

3.22 Prostate

Table 3.22.1
Overview of key epidemiological parameters for Germany, ICD-10 C61

Incidence	2015	2016	Prediction for 2020
	Men	Men	Men
Incident cases	58,000	58,780	61,200
Crude incidence rate ¹	144.4	144.7	151.3
Age-standardised incidence rate ^{1,2}	91.7	91.6	90.1
Median age at diagnosis	72	72	
Mortality	2015	2016	2017
	Men	Men	Men
Deaths	13,900	14,417	14,318
Crude mortality rate ¹	34.6	35.5	35.1
Age-standardised mortality rate ^{1,2}	19.4	19.5	18.8
Median age at death	79	80	80
Prevalence and survival rates	5 years	10 years	
	Men	Men	
Prevalence	258,000	496,200	
Absolute survival rate (2015–2016) ³	75 (71–78)	58 (56–61)	
Relative survival rate (2015–2016) ³	89 (86–91)	88 (85–90)	

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

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

Epidemiology

Around 58,500 new cases of prostate cancer were diagnosed in 2016. After having increased over nearly two decades, the age-standardised incidence rate for prostate cancer remained largely constant since 2003 and has decreased substantially between 2011 and 2016. A similar development can be observed in many other countries and is likely to be attributable to a long-term increase in use of the prostate-specific antigen (PSA) test, although use in Germany has declined recently. In contrast to incidence, age-standardised mortality decreased continuously until 2007 and has since remained largely stable. Incidence in Germany is currently similar to other countries in Central Europe.

Prostate cancer rarely occurs before the age of 50 years: the risk of developing prostate cancer over the next 10 years is less than 0.1% for a 35-year-old, whereas it is about 5% for a 75-year-old.

Men with prostate cancer have a relative 5-year survival rate of 89%, with about two thirds of tumours diagnosed at an early stage (UICC I/II).

Risk factors and early detection

The causes of prostate cancer and most of the risk factors associated with it have yet to be determined. Age is an important risk factor. Men of sub-Saharan African origin or ancestry are more likely to develop prostate cancer than Europeans and those of European descent; Asians are rarely affected. Genetics is a proven risk factor, as clustering has been observed among close relatives. In addition, chronic inflammation of the prostate and sexually transmitted diseases also seem to increase the risk of prostate cancer.

There is little certainty about whether lifestyle or environmental risk factors play a role. However, normal weight and sufficient exercise may reduce the risk of prostate cancer.

The statutory screening programme in Germany offers a health check-up for men 45 years and older, an annual examination of the genitals and a digital rectal examination of the prostate and lymph nodes. The programme does not include a PSA blood test because its benefits at the population level have yet to be proven unequivocally.

Figure 3.22.1a
Age-standardised incidence and mortality rates, ICD-10 C61, Germany 1999–2016/2017, projection (incidence) through 2020 per 100,000 (old European Standard)

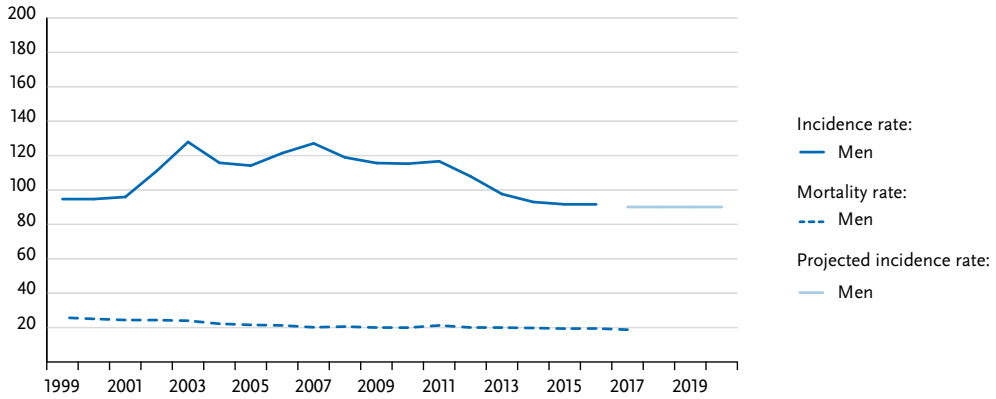


Figure 3.22.1b
Absolute numbers of incident cases and deaths, ICD-10 C61, Germany 1999–2016/2017, projection (incidence) through 2020

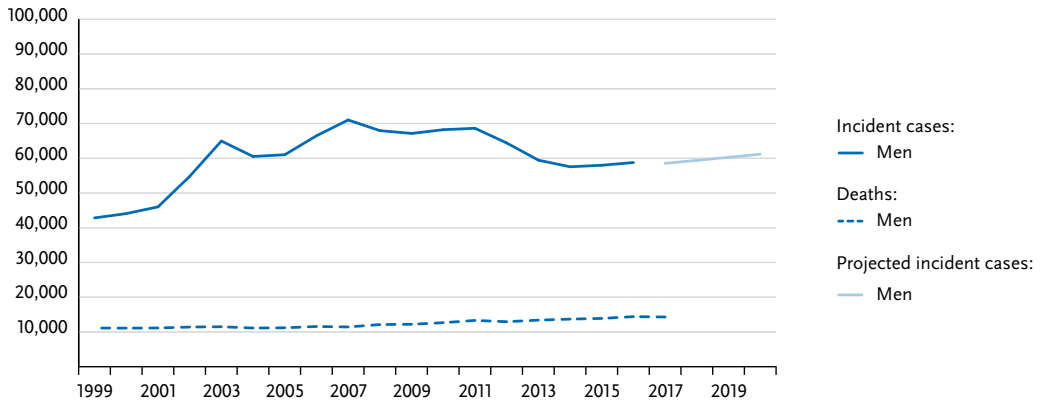


Figure 3.22.2
Age-specific incidence rates, ICD-10 C61, Germany 2015–2016 per 100,000

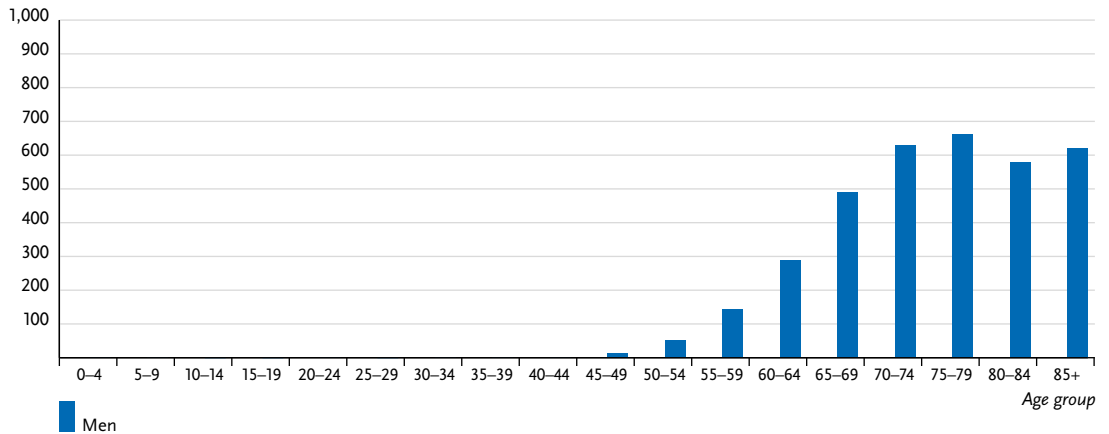


Table 3.22.2
Cancer incidence and mortality risks in Germany by age, ICD-10 C61, database 2016

Men 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 5,100)	11.1%	(1 in 9)	< 0.1%	(1 in 89,200)	3.4%	(1 in 29)
45 years	0.4%	(1 in 270)	11.3%	(1 in 9)	< 0.1%	(1 in 4,900)	3.4%	(1 in 29)
55 years	2.1%	(1 in 47)	11.3%	(1 in 9)	0.2%	(1 in 590)	3.6%	(1 in 28)
65 years	5.1%	(1 in 20)	10.4%	(1 in 10)	0.7%	(1 in 150)	3.8%	(1 in 27)
75 years	5.2%	(1 in 19)	7.1%	(1 in 14)	2.0%	(1 in 50)	3.9%	(1 in 26)
Lifetime risk			10.9%	(1 in 9)			3.3%	(1 in 30)

Figure 3.22.3
Distribution of UICC-stages at first diagnosis, ICD-10 C61, Germany 2015–2016
(top: all cases; bottom: only valid reports)

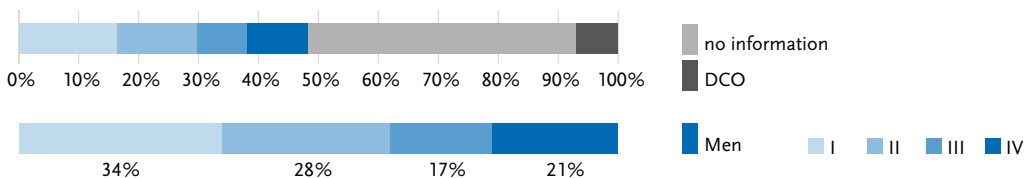


Figure 3.22.4
Absolute and relative survival rates up to 10 years after first diagnosis, ICD-10 C61, Germany 2015–2016

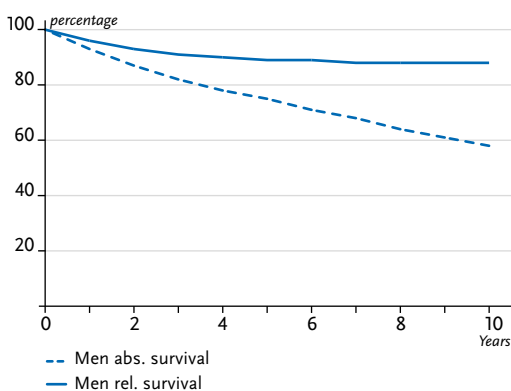


Figure 3.22.5
Relative 5-year survival by UICC-stage, ICD-10 C61, Germany 2015–2016

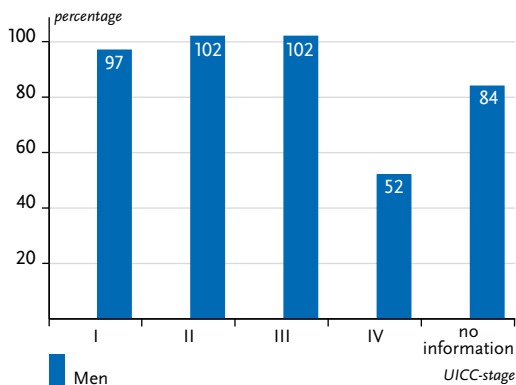


Figure 3.22.6

Age-standardised incidence and mortality rates in German federal states, ICD-10 C61, 2015–2016
(Incidence in Bremen for 2014 and 2016, incidence in eastern Germany for 2014 to 2015)
per 100,000 (old European Standard)

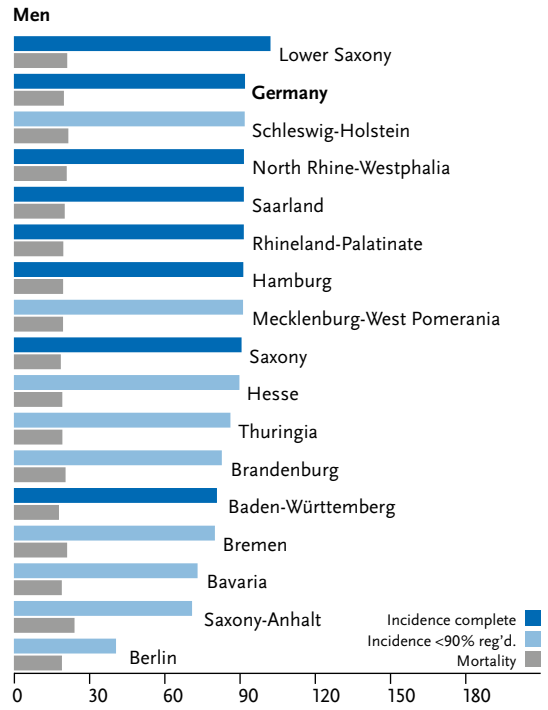
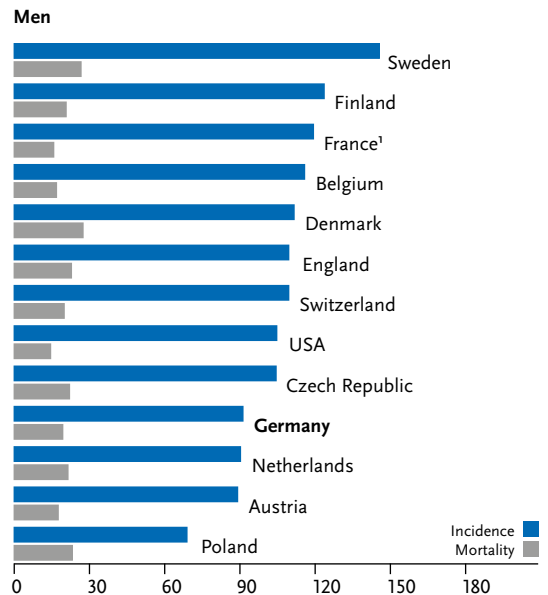


Figure 3.22.7

International comparison of age-standardised incidence and mortality rates, ICD-10 C61,
2015–2016 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)



¹ Incidence and mortality for 2015, no projection