carcinomas continue to occur. Cytostatics used in cancer therapy, and radiation therapy to the pelvic area can also increase risk. Some medicines, such as the diabetes drug pioglitazone, also appear to increase bladder cancer risk.

Air pollution, chlorine in drinking water, and arsenic are additional bladder cancer risk factors, as is chronic inflammatory damage to the bladder mucosa. Family clusters have been observed, and there are indications that genetic factors influence sensitivity to carcinogens and thus increase the risk of contracting cancer of the bladder.

Figure 3.25.1a
Age-standardised incidence and mortality rates by sex, ICD-10 C67, Germany 1999–2016/2017, projection (incidence) through 2020 per 100,000 (old European Standard)

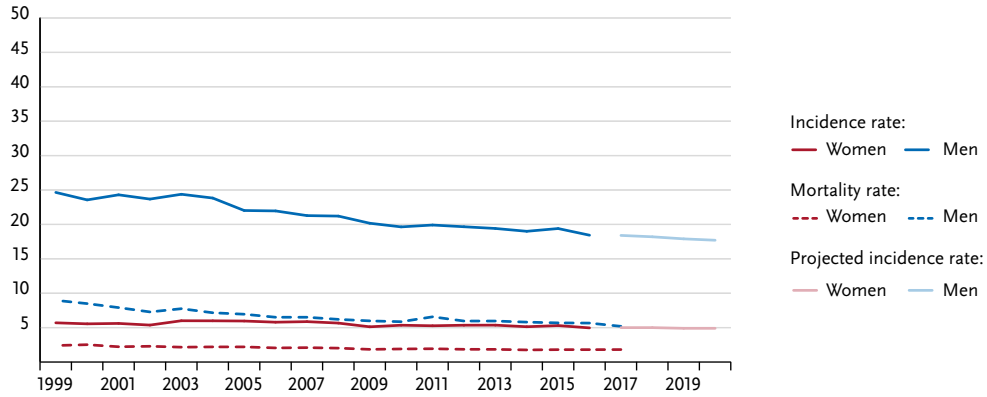


Figure 3.25.1b
Absolute numbers of incident cases and deaths by sex, ICD-10 C67, Germany 1999–2016/2017, projection (incidence) through 2020

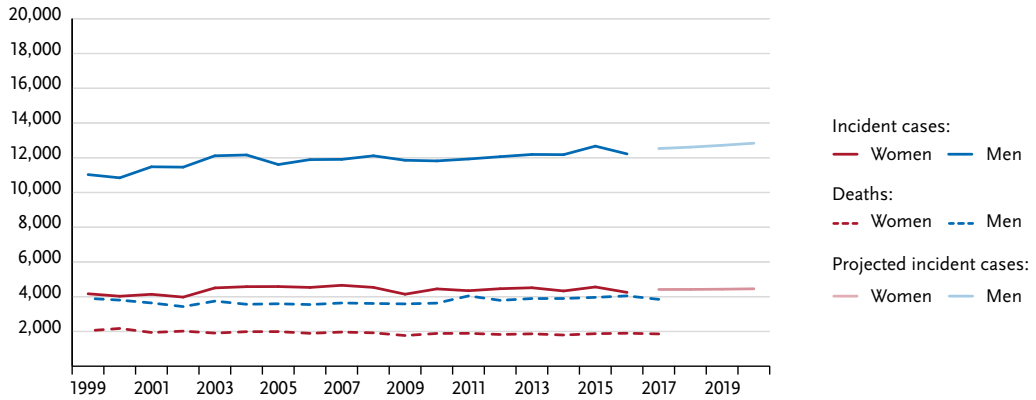


Figure 3.25.2
Age-specific incidence rates by sex, ICD-10 C67, Germany 2015–2016 per 100,000

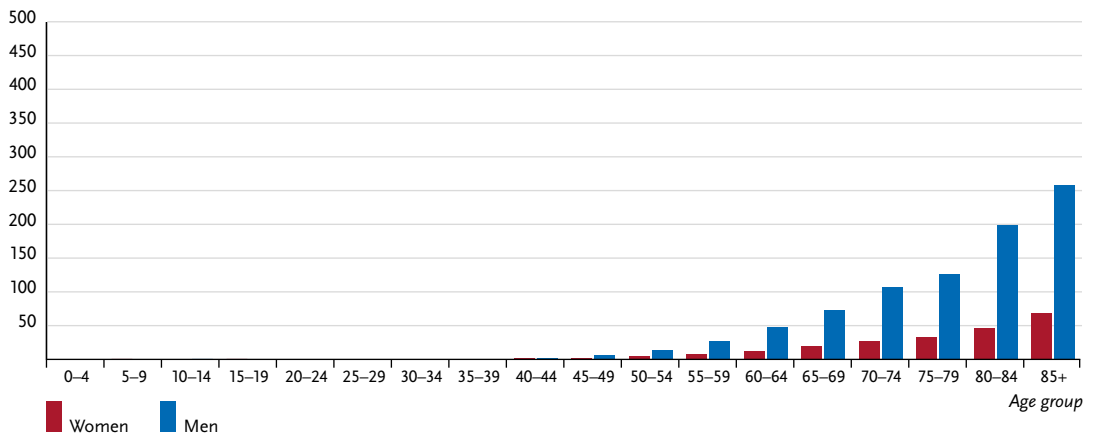


Table 3.25.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C67, database 2016

Women aged	Risk of developing cancer				Mortality risk			
	in the next ten years		ever		in the next ten years		ever	
35 years	< 0.1%	(1 in 10,100)	0.8%	(1 in 120)	< 0.1%	(1 in 30,300)	0.4%	(1 in 250)
45 years	< 0.1%	(1 in 2,800)	0.8%	(1 in 120)	< 0.1%	(1 in 10,800)	0.4%	(1 in 250)
55 years	0.1%	(1 in 1,000)	0.8%	(1 in 120)	< 0.1%	(1 in 4,200)	0.4%	(1 in 250)
65 years	0.2%	(1 in 480)	0.7%	(1 in 130)	0.1%	(1 in 1,900)	0.4%	(1 in 250)
75 years	0.3%	(1 in 320)	0.6%	(1 in 160)	0.2%	(1 in 580)	0.4%	(1 in 260)
Lifetime risk			0.8%	(1 in 120)			0.4%	(1 in 250)
Men aged	in the next ten years		ever		in the next ten years		ever	
35 years	< 0.1%	(1 in 5,300)	2.4%	(1 in 41)	< 0.1%	(1 in 41,400)	1.0%	(1 in 100)
45 years	0.1%	(1 in 1,000)	2.4%	(1 in 41)	< 0.1%	(1 in 6,700)	1.0%	(1 in 100)
55 years	0.4%	(1 in 280)	2.4%	(1 in 41)	0.1%	(1 in 1,400)	1.0%	(1 in 100)
65 years	0.8%	(1 in 130)	2.3%	(1 in 43)	0.2%	(1 in 580)	1.0%	(1 in 98)
75 years	1.2%	(1 in 83)	1.9%	(1 in 52)	0.5%	(1 in 200)	1.1%	(1 in 94)
Lifetime risk			2.4%	(1 in 42)			0.9%	(1 in 110)

Figure 3.25.3
Distribution of UICC-stages at first diagnosis by sex, ICD-10 C67, Germany 2015–2016
(top: all cases; bottom: only valid reports)

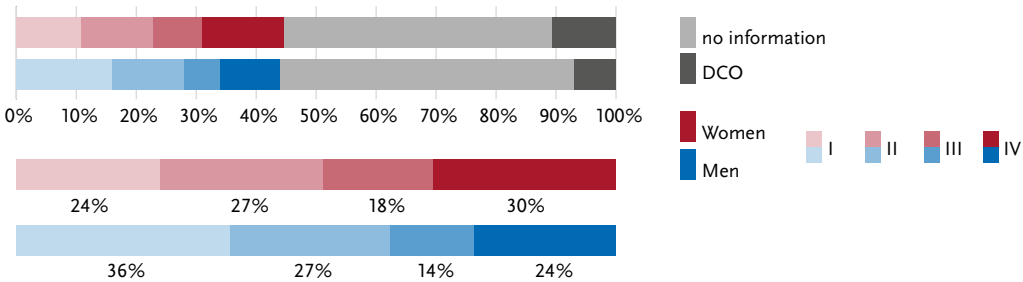


Figure 3.25.4
Absolute and relative survival rates up to 10 years after first diagnosis, by sex, ICD-10 C67, Germany 2015–2016

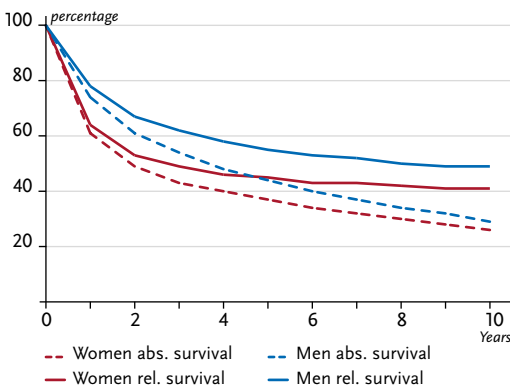


Figure 3.25.5
Relative 5-year survival by UICC-stage and sex, ICD-10 C67, Germany 2015–2016

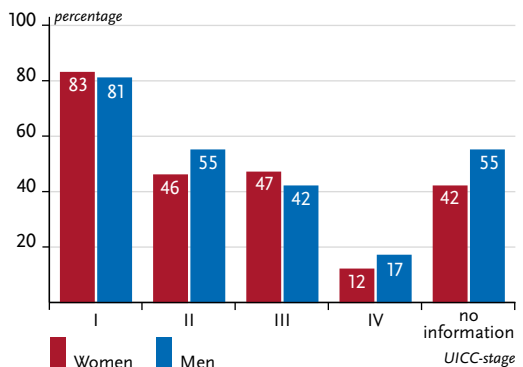


Figure 3.25.6
Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C67, 2015–2016
 (Incidence in Bremen for 2014 and 2016, incidence in eastern Germany for 2014 to 2015)
 per 100,000 (old European Standard)

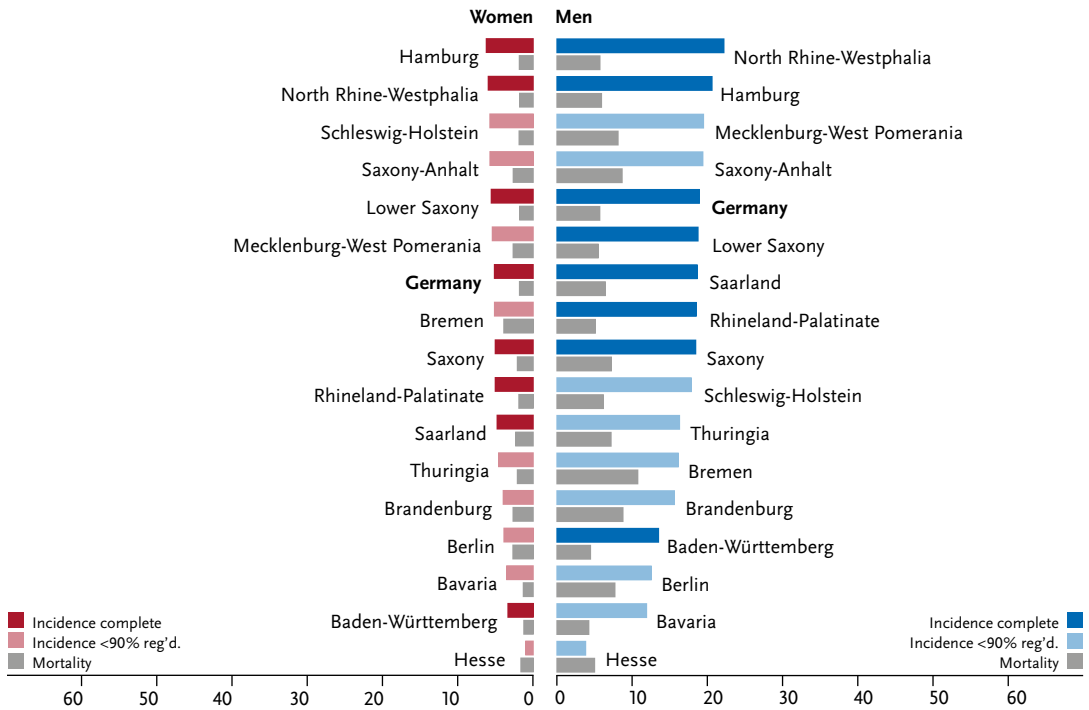
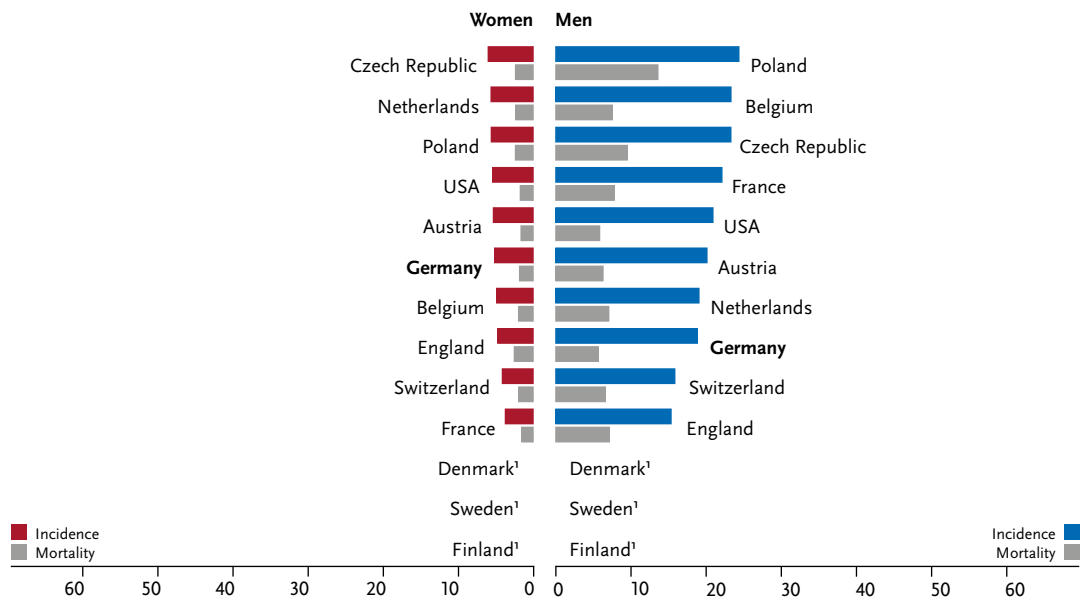


Figure 3.25.7
International comparison of age-standardised incidence and mortality rates by sex, ICD-10 C67, 2015–2016 or latest available year (details and sources, see appendix)
 per 100,000 (old European Standard)



¹ No comparable data available