3.15 Mesothelioma

Table 3.15.1
Overview of key epidemiological parameters for Germany, ICD-10 C45

Incidence		2019		2020		
	Women	Men	Women	Men		
Incident cases	330	1,270	290	1,190		
Crude incidence rate [1]	0.8	3.1	0.7	2.9		
Age-standardised incidence rate [1, 2]	0.4	1.6	0.3	1.5		
Median age at diagnosis	76	77	76	77		
Mortality		**2019**		**2020**		**2021**
	Women	Men	Women	Men	Women	Men
Deaths	274	1,156	263	1,054	242	1,046
Crude mortality rate [1]	0.7	2.8	0.6	2.6	0.6	2.5
Age-standardised mortality rate [1, 2]	0.3	1.5	0.3	1.3	0.2	1.3
Median age at death	78	78	78	79	80	79
Prevalence and survival rates		**5 years**		**10 years**		**25 years**
	Women	Men	Women	Men	Women	Men
Prevalence	500	1,500	800	1,700	1,700	2,200
Absolute survival rate (2019 – 2020) [3]	12	7	8	3		
Relative survival rate (2019 – 2020) [3]	14	8	10	5		

[1] per 100,000 persons [2] age-standardised (old European Standard) [3] in percent

Epidemiology

Mesothelioma is a rare tumour of the soft tissue that mainly occurs in older men. The most common localisation is the pleura; the disease is rarely diagnosed in the peritoneum. In 2020, around 290 women and 1,190 men were diagnosed in Germany. In the last 10 years, the incidence and mortality rates in Germany have been falling continuously, and the absolute numbers have also recently declined slightly. Comparatively high incidence rates can be seen today in north-west Germany at (former) shipbuilding sites, for example in Bremen and neighbouring regions and in some cases also at steel industry sites, such as in the Ruhr area. Occasionally, regions around former production sites for asbestos products are also affected. With relative 5-year survival rates of 14% for women and 8% for men, mesothelioma is one of the tumour diseases with a very unfavourable prognosis; accordingly, the number of annual deaths (1,288 in 2021) is only slightly lower than the number of new cases.

Risk factors

Asbestos exposure is responsible for the majority of newly diagnosed mesotheliomas. The risk depends primarily on the type of fibre and the amount of asbestos inhaled. The processing of asbestos was generally banned in Germany in 1993 and later throughout the EU. However, a decline in the number of mesothelioma cases is only expected with a time lag, as there can be a period of 30 to 50 years between exposure and the manifestation of the disease.

People who worked in the construction industry are primarily at an increased risk of asbestos exposure. In 2020, 824 asbestos-related mesotheliomas were recognised as occupational diseases by the employers' liability insurance associations. In addition to occupational exposure, contact with asbestos can also occur in the private sphere, e.g. when washing asbestos-contaminated clothing or during private demolition and renovation work. Weakly bound asbestos with a high fibre content is particularly dangerous. In contrast, asbestos cement ("Eternit"), which can still be found in or on many buildings today, is considered largely harmless as long as it remains intact.

Exposure to other fibres such as erionite or radiotherapy plays a subordinate role.

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

Figure 3.15.1a
Age-standardised incidence and mortality rates by sex, ICD-10 C45, Germany 1999 – 2020/2021
per 100,000 (old European Standard)

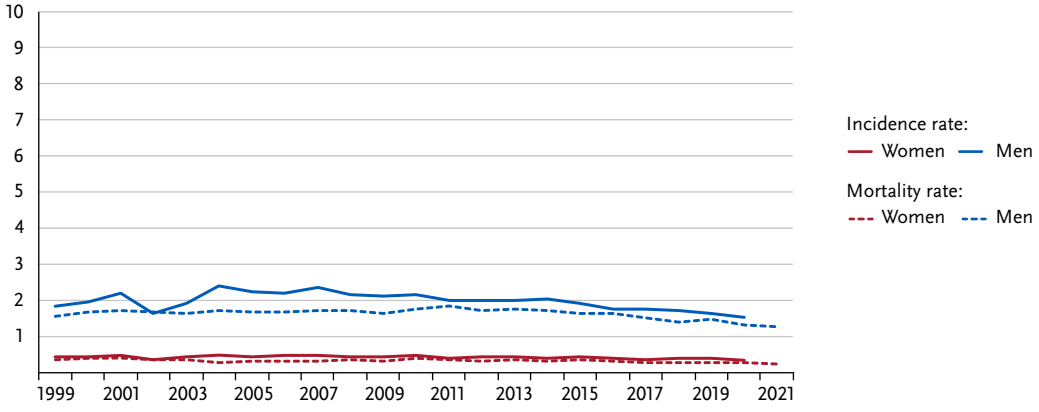


Figure 3.15.1b
Absolute numbers of incident cases and deaths by sex, ICD-10 C45, Germany 1999 – 2020/2021

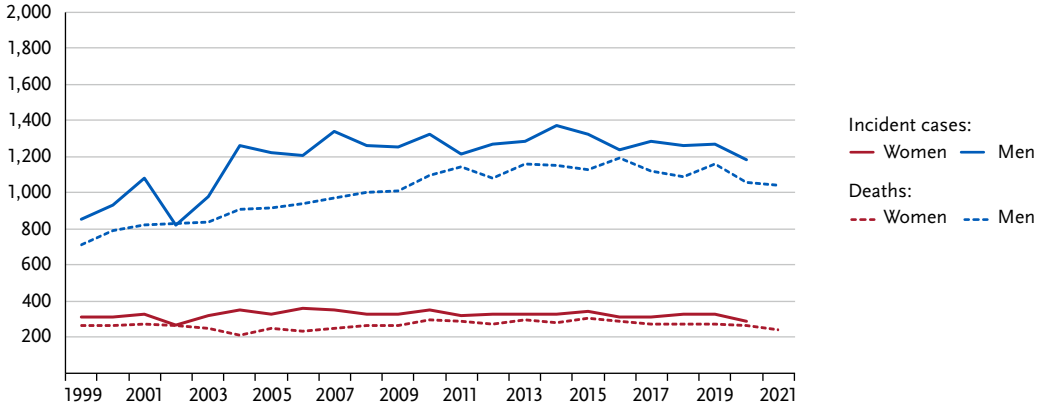


Figure 3.15.2
Age-specific incidence rates by sex, ICD-10 C45, Germany 2019 – 2020
per 100,000

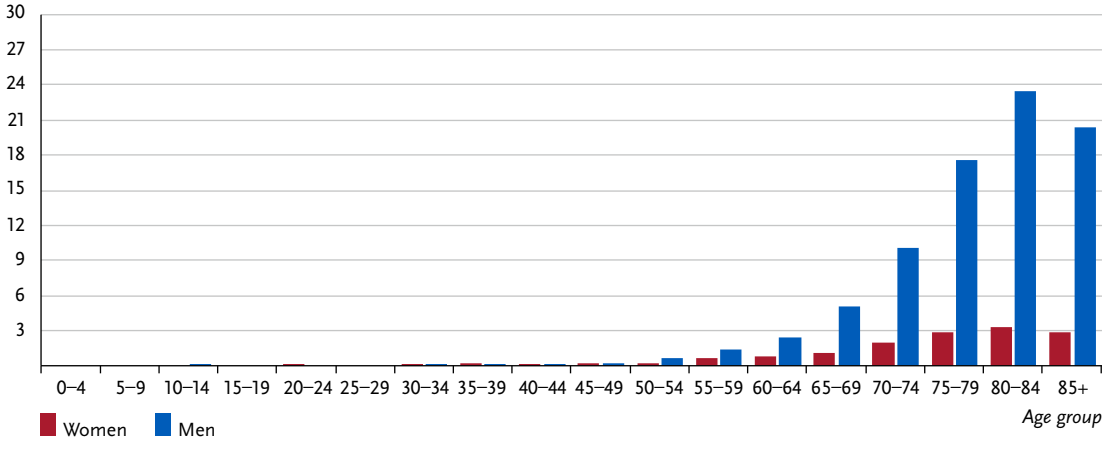


Table 3.15.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C45, database 2019

	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 46,400)	0.1 %	(1 in 1,600)	< 0.1 %	(1 in 253,600)	0.1 %	(1 in 1,900)
45 years	< 0.1 %	(1 in 34,400)	0.1 %	(1 in 1,700)	< 0.1 %	(1 in 82,500)	0.1 %	(1 in 1,900)
55 years	< 0.1 %	(1 in 12,800)	0.1 %	(1 in 1,700)	< 0.1 %	(1 in 22,400)	0.1 %	(1 in 1,900)
65 years	< 0.1 %	(1 in 6,600)	0.1 %	(1 in 1,900)	< 0.1 %	(1 in 7,800)	< 0.1 %	(1 in 2,000)
75 years	< 0.1 %	(1 in 3,700)	< 0.1 %	(1 in 2,400)	< 0.1 %	(1 in 3,700)	< 0.1 %	(1 in 2,400)
Lifetime risk			0.1 %	(1 in 1,600)			0.1 %	(1 in 1,900)
Men aged	**in the next 10 years**		**ever**		**in the next 10 years**		**ever**	
35 years	< 0.1 %	(1 in 141,500)	0.3 %	(1 in 400)	< 0.1 %	(1 in 188,400)	0.2 %	(1 in 430)
45 years	< 0.1 %	(1 in 17,600)	0.3 %	(1 in 400)	< 0.1 %	(1 in 25,500)	0.2 %	(1 in 420)
55 years	< 0.1 %	(1 in 5,000)	0.3 %	(1 in 390)	< 0.1 %	(1 in 6,600)	0.2 %	(1 in 420)
65 years	0.1 %	(1 in 1,400)	0.3 %	(1 in 390)	0.1 %	(1 in 1,500)	0.2 %	(1 in 400)
75 years	0.2 %	(1 in 610)	0.2 %	(1 in 430)	0.2 %	(1 in 660)	0.2 %	(1 in 440)
Lifetime risk			0.2 %	(1 in 410)			0.2 %	(1 in 430)

Figure 3.15.3
Distribution of UICC stages at diagnosis by sex, ICD-10 C45, Germany 2019-2020
(top: incl. missing data and DCO cases; bottom: valid values only)

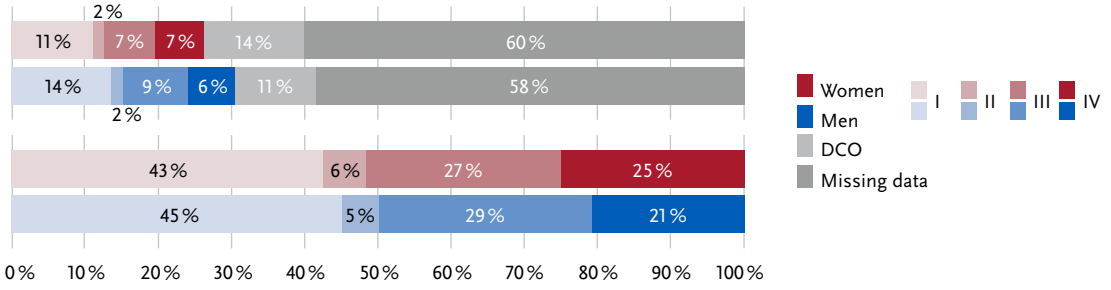


Figure 3.15.4
Absolute and relative survival rates up to 10 years after diagnosis, by sex, ICD-10 C45, Germany 2019 – 2020

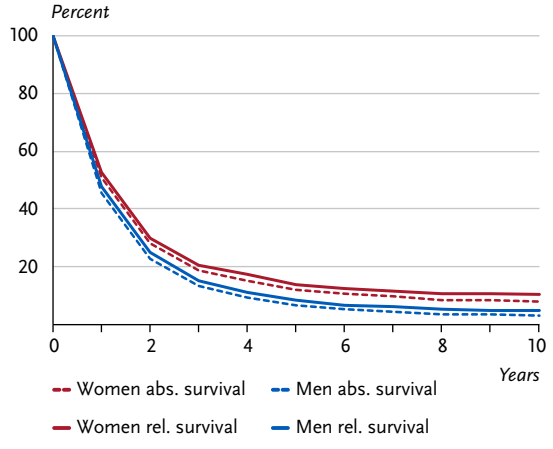


Figure 3.15.5
Relatives 5-year survival by site and sex, ICD-10 C45, Germany 2019 – 2020

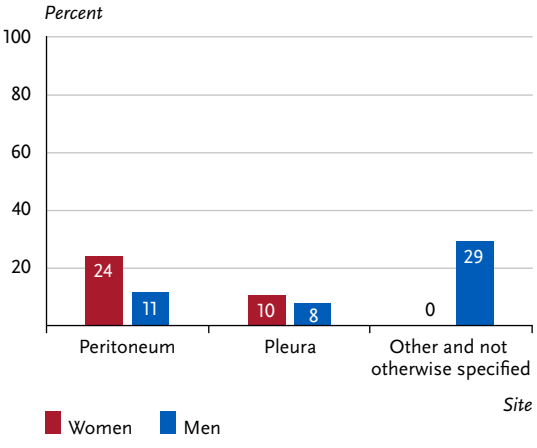


Figure 3.15.6
Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C45, 2019 – 2020
per 100,000 (old European Standard)

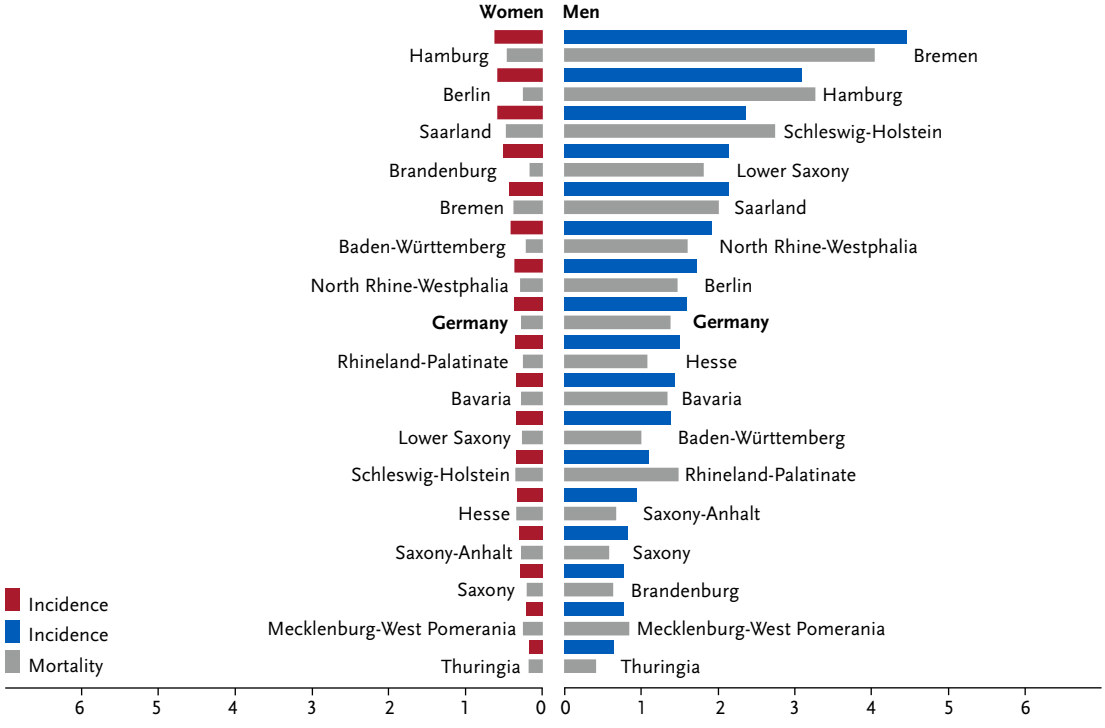
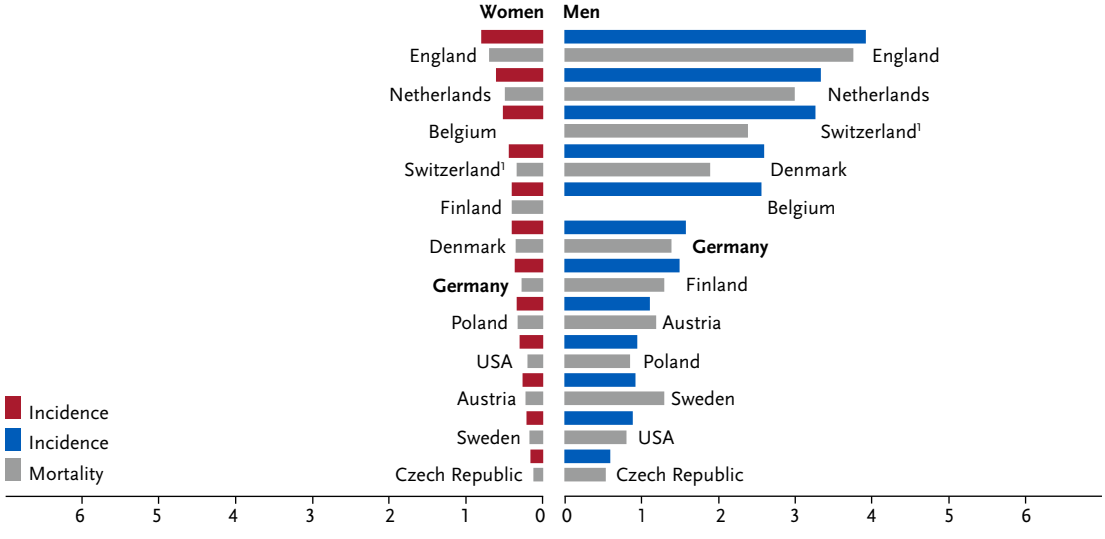


Figure 3.15.7
International comparison of age-standardised incidence and mortality rates by sex, ICD-10 C45, 2019 – 2020 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)



[1] Switzerland: incidence data for 2015 – 2019