3.8 Liver

Table 3.8.1
Overview of key epidemiological parameters for Germany, ICD-10 C22

Incidence		2017		2018	Prediction for 2022	
	Women	Men	Women	Men	Women	Men
Incident cases	3,030	6,350	2,820	6,690	3,100	7,400
Crude incidence rate [1]	7.2	15.6	6.7	16.3	7.4	17.9
Age-standardised incidence rate [1, 2]	3.8	9.9	3.5	10.3	3.7	10.8
Median age at diagnosis	75	71	75	71		
Mortality		**2017**		**2018**		**2019**
	Women	Men	Women	Men	Women	Men
Deaths	2,697	5,213	2,689	5,301	2,649	5,519
Crude mortality rate [1]	6.4	12.8	6.4	13.0	6.3	13.5
Age-standardised mortality rate [1, 2]	3.1	7.8	3.0	7.7	3.0	7.9
Median age at death	77	74	77	74	77	74
Prevalence and survival rates		**5 years**		**10 years**		**25 years**
	Women	Men	Women	Men	Women	Men
Prevalence	3,900	9,300	5,700	12,000	7,900	14,600
Absolute survival rate (2017–2018) [3]	12 (7–18)	15 (13–20)	9 (4–14)	7 (6–11)		
Relative survival rate (2017–2018) [3]	14 (8–21)	18 (16–24)	12 (5–21)	11 (9–15)		

[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

Although liver cancer is relatively rare, it is one of the most common causes of cancer death due to its poor prognosis. In Germany, there are currently around 9,500 new cases per year, with almost 8,000 deaths. One in 190 women and one in 80 men in Germany will develop a malignant liver tumour in their lifetime. The relative 5-year survival rates of patients with the disease are around 14% for women and 18% for men. About 65% of malignant liver tumours arise from liver cells (hepatocellular carcinoma) and 26% from cells of the intrahepatic bile ducts (cholangiocarcinoma). The latter proportion is higher in women.

Since 1999, the age-standardised incidence and mortality rates have risen slightly in both sexes. For about 5 years, however, there have been signs of a decline in both rates for men.

The incidence and mortality rates in the north-western federal states are somewhat lower than in the rest of Germany. Internationally, France has high incidence and mortality rates, especially among men.

Risk factors and early detection

The main risk factor for liver cancer (hepatocellular carcinoma) is liver cirrhosis. In Germany, its most common causes are chronic hepatitis C virus infection and high alcohol consumption. Non-alcohol-related fatty liver diseases, which also increase the risk of liver cancer, are becoming more important. They can also be a consequence of diabetes mellitus or metabolic syndrome. The trigger of these is in turn very often obesity.

A chronic hepatitis B virus infection is a risk factor for liver cancer, even without liver cirrhosis. This applies mainly to Africa and South-East Asia. Smoking also increases the risk of disease. Hereditary metabolic diseases such as haemochromatosis, porphyria or alpha-1-antitrypsin deficiency can also increase the risk of liver cancer.

In addition to the risk factors mentioned, chronic inflammation or stones in the bile ducts can increase the risk of carcinoma of the bile ducts within the liver. There is no screening for the general population as part of the statutory screening services. Patients with liver cirrhosis or chronic hepatitis should be offered regular ultrasound checks.

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

Figure 3.8.1a
Age-standardised incidence and mortality rates by sex, ICD-10 C22, Germany 1999–2018/2019, projection (incidence) through 2022
per 100,000 (old European Standard)

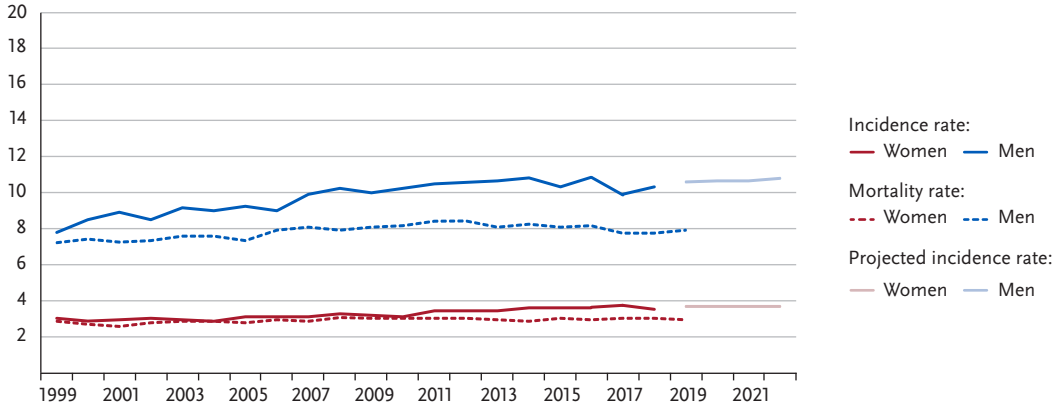

Figure 3.8.1b
Absolute numbers of incident cases and deaths by sex, ICD-10 C22, Germany 1999–2018/2019, projection (incidence) through 2022

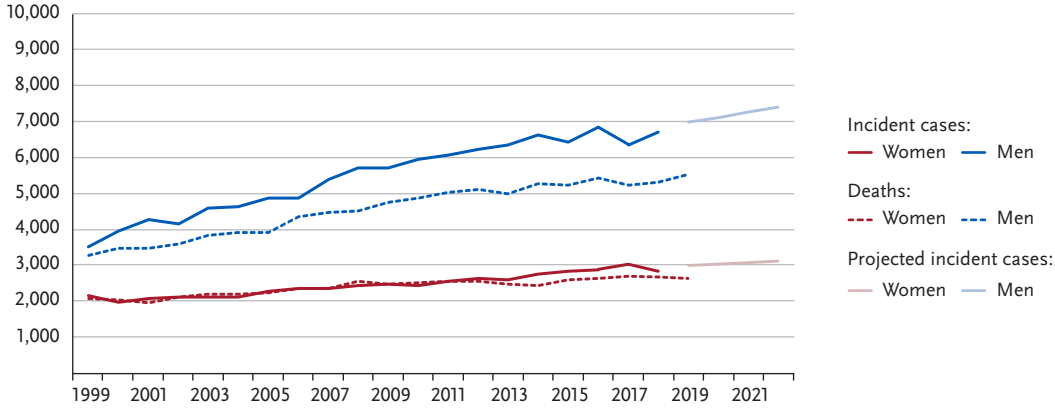

Figure 3.8.2
Age-specific incidence rates by sex, ICD-10 C22, Germany 2017–2018
per 100,000

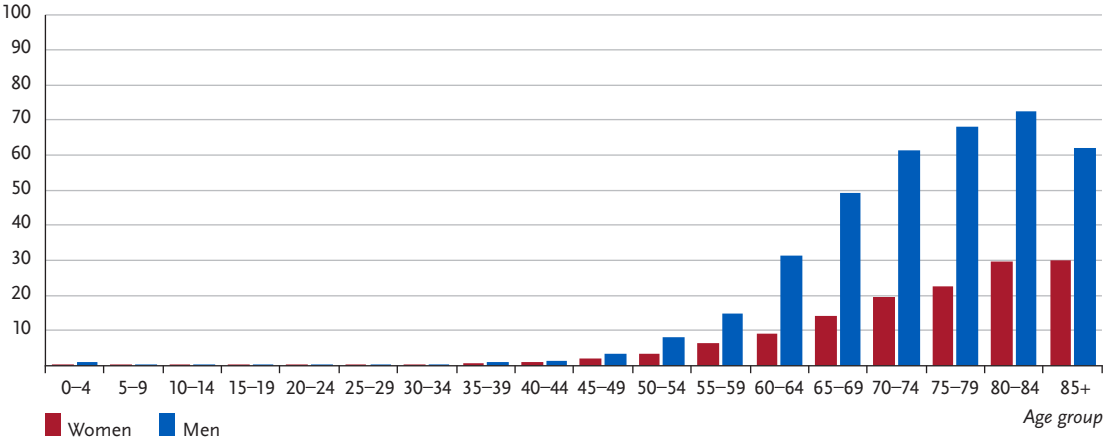

Table 3.8.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C22, database 2018

	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 12,500)	0.5 %	(1 in 190)	< 0.1 %	(1 in 20,700)	0.5 %	(1 in 200)
45 years	< 0.1 %	(1 in 3,700)	0.5 %	(1 in 190)	< 0.1 %	(1 in 5,700)	0.5 %	(1 in 200)
55 years	0.1 %	(1 in 1,400)	0.5 %	(1 in 200)	0.1 %	(1 in 1,900)	0.5 %	(1 in 200)
65 years	0.2 %	(1 in 650)	0.4 %	(1 in 220)	0.1 %	(1 in 710)	0.5 %	(1 in 210)
75 years	0.2 %	(1 in 470)	0.3 %	(1 in 300)	0.2 %	(1 in 460)	0.4 %	(1 in 270)
Lifetime risk			0.5 %	(1 in 190)			0.5 %	(1 in 200)
Men aged	**in the next 10 years**		**ever**		**in the next 10 years**		**ever**	
35 years	< 0.1 %	(1 in 7,700)	1.3 %	(1 in 80)	< 0.1 %	(1 in 19,000)	1.0 %	(1 in 98)
45 years	0.1 %	(1 in 1,700)	1.3 %	(1 in 80)	< 0.1 %	(1 in 2,700)	1.0 %	(1 in 97)
55 years	0.2 %	(1 in 430)	1.2 %	(1 in 81)	0.2 %	(1 in 660)	1.0 %	(1 in 97)
65 years	0.5 %	(1 in 200)	1.1 %	(1 in 90)	0.4 %	(1 in 270)	1.0 %	(1 in 100)
75 years	0.5 %	(1 in 180)	0.8 %	(1 in 130)	0.5 %	(1 in 190)	0.8 %	(1 in 130)
Lifetime risk			1.2 %	(1 in 80)			1.0 %	(1 in 99)

Figure 3.8.3
Distribution of UICC stages at diagnosis by sex, ICD-10 C22, Germany 2017–2018
top: according to 7th edition TNM; bottom: according to 8th edition TNM.
The DCO proportion was 17%. For 68% of the remaining cases, no UICC stage could be assigned.

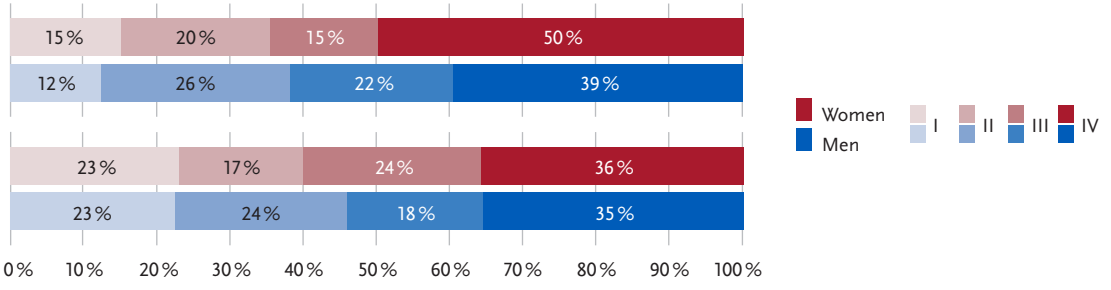

Figure 3.8.4
Absolute and relative survival rates up to 10 years after diagnosis by sex, ICD-10 C22, Germany 2017–2018

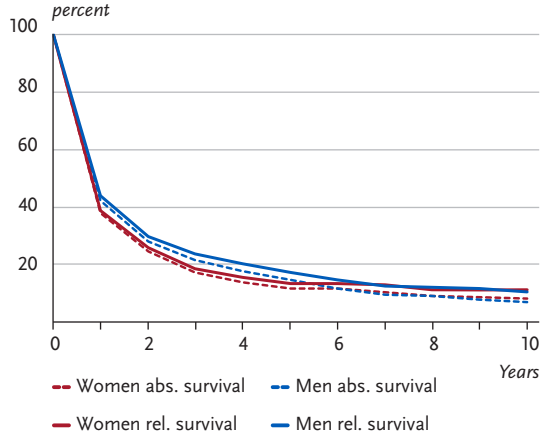

Figure 3.8.5
Relative 5-year survival by UICC stage (7th edition TNM) and sex, ICD-10 C22, Germany 2016–2018

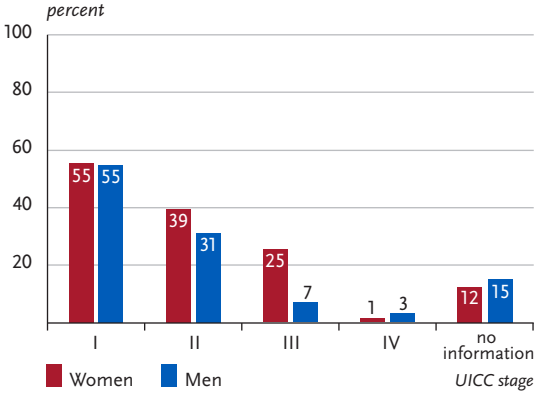

Figure 3.8.6
Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C22, 2017–2018
per 100,000 (old European Standard)

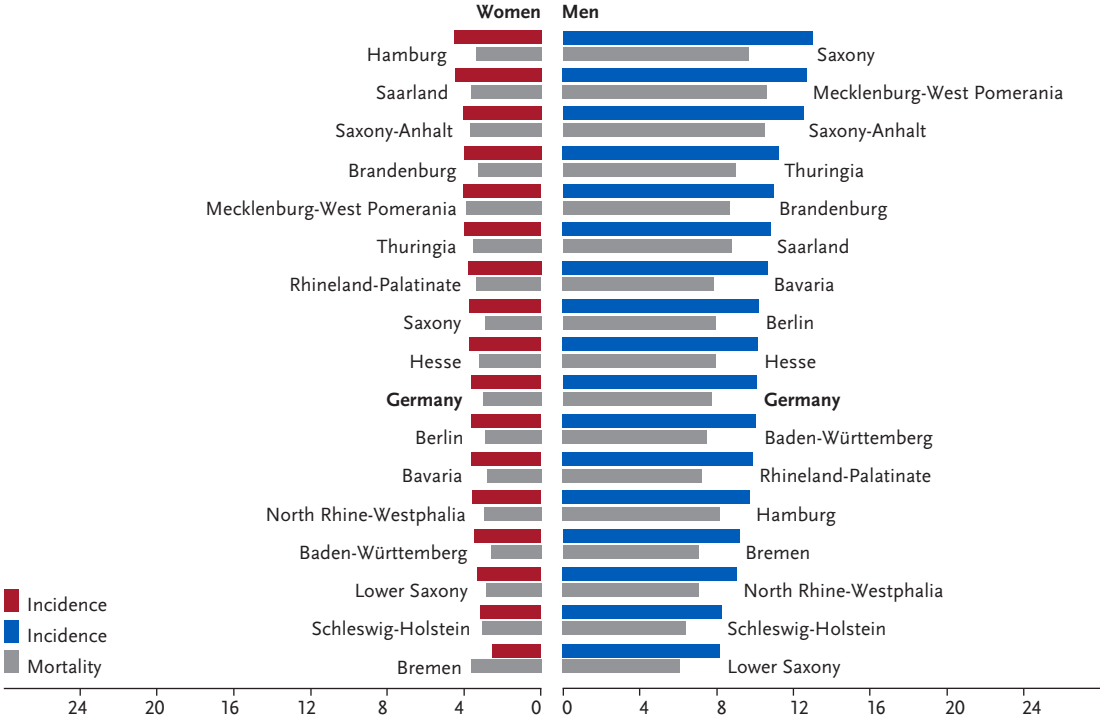

Figure 3.8.7
International comparison of age-standardised incidence and mortality rates by sex, ICD-10 C22, 2017–2018 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)