3.23 Testis

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

Incidence	2017	2018	Prediction for 2022
	Men	Men	Men
Incident cases	4,140	4,160	4,100
Crude incidence rate [1]	10.1	10.2	10.0
Age-standardised incidence rate [1, 2]	10.2	10.4	10.2
Median age at diagnosis	38	37	
Mortality	**2017**	**2018**	**2019**
	Men	Men	Men
Deaths	157	178	158
Crude mortality rate [1]	0.4	0.4	0.4
Age-standardised mortality rate [1, 2]	0.3	0.4	0.3
Median age at death	53	54	54
Prevalence and survival rates	**5 years**	**10 years**	**25 years**
	Men	Men	Men
Prevalence	20,100	39,300	87,300
Absolute survival rate (2017–2018) [3]	95 (92–98)	93 (91–95)	
Relative survival rate (2017–2018) [3]	97 (94–100)	97 (95–99)	

[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 2018, approximately 4,160 men were diagnosed with testicular cancer in Germany. Accordingly, testicular cancer is rare, 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 one third 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 recently remained almost constant, after a steady increase over decades, as in other European countries. About 86% to 89% of testicular tumours for which a stage is known are diagnosed in stage I/II. Histologically, testicular cancer is predominantly germ cell tumours: about two thirds of all testicular tumours are seminomas. About one in six cases are malignant teratomas or mixed forms of both types.

Since the introduction of cis-platinum in chemotherapy of testicular cancer a good 30 years ago, the disease has been one of the most prognostically favourable malignant neoplasms with correspondingly high relative 5-year survival rates (most recently 97%) and low mortality (158 deaths in 2019).

Risk factors and early detection

Undescended testis (cryptorchidism) is considered a confirmed risk factor for testicular cancer. In addition, men who have already had testicular cancer or a precursor have 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 family history of the disease. Sons and brothers of people 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 knowledge, lifestyle and environmental factors do not play a role in the development of testicular cancer.

It has been proven 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 the genital organs once a year as part of the statutory cancer screening.

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

Figure 3.23.1a
Age-standardised incidence and mortality rates, ICD-10 C62, Germany 1999–2018/2019, projection (incidence) through 2022
per 100,000 (old European Standard)

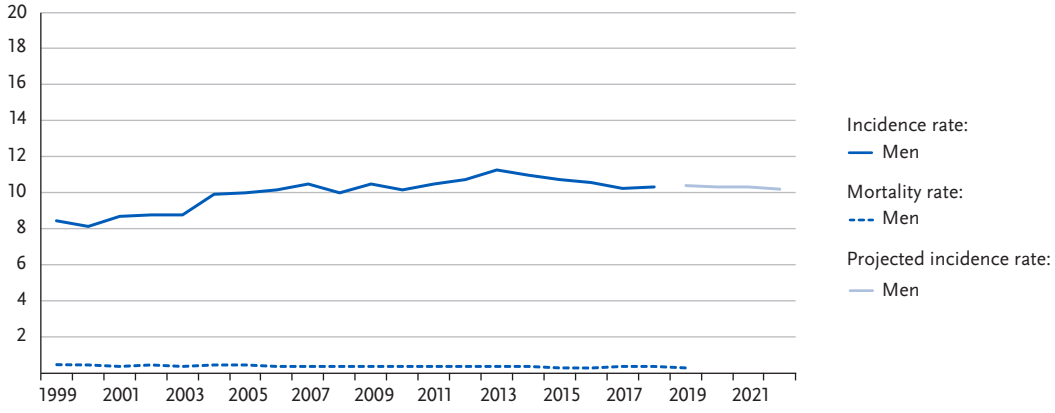


Figure 3.23.1b
Absolute numbers of incident cases and deaths, ICD-10 C62, Germany 1999–2018/2019, projection (incidence) through 2022

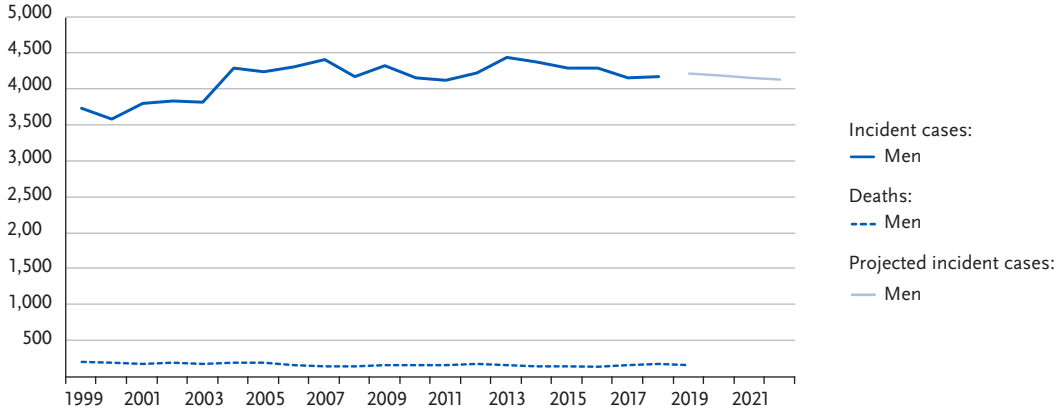


Figure 3.23.2
Age-specific incidence rates, ICD-10 C62, Germany 2017–2018
per 100,000

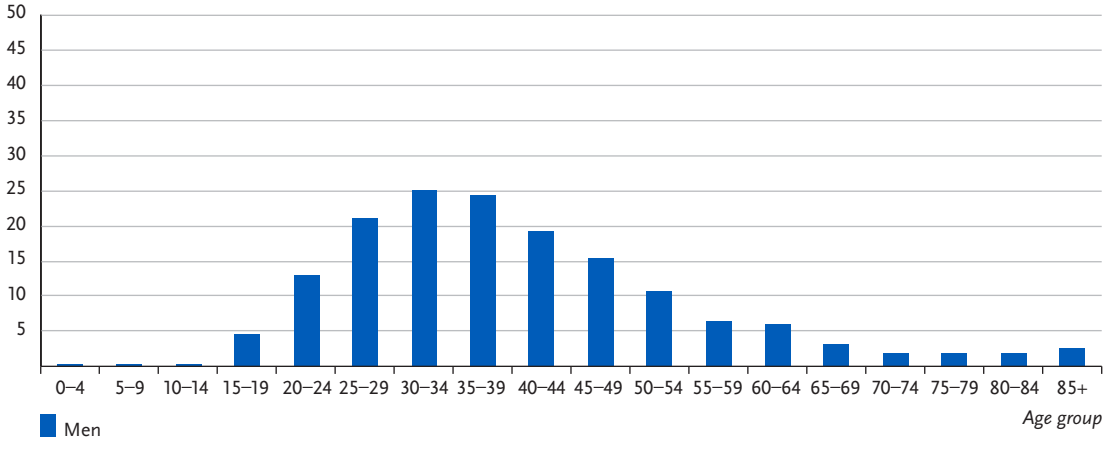


Table 3.23.2
Cancer incidence and mortality risks in Germany by age, ICD-10 C62, database 2018

	Risk of developing cancer				Mortality risk			
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 65,300)	< 0.1 %	(1 in 3,100)
25 years	0.2 %	(1 in 440)	0.7 %	(1 in 150)	< 0.1 %	(1 in 24,400)	< 0.1 %	(1 in 3,300)
35 years	0.2 %	(1 in 460)	0.4 %	(1 in 230)	< 0.1 %	(1 in 15,600)	< 0.1 %	(1 in 3,700)
45 years	0.1 %	(1 in 800)	0.2 %	(1 in 460)	< 0.1 %	(1 in 21,200)	< 0.1 %	(1 in 4,900)
55 years	0.1 %	(1 in 1,700)	0.1 %	(1 in 1,000)	< 0.1 %	(1 in 16,100)	< 0.1 %	(1 in 6,100)
65 years	< 0.1 %	(1 in 4,000)	< 0.1 %	(1 in 2,300)	< 0.1 %	(1 in 21,000)	< 0.1 %	(1 in 8,900)
75 years	< 0.1 %	(1 in 6,700)	< 0.1 %	(1 in 4,400)	< 0.1 %	(1 in 21,600)	< 0.1 %	(1 in 12,300)
Lifetime risk			0.8 %	(1 in 130)			< 0.1 %	(1 in 3,100)

Figure 3.23.3
Distribution of UICC stages at diagnosis, ICD-10 C62, Germany 2017–2018
top: according to 7th edition TNM; bottom: according to 8th edition TNM.
The DCO proportion was 1%. For 57 % of the remaining cases, no UICC stage could be assigned.

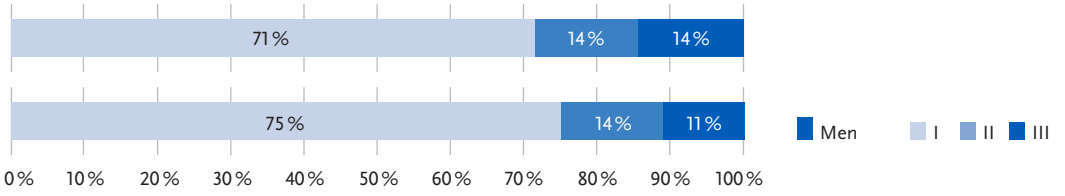


Figure 3.23.4
Absolute and relative survival rates up to 10 years after diagnosis, ICD-10 C62, Germany 2017–2018

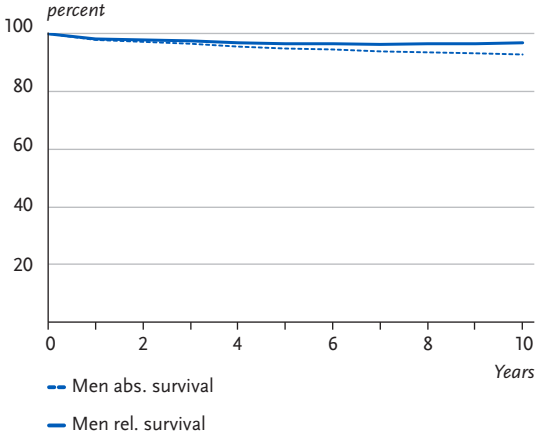


Figure 3.23.5
Relative 5-year survival by UICC stage (7th edition TNM), ICD-10 C62, Germany 2016–2018

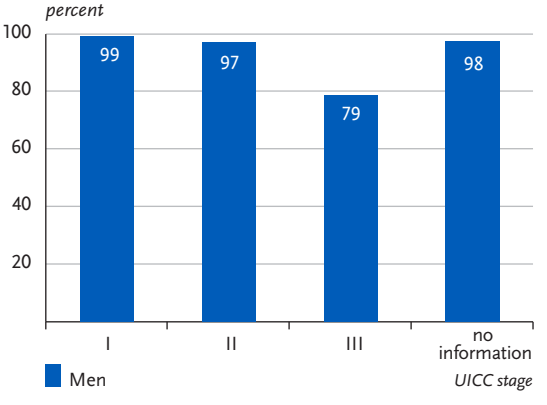


Figure 3.23.6
Age-standardised incidence and mortality rates in German federal states, ICD-10 C62, 2017–2018
per 100,000 (old European Standard)

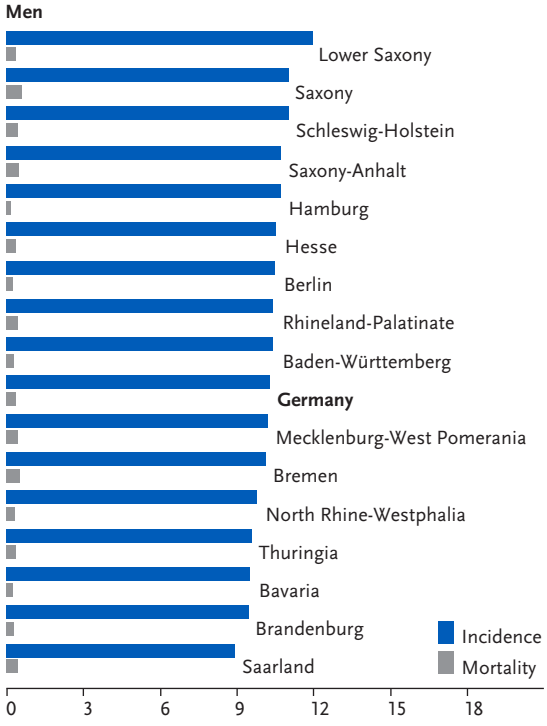
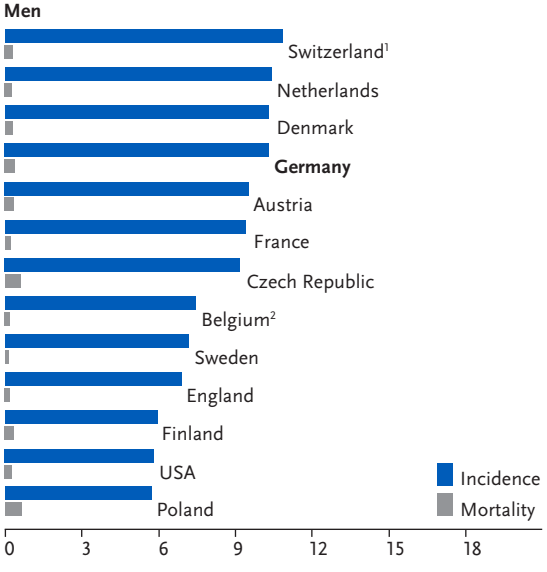


Figure 3.23.7
International comparison of age-standardised incidence and mortality rates, ICD-10 C62, 2017–2018 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)



[1] Mortality for 2013 to 2017
[2] Mortality for 2016