3.23 Testis

Table 3.23.1
Overview of key epidemiological parameters for Germany, ICD-10 C62

Incidence	2015	2016	Prediction for 2020
	Men	Men	Men
Incident cases	4,280	4,120	4,200
Crude incidence rate[1]	10.7	10.1	10.5
Age-standardised incidence rate[1,2]	10.7	10.2	10.6
Median age at diagnosis	37	37	

Mortality	2015	2016	2017
	Men	Men	Men
Deaths	145	140	157
Crude mortality rate[1]	0.4	0.3	0.4
Age-standardised mortality rate[1,2]	0.3	0.3	0.3
Median age at death	48	56	53

Prevalence and survival rates	5 years	10 years
	Men	Men
Prevalence	20,600	40,200
Absolute survival rate (2015–2016)[3]	95 (87–98)	93 (87–96)
Relative survival rate (2015–2016)[3]	97 (89–100)	97 (90–100)

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

In 2016, around 4,120 men in Germany developed testicular cancer. As such, testicular cancer is rare, accounting for just 1.6 % of all cancers in men. In contrast to most other cancers, testicular cancer occurs comparatively early, between the ages of 25 and 45 years. Testicular cancer is the most common malignant tumour in men of this age group. The median age of onset is 37 years. After a steady increase lasting multiple decades, age-standardised incidence has remained fairly constant in recent years; the same has been reported by other countries in Europe. About 90 % of testicular tumours are diagnosed at stage I/II. Testicular cancers are predominantly germ cell tumours, of which around two thirds are seminomas. About one in every sixth case is a malignant teratoma or a mixture of these two types.

Since the introduction of the chemotherapy drug cisplatin more than 30 years ago, testicular cancer has had one of the most favourable prognoses and a correspondingly high relative 5-year survival rate (most recently 97 %) and low mortality (157 deaths in 2017).

Risk factors and early detection

Undescended testicles (cryptorchidism) have been confirmed as a risk factor for testicular cancer. Men who have a history of testicular cancer or a precancerous condition in one testicle also have an increased risk of developing a tumour in the healthy testicle. Rare, genetic disorders of sexual development such as Klinefelter syndrome also increase the risk of developing the disease.

Sons and brothers of individuals who have developed testicular cancer are at substantially higher risk of developing this disease themselves. In a small proportion of these cases, genetics may play a role in this familial predisposition.

A birth weight of less than 2,500 g or more than 4,500 g as well as tall stature have also been discussed as possible risk factors. The reasons behind the increased incidence that has been observed over the last few decades have yet to be determined conclusively. The latest research suggests that neither lifestyle nor environmental factors play a role in the development of testicular cancer.

Nevertheless, an early diagnosis is associated with a better prognosis. Adolescents and men are therefore advised to carry out regular self-examinations from puberty onwards. Statutory cancer screening offers men 45 years and older an annual genital examination.

Figure 3.23.1a
Age-standardised incidence and mortality rates, ICD-10 C62, Germany 1999–2016/2017, projection (incidence) through 2020
per 100,000 (old European Standard)

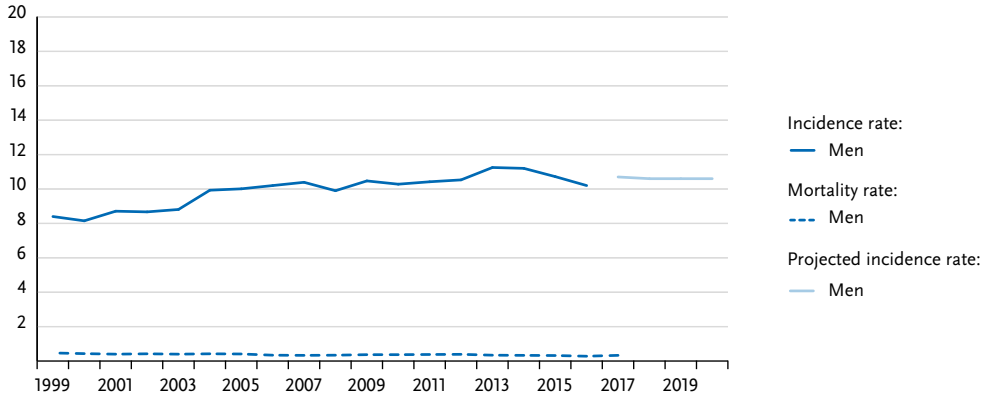

Figure 3.23.1b
Absolute numbers of incident cases and deaths, ICD-10 C62, Germany 1999–2016/2017, projection (incidence) through 2020

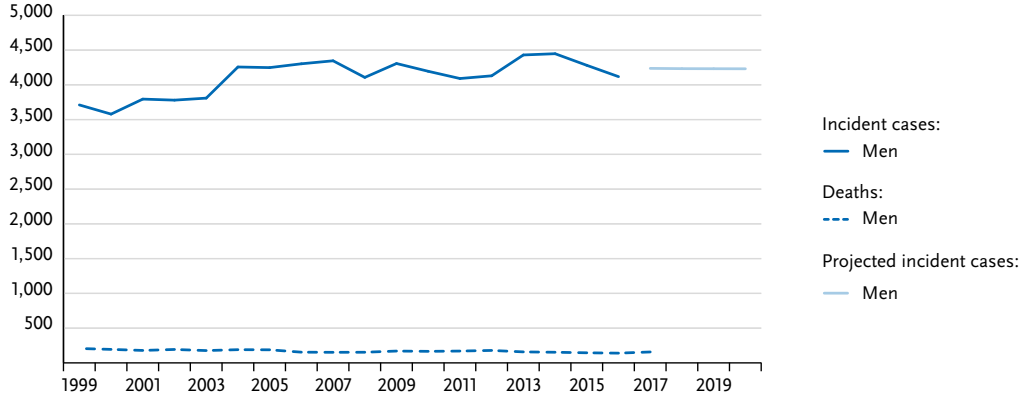

Figure 3.23.2
Age-specific incidence rates, ICD-10 C62, Germany 2015–2016
per 100,000

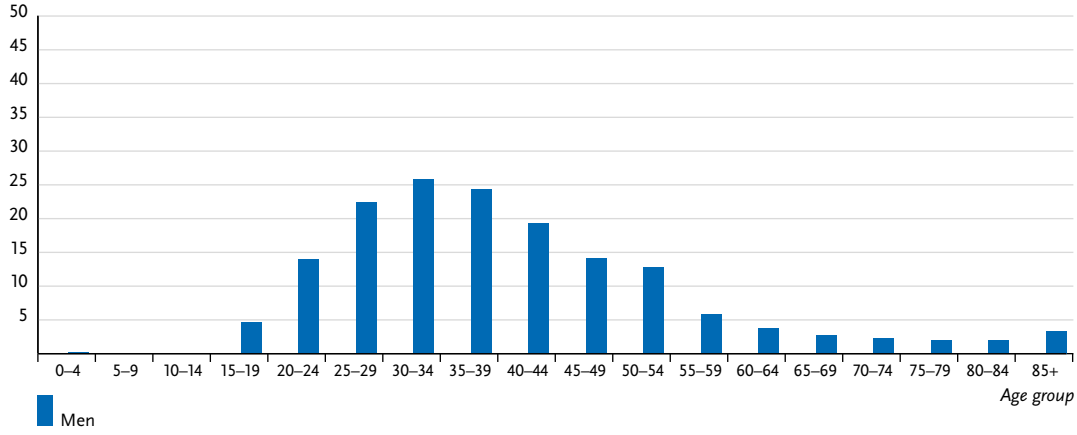

Table 3.23.2
Cancer incidence and mortality risks in Germany by age, ICD-10 C62, database 2016

	Risk of developing cancer				Mortality risk			
Men aged	**in the next ten years**		**ever**		**in the next ten years**		**ever**	
15 years	0.1%	(1 in 1,100)	0.7%	(1 in 140)	< 0.1%	(1 in 85,100)	< 0.1%	(1 in 3,800)
25 years	0.2%	(1 in 440)	0.6%	(1 in 160)	< 0.1%	(1 in 32,100)	< 0.1%	(1 in 4,000)
35 years	0.2%	(1 in 480)	0.4%	(1 in 240)	< 0.1%	(1 in 23,100)	< 0.1%	(1 in 4,500)
45 years	0.1%	(1 in 760)	0.2%	(1 in 460)	< 0.1%	(1 in 28,900)	< 0.1%	(1 in 5,500)
55 years	< 0.1%	(1 in 2,000)	0.1%	(1 in 1,100)	< 0.1%	(1 in 17,300)	< 0.1%	(1 in 6,500)
65 years	< 0.1%	(1 in 4,400)	< 0.1%	(1 in 2,300)	< 0.1%	(1 in 39,800)	< 0.1%	(1 in 9,500)
75 years	< 0.1%	(1 in 6,100)	< 0.1%	(1 in 4,000)	< 0.1%	(1 in 14,700)	< 0.1%	(1 in 9,900)
Lifetime risk			0.7%	(1 in 140)			< 0.1%	(1 in 3,800)

Figure 3.23.3
Distribution of UICC-stages at first diagnosis, ICD-10 C62, Germany 2015–2016
(top: all cases; bottom: only valid reports)

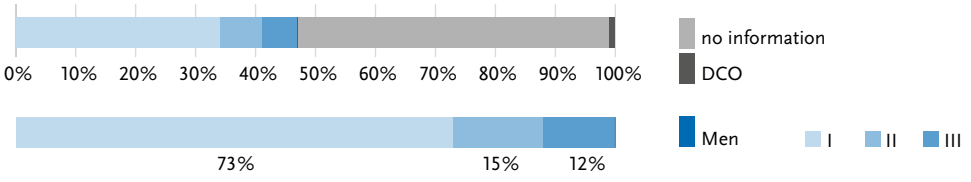

Figure 3.23.4
Absolute and relative survival rates up to 10 years after first diagnosis, ICD-10 C62, Germany 2015–2016

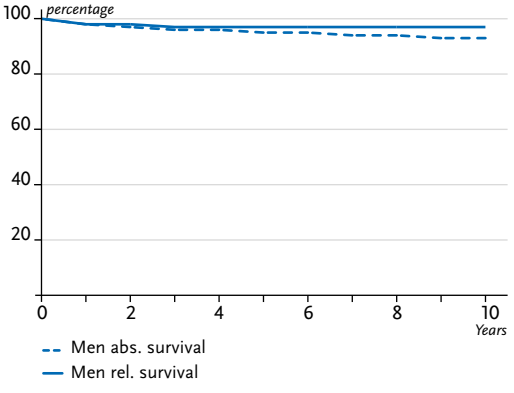

Figure 3.23.5
Relative 5-year survival by UICC-stage, ICD-10 C62, Germany 2015–2016

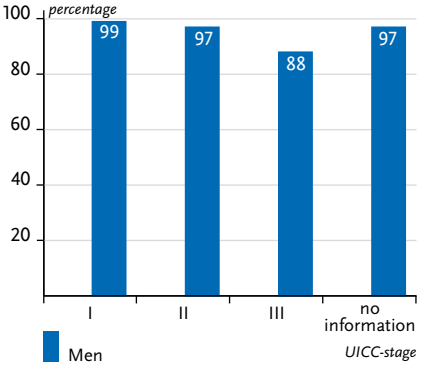

Figure 3.23.6
Age-standardised incidence and mortality rates in German federal states, ICD-10 C62, 2015–2016 (Incidence in Bremen for 2014 and 2016, incidence in eastern Germany for 2014 to 2015)
per 100,000 (old European Standard)

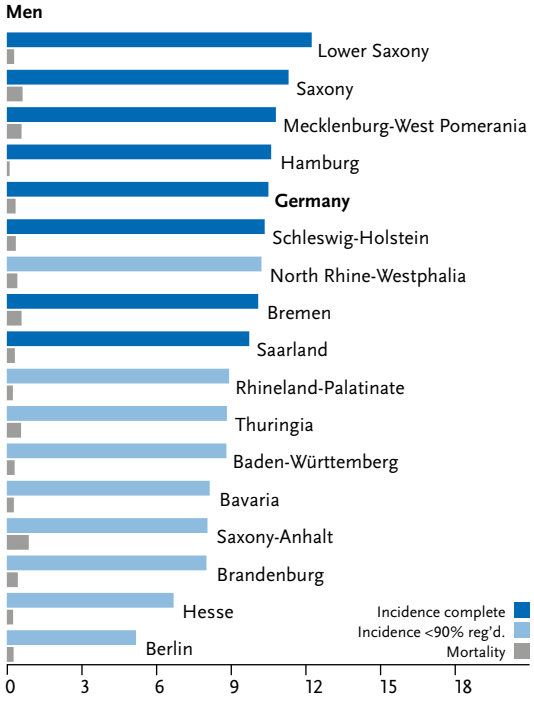

Figure 3.23.7
International comparison of age-standardised incidence and mortality rates, ICD-10 C62, 2015–2016 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)