3.23 Testis

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

Incidence	2019	2020	
	Men	Men	
Incident cases	4,190	4,060	
Crude incidence rate [1]	10.2	9.9	
Age-standardised incidence rate [1, 2]	10.4	10.1	
Median age at diagnosis	38	37	
Mortality	**2019**	**2020**	**2021**
	Men	Men	Men
Deaths	158	197	179
Crude mortality rate [1]	0.4	0.5	0.4
Age-standardised mortality rate [1, 2]	0.3	0.4	0.4
Median age at death	54	54	55
Prevalence and survival rates	**5 years**	**10 years**	**25 years**
	Men	Men	Men
Prevalence	19,700	39,000	87,800
Absolute survival rate (2019 – 2020) [3]	95 (93 – 98)	92 (91 – 96)	
Relative survival rate (2019 – 2020) [3]	97 (95 – 99)	96 (95 – 100)	

[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

In 2020, about 4,060 men in Germany were diagnosed with testicular cancer. This makes it one of the rarer types of cancer, accounting for 1.6 % of all cancers in men. In contrast to almost all other cancers, most cases occur at a comparatively early age between 25 and 45 years. In this age group, testicular cancer is the most common malignant tumour in men. It accounts for about 26 % of all tumours (excluding non-melanoma skin cancer) in this age group. The median age at diagnosis is 37 years. The age-standardised incidence rate has remained almost constant recently, after a steady increase had been observed for decades, as in other European countries. About 90 % of testicular tumours for which a stage is known are diagnosed in stage I/II. Histologically, most testicular cancers are germ cell tumours, two thirds of which are seminomas. One in five cases are malignant teratomas or mixed forms of these.

Since the introduction of cis-platinum in chemotherapy for testicular cancer a good 30 years ago, the disease has become one of the most prognostically favourable malignant neoplasms with correspondingly high relative 5-year survival rates (most recently 97 %) and low mortality (179 deaths in 2021).

Risk factors and early detection

A confirmed risk factor for testicular cancer is undescended testis (cryptorchidism). In addition, men who have already had testicular cancer or a precursor are at an increased risk of developing a tumour in the healthy testicle as well. Rare genetic disorders of sex development such as Klinefelter's syndrome also increase the risk of developing the disease.

A small number of those affected may have a familial predisposition. Sons and brothers of men with the disease have a significantly increased risk.

A birth weight of less than 2,500 g or more than 4,500 g as well as tall stature are also discussed as possible risk factors. The causes of the increase in incidence observed over several decades have not been conclusively clarified. According to current findings, lifestyle and environmental factors do not play a role.

There is evidence that early diagnosis correlates with a better prognosis. Adolescents and men are therefore advised to undergo regular self-examination from puberty onwards. From the age of 45, men can have an examination of their reproductive organs once a year as part of statutory cancer screening programme.

▶ *Additional information: www.krebsdaten.de/testis*

Figure 3.23.1a
Age-standardised incidence and mortality rates, ICD-10 C62, Germany 1999 – 2020/2021
per 100,000 (old European Standard)

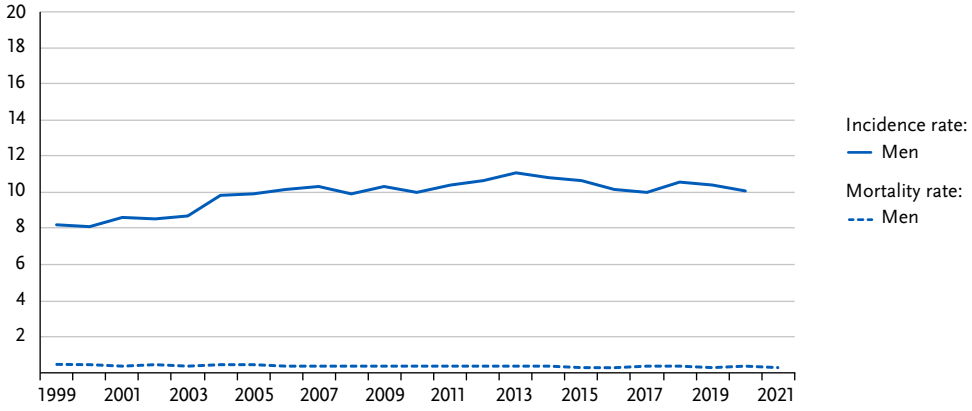


Figure 3.23.1b
Absolute numbers of incident cases and deaths, ICD-10 C62, Germany 1999 – 2020/2021

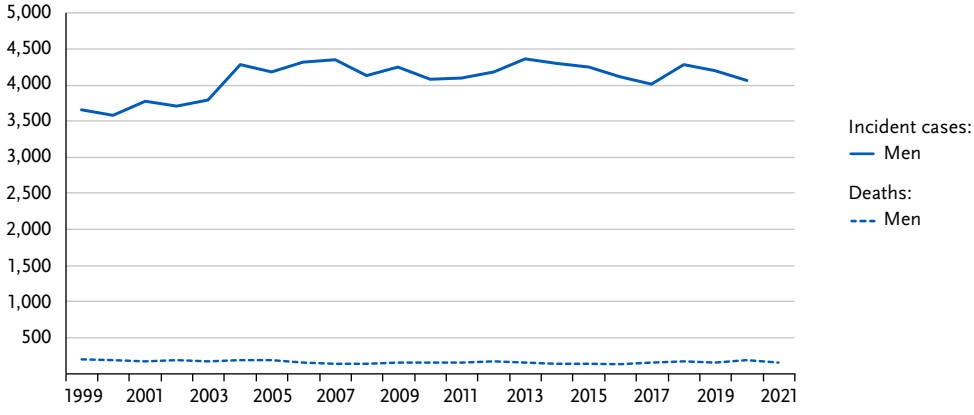


Figure 3.23.2
Age-specific incidence rates, ICD-10 C62, Germany 2019 – 2020
per 100,000

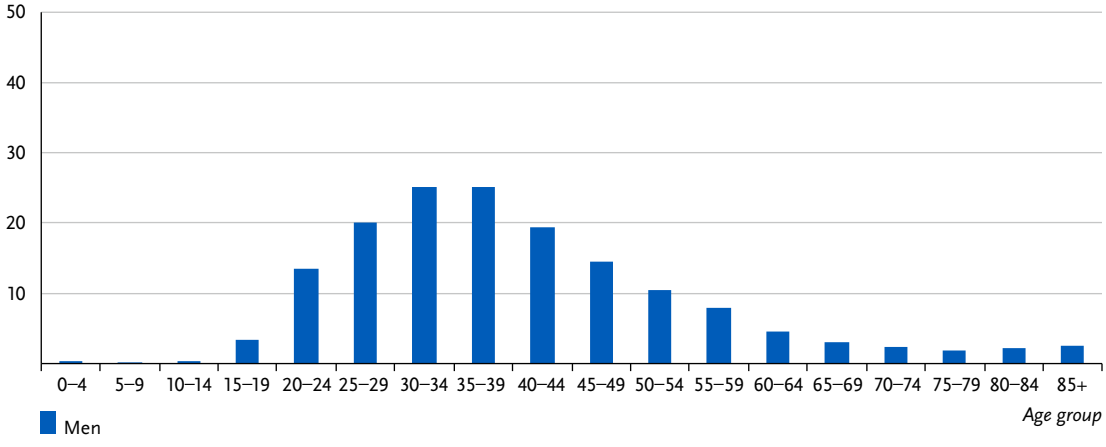


Table 3.23.2
Cancer incidence and mortality risks in Germany by age, ICD-10 C62, database 2019

	Erkrankungsrisiko				Sterberisiko			
Men aged	**in the next 10 years**		**ever**		**in the next 10 years**		**ever**	
15 years	0.1 %	(1 in 1,100)	0.8 %	(1 in 130)	< 0.1 %	(1 in 68,600)	< 0.1 %	(1 in 3,500)
25 years	0.2 %	(1 in 450)	0.7 %	(1 in 150)	< 0.1 %	(1 in 28,000)	< 0.1 %	(1 in 3,600)
35 years	0.2 %	(1 in 440)	0.5 %	(1 in 220)	< 0.1 %	(1 in 25,000)	< 0.1 %	(1 in 4,100)
45 years	0.1 %	(1 in 770)	0.2 %	(1 in 440)	< 0.1 %	(1 in 19,400)	< 0.1 %	(1 in 4,900)
55 years	0.1 %	(1 in 1,700)	0.1 %	(1 in 990)	< 0.1 %	(1 in 21,800)	< 0.1 %	(1 in 6,400)
65 years	< 0.1 %	(1 in 3,600)	< 0.1 %	(1 in 2,100)	< 0.1 %	(1 in 28,100)	< 0.1 %	(1 in 8,200)
75 years	< 0.1 %	(1 in 6,100)	< 0.1 %	(1 in 4,200)	< 0.1 %	(1 in 17,700)	< 0.1 %	(1 in 9,200)
Lifetime risk			0.8 %	(1 in 130)			< 0.1 %	(1 in 3,400)

Figure 3.23.3
Distribution of UICC stages at diagnosis, ICD-10 C62, Germany 2019 – 2020
(top: incl. missing data and DCO cases; bottom: valid values only)

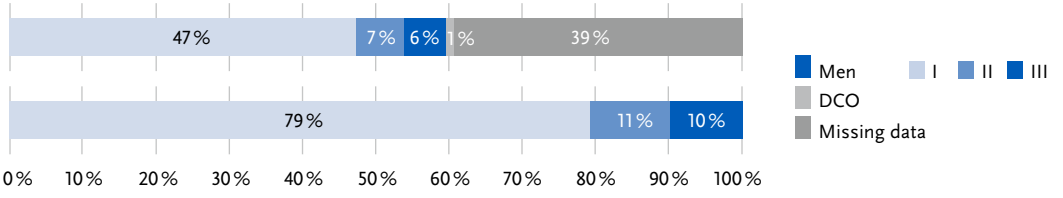


Figure 3.23.4
Absolute and relative survival rates up to 10 years after diagnosis, ICD-10 C62, Germany 2019 – 2020

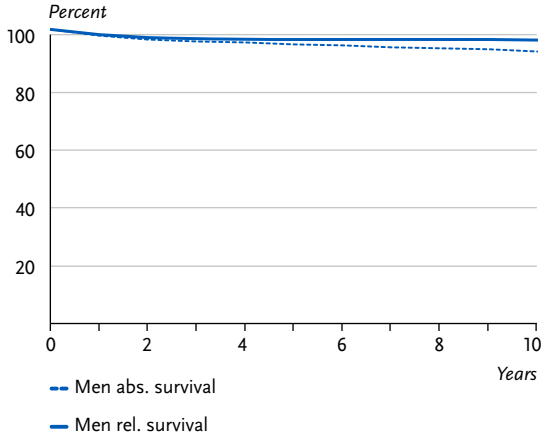


Figure 3.23.5
Relative 5-year survival by UICC stage (7th and 8th edition TNM), ICD-10 C62, Germany 2019 – 2020

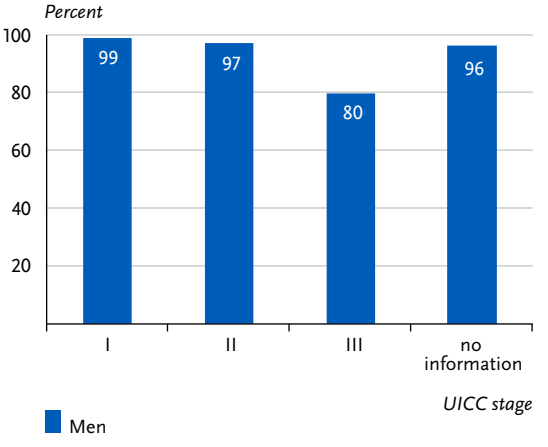


Figure 3.23.6
Age-standardised incidence and mortality rates in German federal states, ICD-10 C62, 2019 – 2020
per 100,000 (old European Standard)

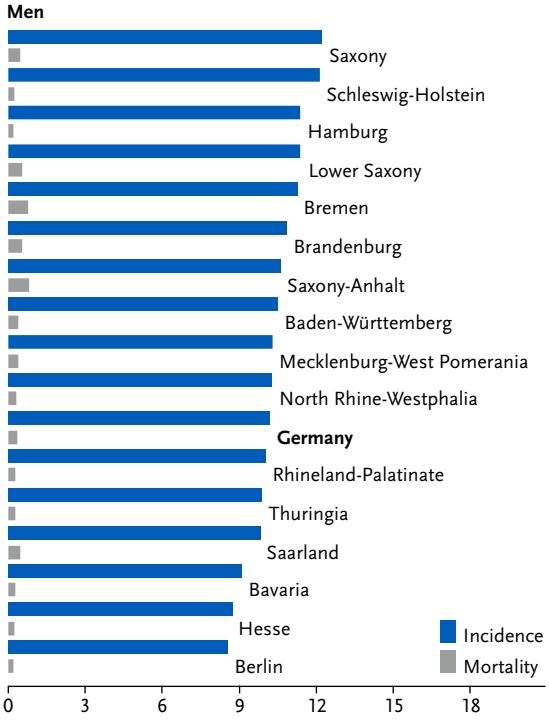
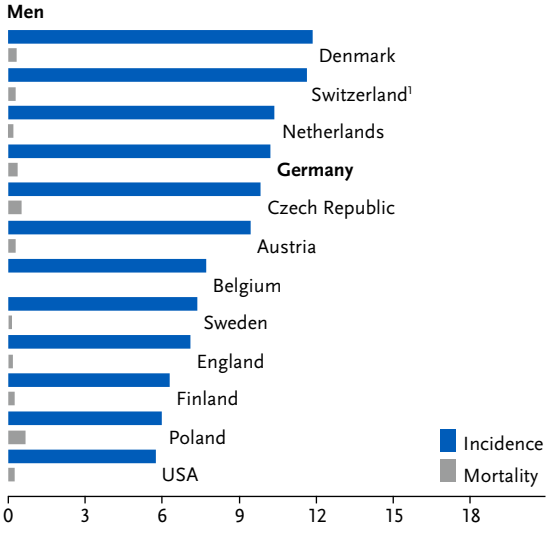


Figure 3.23.7
International comparison of age-standardised incidence and mortality rates, ICD-10 C62, 2019 – 2020 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)



[1] Switzerland: incidence data for 2015 – 2019