3.13 Malignant melanoma of the skin

Table 3.13.1
Overview of key epidemiological parameters for Germany, ICD-10 C43

Incidence	2017		2018		Prediction for 2022	
	Women	Men	Women	Men	Women	Men
Incident cases	11,220	12,120	10,880	12,010	11,300	13,900
Crude incidence rate [1]	26.8	29.7	25.9	29.4	26.8	33.6
Age-standardised incidence rate [1, 2]	19.5	20.5	18.9	20.2	18.8	22.0
Median age at diagnosis	62	69	62	68		
Mortality	**2017**		**2018**		**2019**	
	Women	Men	Women	Men	Women	Men
Deaths	1,242	1,593	1,176	1,766	1,232	1,789
Crude mortality rate [1]	3.0	3.9	2.8	4.3	2.9	4.4
Age-standardised mortality rate [1, 2]	1.6	2.4	1.4	2.6	1.4	2.6
Median age at death	75	75	76	75	78	75
Prevalence and survival rates	**5 years**		**10 years**		**25 years**	
	Women	Men	Women	Men	Women	Men
Prevalence	49,200	49,400	90,800	86,200	158,300	134,200
Absolute survival rate (2017–2018) [3]	86 (79–88)	79 (73–81)	77 (69–79)	66 (59–68)		
Relative survival rate (2017–2018) [3]	95 (87–96)	93 (88–96)	94 (86–97)	93 (86–96)		

[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, around 22,890 people in Germany were diagnosed with malignant melanoma of the skin, including 10,880 women. The median age at diagnosis for women is comparatively low at 62 years, while the median age at diagnosis for men is 68 years. The age-standardised incidence rates of women and men increased sharply around the year 2008. This is probably a consequence of the skin cancer screening introduced in Germany in July 2008. Since 2012, the incidence rate has declined slightly for women and remained almost constant for men. The mortality rates have remained almost unchanged in both sexes in the period under consideration. The predominant type of malignant melanoma is superficial spreading melanoma, which is associated with a favourable prognosis. Other forms, especially nodular and amelanotic melanoma, have a much less favourable prognosis. Currently, the relative 5-year survival rates for women with malignant melanoma of the skin in Germany are 95% and for men 93%. About 70% of all melanomas are detected in an early tumour stage (UICC I). In women, melanomas often occur on the lower extremities (legs and hips), in men mainly on the trunk.

Risk factors and early detection

The most important exogenous risk factor for malignant melanoma is ultraviolet (UV) radiation, especially recurrent intense sun exposure. This applies both to natural radiation from the sun and to artificial UV radiation, for example in a solarium. Sunburns at any age increase the risk.

The most important congenital risk factors include particularly large moles already present at birth and a light skin type. If you have already had melanoma yourself, the risk of getting another melanoma increases. If several first-degree relatives have malignant melanoma, this may indicate a familial increased risk due to inherited mutations. Depending on the type of mutation and the gene affected, the risk of melanoma can be increased to different degrees. A significant risk factor is also the number of benign moles that have appeared in the course of life, as well as the occurrence of atypical (dysplastic) moles.

The statutory cancer screening programme offers men and women from the age of 35 a skin examination every two years by a doctor with appropriate training (including dermatologists, general practitioners).

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

Figure 3.13.1a
Age-standardised incidence and mortality rates by sex, ICD-10 C43, Germany 1999–2018/2019, projection (incidence) through 2022
per 100,000 (old European Standard)

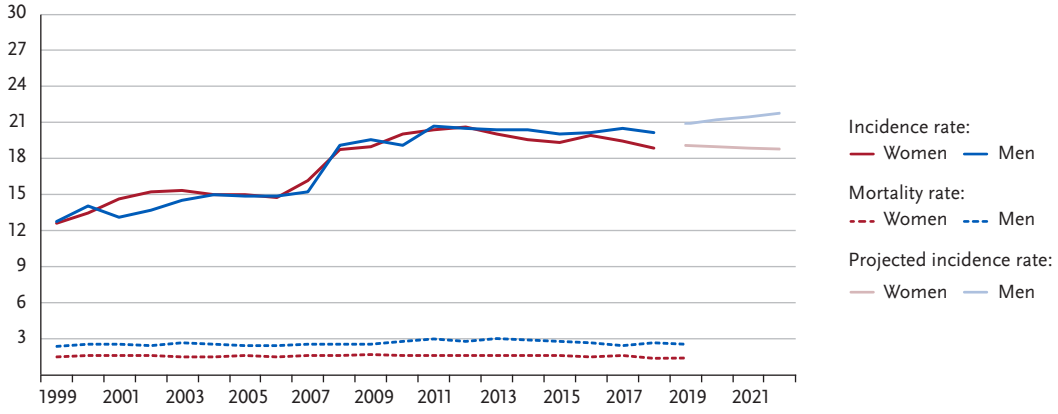

Figure 3.13.1b
Absolute numbers of incident cases and deaths by sex, ICD-10 C43, Germany 1999–2018/2019, projection (incidence) through 2022

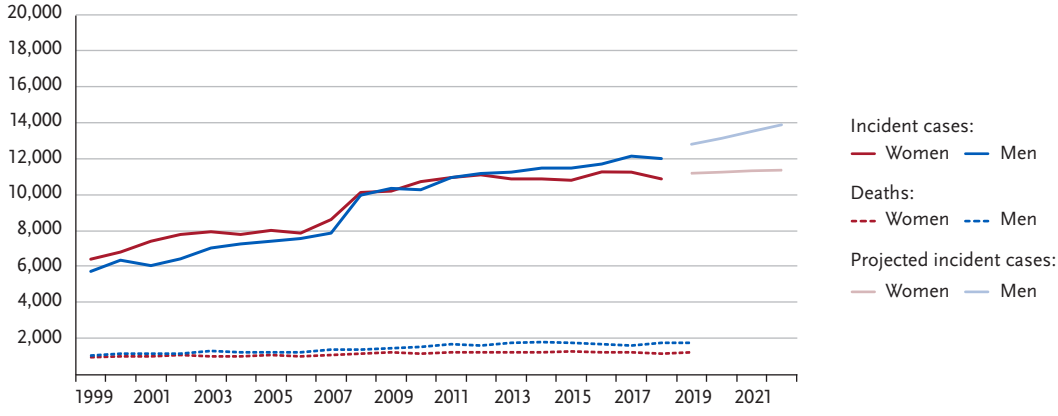

Figure 3.13.2
Age-specific incidence rates by sex, ICD-10 C43, Germany 2017–2018
per 100,000

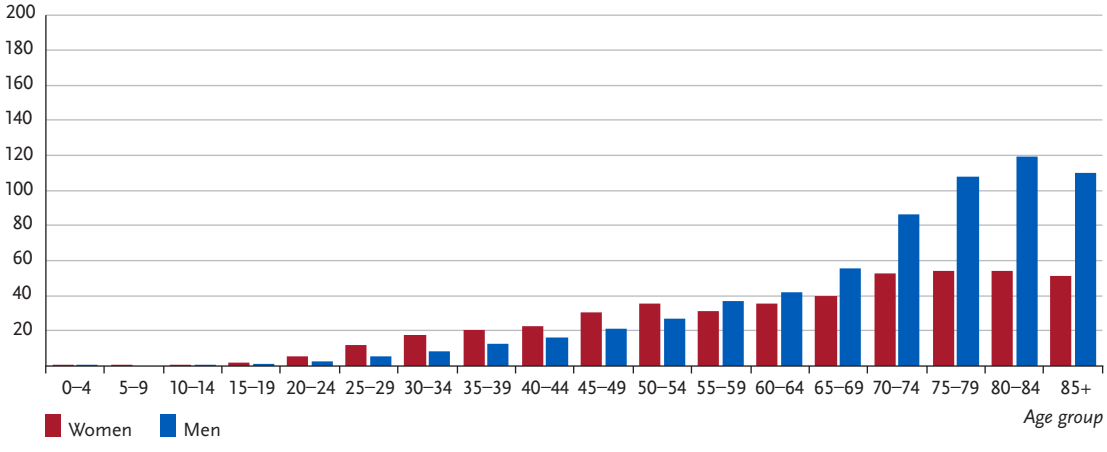

Table 3.13.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C43, database 2018

	Risk of developing cancer				Mortality risk			
Women aged	**in the next 10 years**		**ever**		**in the next 10 years**		**ever**	
35 years	0.2 %	(1 in 480)	1.8 %	(1 in 56)	< 0.1 %	(1 in 16,300)	0.2 %	(1 in 450)
45 years	0.3 %	(1 in 310)	1.6 %	(1 in 63)	< 0.1 %	(1 in 5,900)	0.2 %	(1 in 460)
55 years	0.3 %	(1 in 300)	1.3 %	(1 in 76)	< 0.1 %	(1 in 3,700)	0.2 %	(1 in 490)
65 years	0.4 %	(1 in 230)	1.0 %	(1 in 97)	< 0.1 %	(1 in 2,200)	0.2 %	(1 in 540)
75 years	0.5 %	(1 in 220)	0.7 %	(1 in 140)	0.1 %	(1 in 1,200)	0.2 %	(1 in 630)
Lifetime risk			2.0 %	(1 in 51)			0.2 %	(1 in 450)
Men aged	**in the next 10 years**		**ever**		**in the next 10 years**		**ever**	
35 years	0.1 %	(1 in 700)	2.1 %	(1 in 47)	< 0.1 %	(1 in 11,800)	0.4 %	(1 in 290)
45 years	0.3 %	(1 in 400)	2.0 %	(1 in 50)	< 0.1 %	(1 in 4,800)	0.3 %	(1 in 290)
55 years	0.4 %	(1 in 260)	1.8 %	(1 in 55)	< 0.1 %	(1 in 2,400)	0.3 %	(1 in 300)
65 years	0.6 %	(1 in 160)	1.6 %	(1 in 63)	0.1 %	(1 in 1,100)	0.3 %	(1 in 310)
75 years	0.9 %	(1 in 110)	1.2 %	(1 in 81)	0.2 %	(1 in 600)	0.3 %	(1 in 340)
Lifetime risk			2.2 %	(1 in 46)			0.4 %	(1 in 290)

Figure 3.13.3
Distribution of UICC stages at diagnosis by sex, ICD-10 C43, Germany 2017–2018
top: according to 7th edition TNM; bottom: according to 8th edition TNM.
The DCO proportion was 1%. For 51% of the remaining cases, no UICC stage could be assigned.

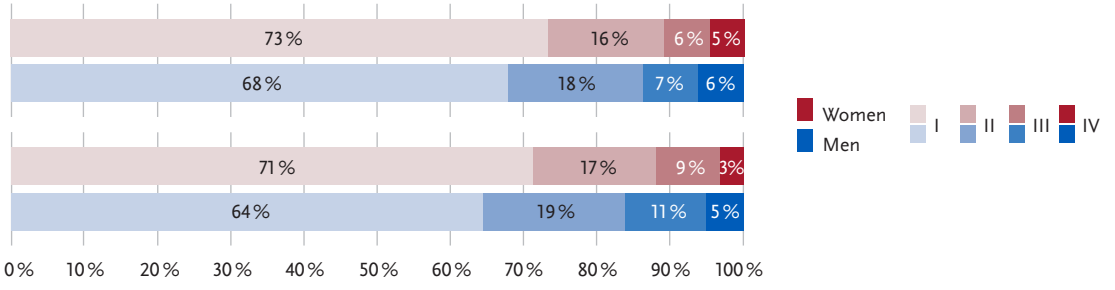

Figure 3.13.4
Absolute and relative survival rates up to 10 years after diagnosis by sex, ICD-10 C43, Germany 2017–2018

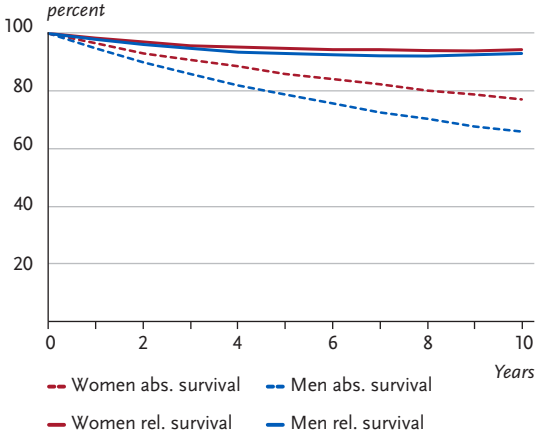

Figure 3.13.5
Relative 5-year survival by UICC stage (7th edition TNM) and sex, ICD-10 C43, Germany 2016–2018

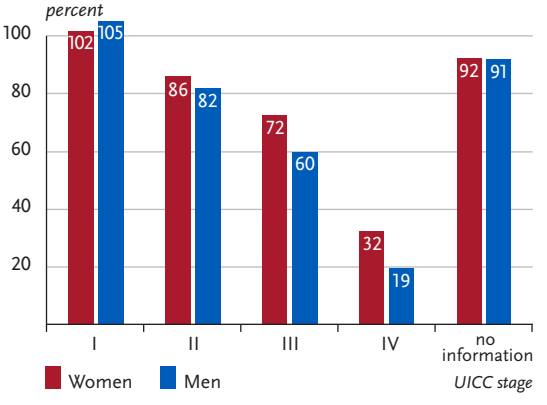

Figure 3.13.6
Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C43, 2017–2018
per 100,000 (old European Standard)

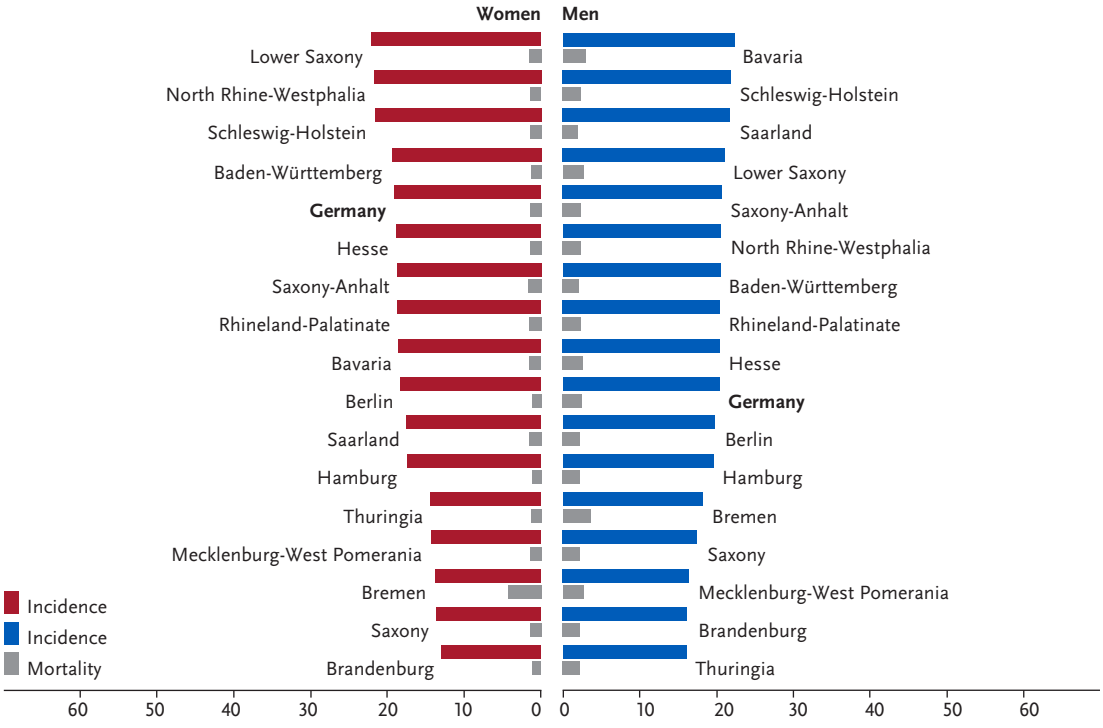

Figure 3.13.7
International comparison of age-standardised incidence and mortality rates by sex, ICD-10 C43, 2017–2018 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)