3.13 Soft tissue without mesothelioma

Table 3.13.1
Overview of key epidemiologic parameters for Germany, ICD-10 C46–C49

Incidence	2013		2014		Prediction for 2018	
	Men	Women	Men	Women	Men	Women
Incident cases	2,140	1,880	2,040	1,870	2,300	2,000
Crude incidence rate[1]	5.4	4.6	5.2	4.5	5.8	4.8
Standardised incidence rate[1,2]	4.1	3.2	3.9	3.2	4.2	3.3
Median age at diagnosis	65	69	67	66		

Mortality	2013		2014		2015	
	Men	Women	Men	Women	Men	Women
Deaths	744	831	724	901	843	927
Crude mortality rate[1]	1.9	2.0	1.8	2.2	2.1	2.2
Standardised mortality rate[1,2]	1.3	1.2	1.2	1.2	1.4	1.3
Median age at death	72	73	72	73	71	74

[1] per 100,000 persons [2] age-standardised (old European Standard)

Prevalence and survival rates	after 5 years		after 10 years	
	Men	Women	Men	Women
Prevalence	6,700	5,600	10,800	9,200
Absolute survival rate (2013–2014)[3]	55 (48–59)	44 (35–47)	43	34 (27–39)
Relative survival rate (2013–2014)[3]	64 (55–69)	49 (38–53)	58	44 (35–50)

[3] in percentages (lowest and highest value of the included German federal states)

Epidemiology

This disease group includes the rare Kaposi sarcoma, occurring mainly on the skin and malignant tumours of the peripheral nerves, connective and other soft tissue such as the peritoneum and retroperitoneal soft tissue behind it. 84 % of all cases are sarcomas, which unlike carcinomas do not develop from epithelial or glandular tissue, but from connective tissue structures, which also include fatty tissue and muscles. Conversely, around 50 % of all sarcomas occur in organs such as the gastro-intestinal tract, the sexual organs and the breast.

Out of the around 4,000 new malignant soft tissue tumour cases, 35 % occur in the extremities. The two most prevalent types of soft tissue sarcoma in adulthood are the leiomyosarcoma originating in smooth muscle and liposarcoma (fatty tissue tumour). Rhabdomyosarcoma (RMS) occur almost exclusively in children and adolescents.

Since 1999, the age-standardised incidence and mortality rates for malignant soft tissue tumours in Germany have remained almost constant.

Risk factors

In most cases, soft tissue sarcomas have no clearly identifiable cause. Patients with rare hereditary cancer syndromes, however, face a higher risk of developing sarcomas. Presumably, a single (or multiple) genetic mutation also may influences a person's risk of developing a sarcoma.

In rare cases, following radiation therapy, a sarcoma may occur in the irradiated area of the body. The human herpes virus type 8 (HHV8) causes the Kaposi sarcoma. In severely immuno-deficient patients, the Epstein-Barr virus (EBV) potentially also plays a role in the development of soft tissue sarcoma.

Environmental toxins and chemicals are potentially also factors in sarcoma development. Evidence strongly indicates a link between vinyl chloride exposure and angiosarcoma of the liver. Chronic inflammatory processes possibly also increase the risk of soft tissue sarcoma. Chronic lymphedema as a consequence of a mastectomy (breast removal) can in rare cases result in the emergence of an angiosarcoma (Stewart Treves Syndrome). Whether diet or other lifestyle factors, such as tobacco and alcohol consumption also have an influence remains unclear.

Figure 3.13.1a
Age-standardised incidence and mortality rates, by sex, ICD-10 C46–C49, Germany 1999–2014/2015
per 100,000 (old European Standard)

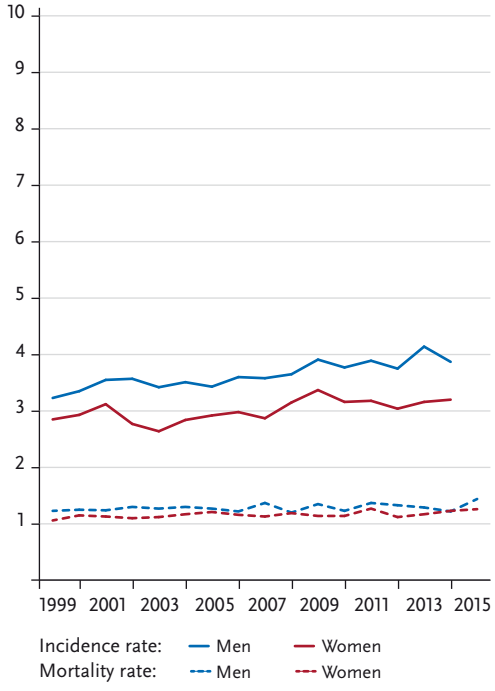


Figure 3.13.1b
Absolute numbers of incident cases and deaths, by sex, ICD-10 C46–C49, Germany 1999–2014/2015

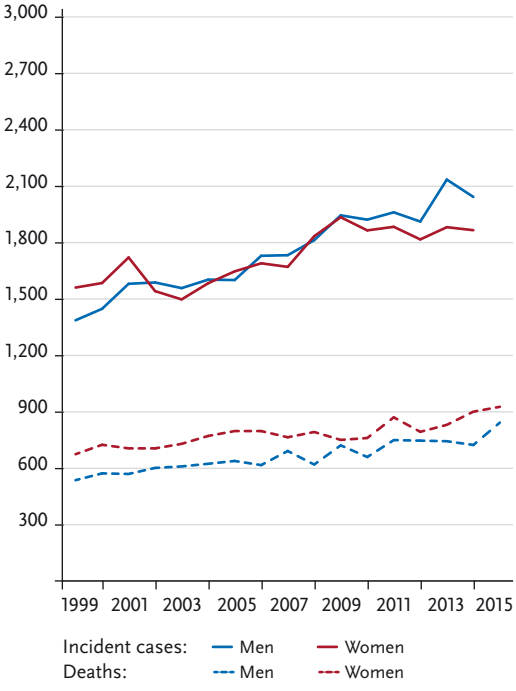


Figure 3.13.2
Age-specific incidence rates by sex, ICD-10 C46–C49, Germany 2013–2014
per 100,000

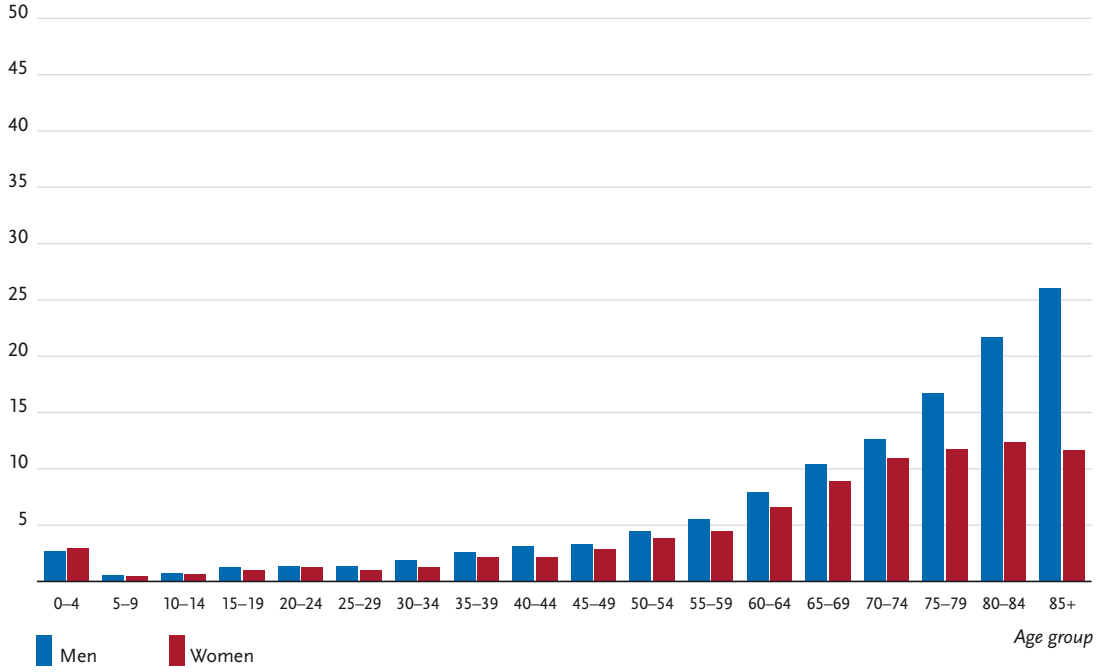
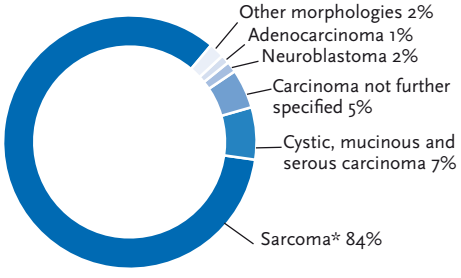


Table 3.13.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C46–C49, database 2014

	Risk of developing cancer				Mortality risk			
Men aged	**in the next ten years**		**ever**		**in the next ten years**		**ever**	
35 years	<0.1%	(1 in 3,600)	0.4%	(1 in 260)	<0.1%	(1 in 22,400)	0.1%	(1 in 690)
45 years	<0.1%	(1 in 2,500)	0.4%	(1 in 280)	<0.1%	(1 in 9,200)	0.1%	(1 in 700)
55 years	0.1%	(1 in 1,500)	0.3%	(1 in 300)	<0.1%	(1 in 5,200)	0.1%	(1 in 730)
65 years	0.1%	(1 in 980)	0.3%	(1 in 350)	<0.1%	(1 in 2,400)	0.1%	(1 in 770)
75 years	0.2%	(1 in 650)	0.2%	(1 in 420)	0.1%	(1 in 1,400)	0.1%	(1 in 890)
Lifetime risk			0.4%	(1 in 230)			0.2%	(1 in 650)
Women aged	**in the next ten years**		**ever**		**in the next ten years**		**ever**	
35 years	<0.1%	(1 in 4,700)	0.3%	(1 in 310)	<0.1%	(1 in 15,100)	0.2%	(1 in 640)
45 years	<0.1%	(1 in 2,900)	0.3%	(1 in 330)	<0.1%	(1 in 8,000)	0.2%	(1 in 660)
55 years	0.1%	(1 in 1,900)	0.3%	(1 in 360)	<0.1%	(1 in 5,000)	0.1%	(1 in 710)
65 years	0.1%	(1 in 1,000)	0.2%	(1 in 430)	<0.1%	(1 in 2,400)	0.1%	(1 in 780)
75 years	0.1%	(1 in 950)	0.2%	(1 in 640)	0.1%	(1 in 1,700)	0.1%	(1 in 1,000)
Lifetime risk			0.4%	(1 in 280)			0.2%	(1 in 620)

Figure 3.13.3a
Proportion of histologic group of malignant soft tissue tumours, ICD-10 C46–C49, Germany 2013–2014



* classified according to NCIN criteria (2013, see »further literature«)

Figure 3.13.3b
Distribution of sarcoma localizations, Germany 2013–2014

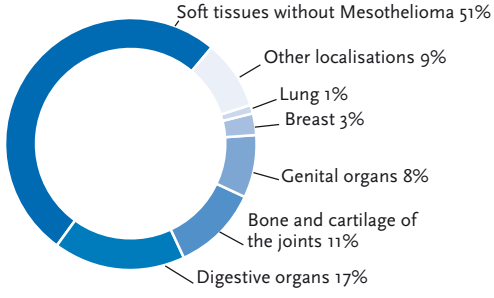


Figure 3.13.4a
Absolute survival rates up to 10 years after first diagnosis, by sex, ICD-10 C46–C49, Germany 2013–2014

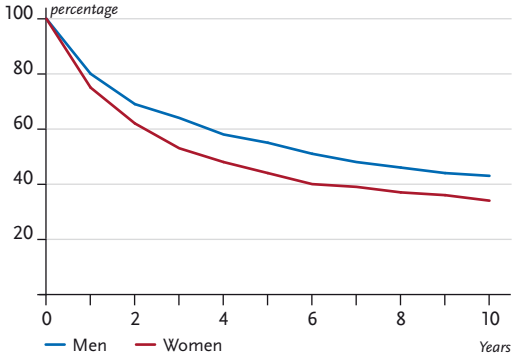


Figure 3.13.4b
Relative survival rates up to 10 years after first diagnosis, by sex, ICD-10 C46–C49, Germany 2013–2014

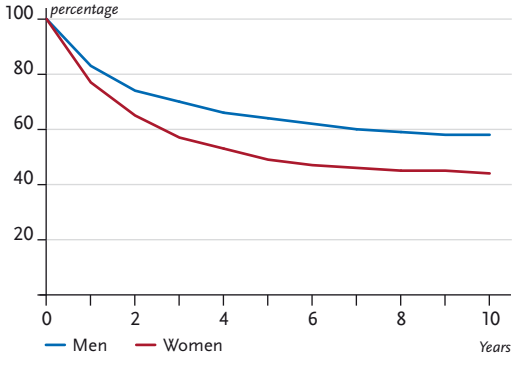


Figure 3.13.5
Registered age-standardised incidence and mortality rates in German federal states, by sex, ICD-10 C46–C49, 2013–2014
per 100,000 (old European Standard)

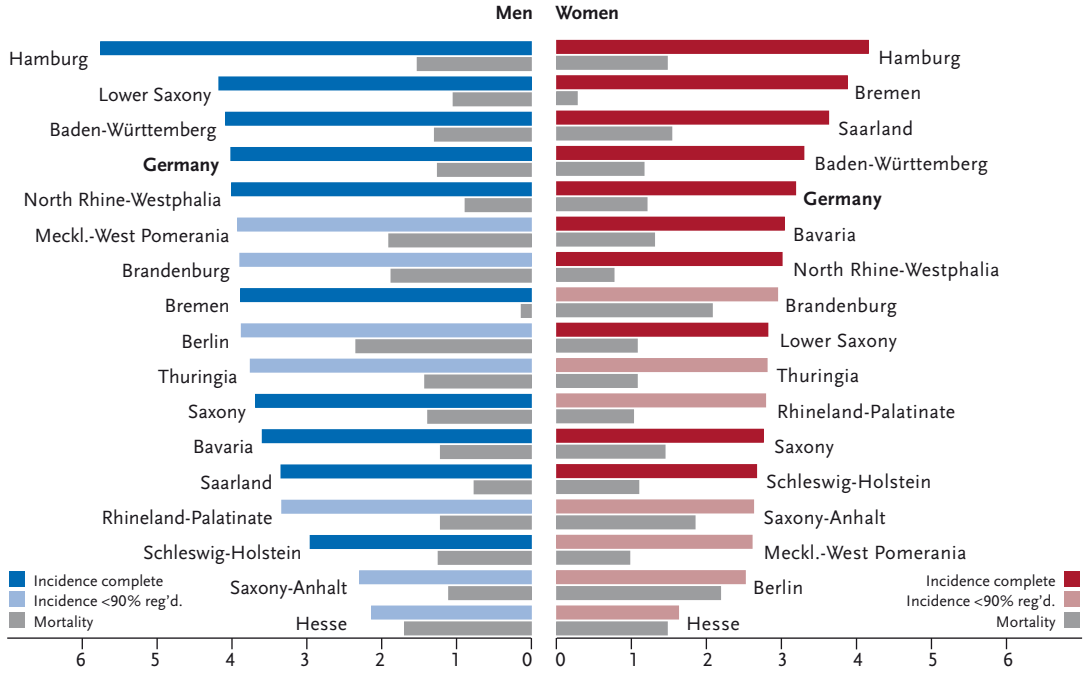
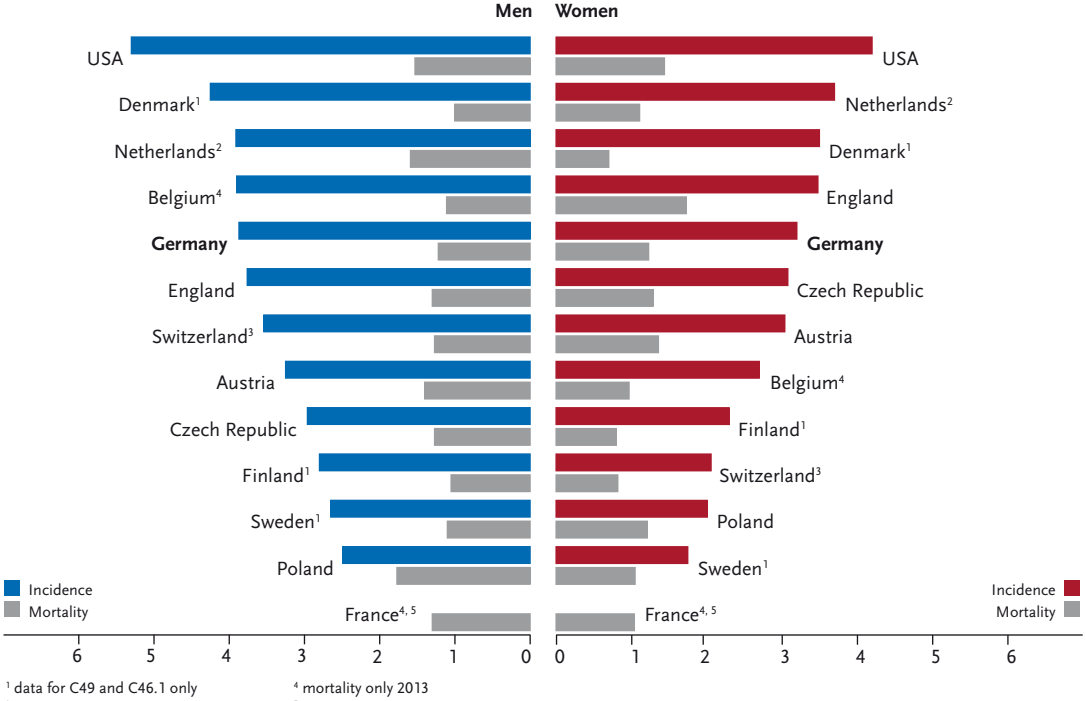


Figure 3.13.6
International comparison of age-standardised incidence and mortality rates, by sex, ICD-10 C46–C49, 2013–2014 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)



[1] data for C49 and C46.1 only
[2] data incl. C38
[3] data for C47 and C49 only
[4] mortality only 2013
[5] no data for incidence