3.16 Malignant neoplasms of the soft tissue excluding mesothelioma

Table 3.16.1
Overview of key epidemiological parameters for Germany, ICD-10 C46–C49

Incidence		2017		2018	Prediction for 2022	
	Women	Men	Women	Men	Women	Men
Incident cases	2,090	2,290	2,160	2,140	2,400	2,500
Crude incidence rate [1]	5.0	5.6	5.1	5.2	5.6	6.1
Age-standardised incidence rate [1, 2]	3.3	4.1	3.4	3.8	3.7	4.4
Median age at diagnosis	68	67	68	68		
Mortality		**2017**		**2018**		**2019**
	Women	Men	Women	Men	Women	Men
Deaths	972	884	943	913	991	961
Crude mortality rate [1]	2.3	2.2	2.2	2.2	2.4	2.3
Age-standardised mortality rate [1, 2]	1.3	1.4	1.3	1.5	1.3	1.5
Median age at death	75	72	73	71	74	72
Prevalence and survival rates		**5 years**		**10 years**		**25 years**
	Women	Men	Women	Men	Women	Men
Prevalence	7,000	7,400	11,200	12,400	19,500	20,900
Absolute survival rate (2017–2018) [3]	46 (38–57)	51 (44–62)	35	38		
Relative survival rate (2017–2018) [3]	51 (43–63)	61 (54–75)	45	55		

[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

This disease group includes the rare, malignant tumours of the peripheral nerves, connective tissue and other soft tissues, the peritoneum and the retroperitoneal soft tissue behind it. They also include the rare Kaposi's sarcomas that occur on the skin (4% of the diagnostic group). Since the tumours of the soft tissue, in contrast to carcinomas, predominantly develop from the connective tissue structures, sarcomas represent the majority of these tumours.

Leiomyosarcoma originating in smooth muscle tissue and liposarcoma (malignant fatty tissue tumour) are the most common forms in adults, along with fibrosarcoma. In contrast, rhabdomyosarcomas originating in the tissue of the skeletal muscles occur almost exclusively in children and adolescents. The approximately 4,300 new cases of malignant soft tissue tumours per year are compared to approximately 1,950 deaths. Age-standardised incidence and mortality rates for malignant soft tissue tumours have risen slightly in Germany since 1999.

Risk factors

In most cases, no clear cause for a soft tissue sarcoma can be found. Patients with rare hereditary tumour syndromes may have a higher incidence of sarcomas. The presence of one or more genetic variants probably also has an influence on the risk of developing the disease.

In rare cases, a sarcoma can occur in the irradiated region of the body after radiotherapy. Chemotherapy can also increase the risk of sarcoma. The human herpes virus type 8 (HHV8) causes Kaposi's sarcoma. In people with severe immunodeficiency, the Epstein-Barr virus (EBV) may also be involved in the development of soft tissue sarcomas.

Environmental toxins and chemicals may possibly contribute to the development of sarcomas. A connection between vinyl chloride and angiosarcomas of the liver is regarded as certain. Chronic inflammatory processes probably also increase the risk of soft tissue sarcomas. In addition, chronic lymphoedema after breast removal can lead to the development of angiosarcoma in rare cases (Stewart-Treves syndrome).

An influence of diet or other lifestyle factors such as smoking or alcohol consumption is not known.

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

Figure 3.16.1a
Age-standardised incidence and mortality rates by sex, ICD-10 C46 – C49, Germany 1999 – 2018/2019, projection (incidence) through 2022
per 100,000 (old European Standard)

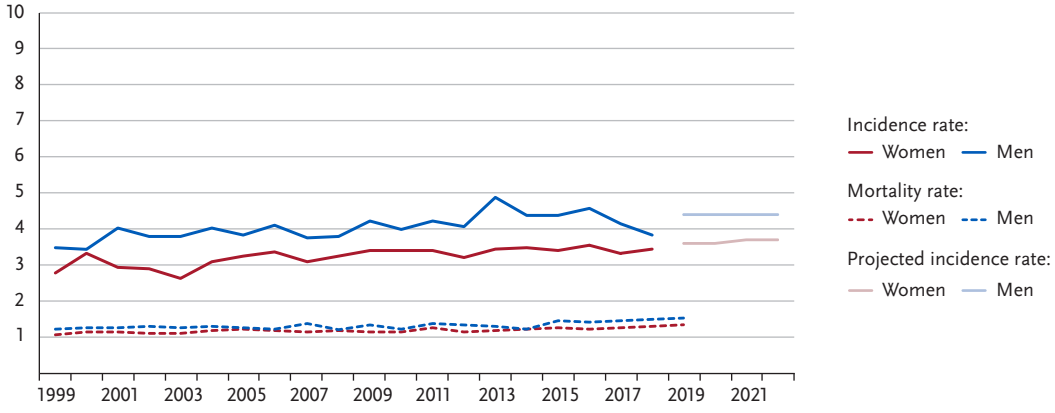


Figure 3.16.1b
Absolute numbers of incident cases and deaths by sex, ICD-10 C46 – C49, Germany 1999 – 2018/2019, projection (incidence) through 2022

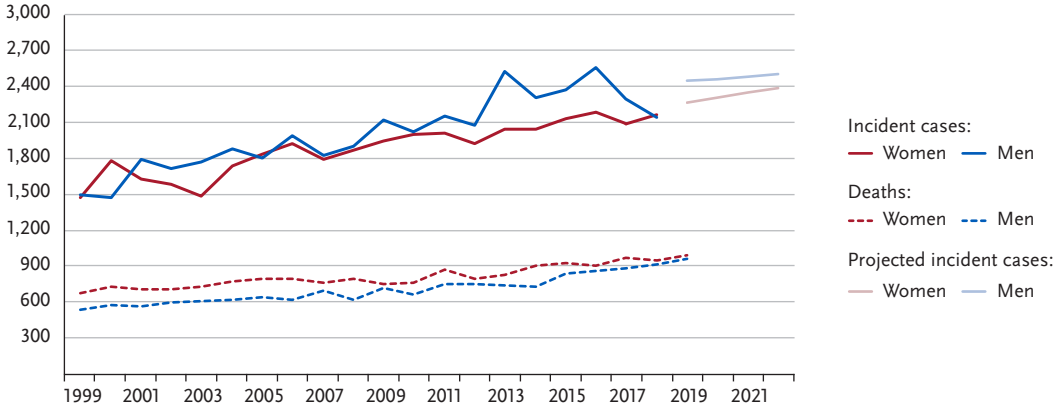


Figure 3.16.2
Age-specific incidence rates by sex, ICD-10 C46 – C49, Germany 2017 – 2018
per 100,000

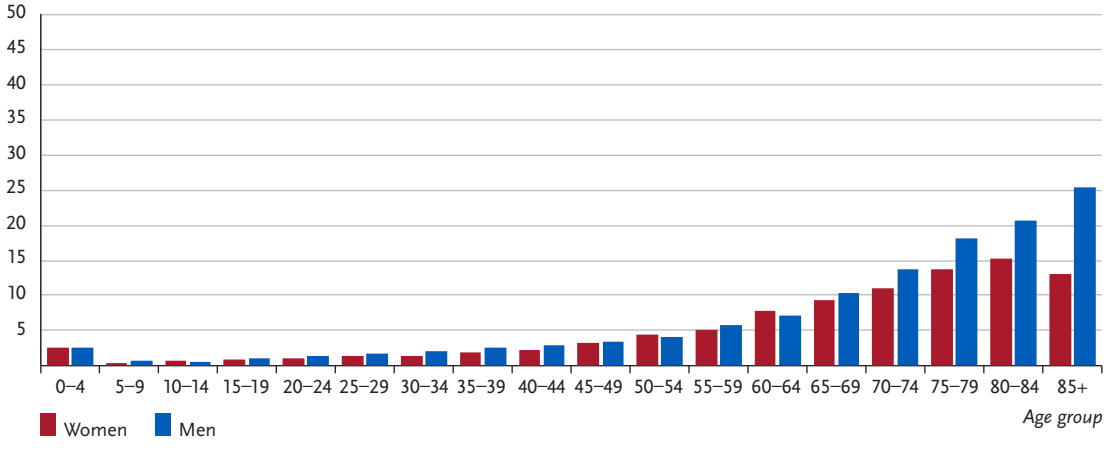


Table 3.16.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C46–C49, database 2018

	Risk of developing cancer				Mortality risk			
Women aged	**in the next 10 years**		**ever**		**in the next 10 years**		**ever**	
35 years	< 0.1 %	(1 in 4,700)	0.4 %	(1 in 280)	< 0.1 %	(1 in 13,500)	0.2 %	(1 in 590)
45 years	< 0.1 %	(1 in 2,600)	0.3 %	(1 in 290)	< 0.1 %	(1 in 7,900)	0.2 %	(1 in 620)
55 years	0.1 %	(1 in 1,500)	0.3 %	(1 in 320)	< 0.1 %	(1 in 4,100)	0.2 %	(1 in 660)
65 years	0.1 %	(1 in 1,000)	0.3 %	(1 in 390)	< 0.1 %	(1 in 2,300)	0.1 %	(1 in 740)
75 years	0.1 %	(1 in 820)	0.2 %	(1 in 560)	0.1 %	(1 in 1,500)	0.1 %	(1 in 960)
Lifetime risk			0.4 %	(1 in 250)			0.2 %	(1 in 570)
Men aged	**in the next 10 years**		**ever**		**in the next 10 years**		**ever**	
35 years	< 0.1 %	(1 in 3,700)	0.4 %	(1 in 280)	< 0.1 %	(1 in 13,900)	0.2 %	(1 in 600)
45 years	< 0.1 %	(1 in 2,800)	0.3 %	(1 in 290)	< 0.1 %	(1 in 8,400)	0.2 %	(1 in 620)
55 years	0.1 %	(1 in 1,800)	0.3 %	(1 in 320)	< 0.1 %	(1 in 3,800)	0.2 %	(1 in 650)
65 years	0.1 %	(1 in 920)	0.3 %	(1 in 350)	< 0.1 %	(1 in 2,000)	0.1 %	(1 in 700)
75 years	0.1 %	(1 in 670)	0.2 %	(1 in 440)	0.1 %	(1 in 1,300)	0.1 %	(1 in 860)
Lifetime risk			0.4 %	(1 in 250)			0.2 %	(1 in 570)

Figure 3.16.3
Proportion of morphologic groups of malignant soft tissue tumours by sex, ICD-10 C46–C49, Germany 2017–2018

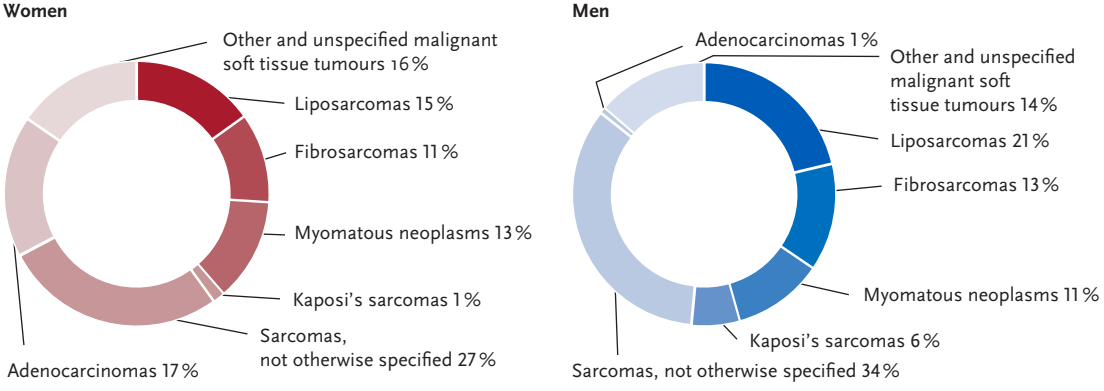


Figure 3.16.4
Absolute and relative survival rates up to 10 years after diagnosis by sex, ICD-10 C46–C49, Germany 2017–2018

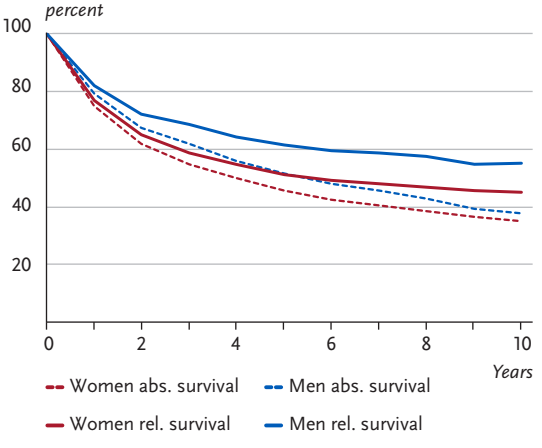


Figure 3.16.5
Relative 5-year survival by histology and sex, ICD-10 C46–C49, Germany 2017–2018

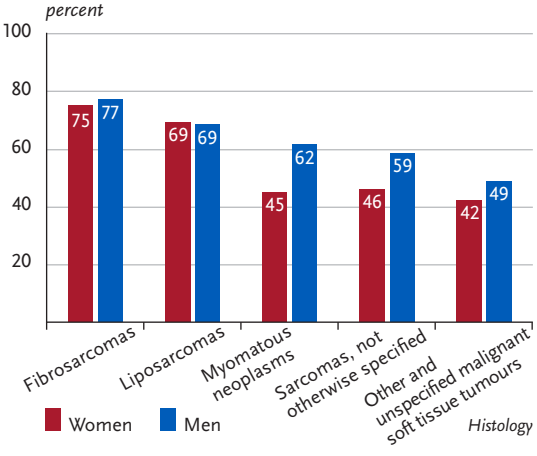


Figure 3.16.6
Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C46–C49, 2017–2018
per 100,000 (old European Standard)

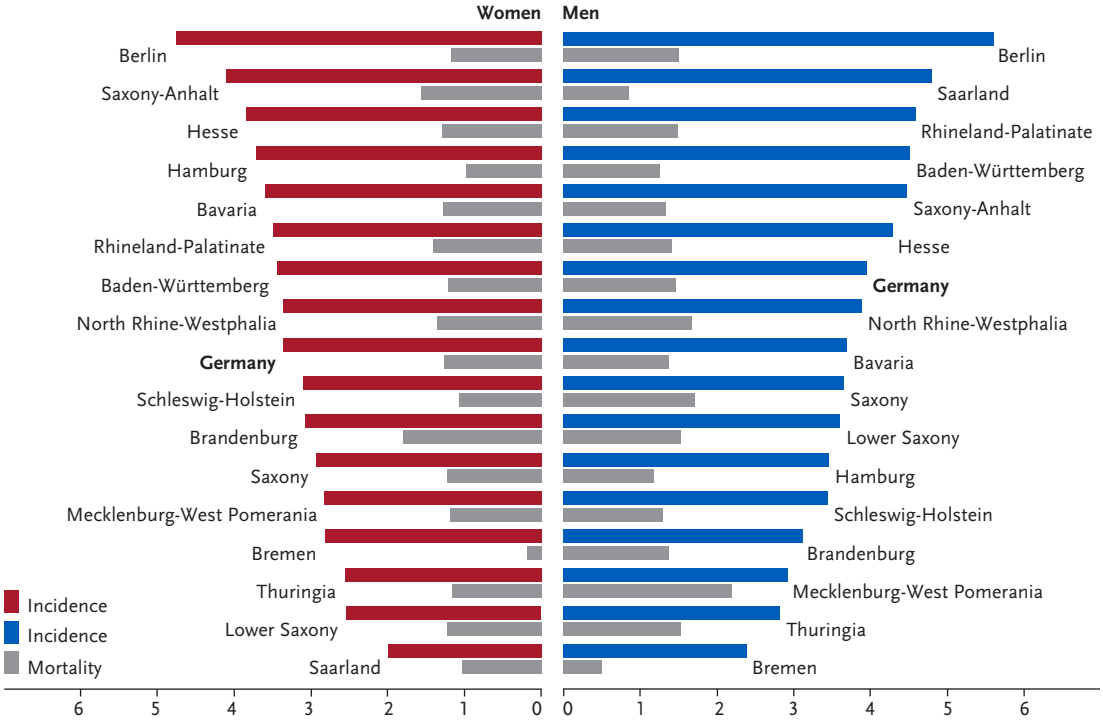
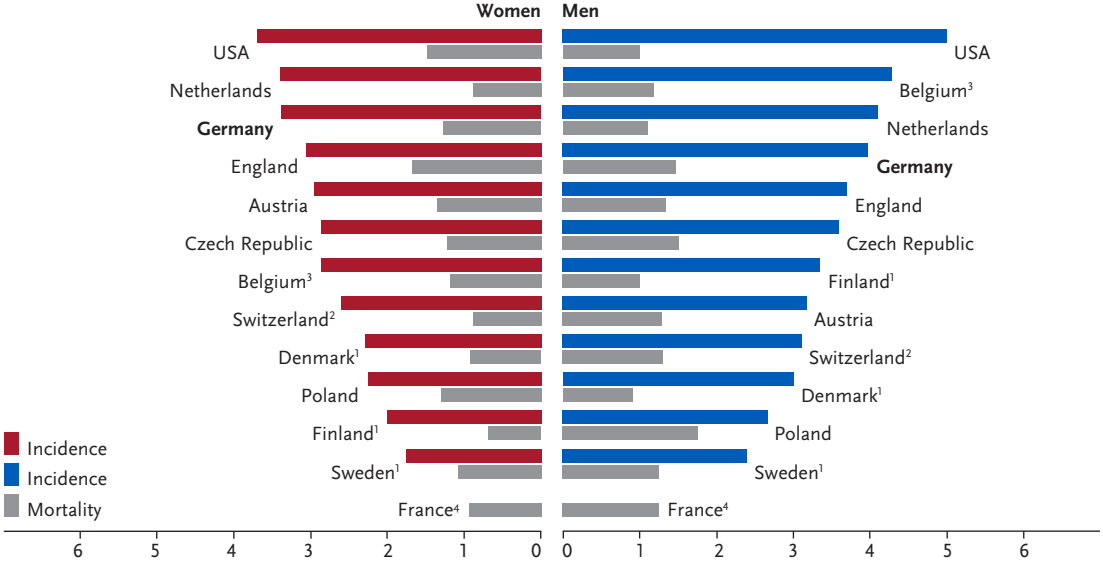


Figure 3.16.7
International comparison of age-standardised incidence and mortality rates by sex, ICD-10 C46–C49, 2017–2018 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)



[1] Data for C49
[2] Data for C47 and C49; mortality for 2013 to 2017
[3] Mortality for 2016
[4] No incidence data available