

3.6 Liver

Table 3.6.1
Overview of key epidemiological parameters for Germany, ICD-10 C22

	2009		2010		Prediction for 2014	
	Men	Women	Men	Women	Men	Women
Incident cases	5,630	2,390	5,850	2,480	6,200	2,700
Crude incidence rate ¹	14.0	5.7	14.6	5.9	15.7	6.6
Standardised incidence rate ^{1,2}	9.9	3.1	10.1	3.2	10.0	3.3
Median age at diagnosis	70	74	70	74		
Deaths	4,738	2,493	4,856	2,534		
Crude mortality rate ¹	11.8	6.0	12.1	6.1		
Standardised mortality rate ^{1,2}	8.1	3.0	8.1	3.0		
5-year prevalence	7,400	2,700	7,600	2,800		
Absolute 5-year survival rate (2009-2010) ³			13 (10-17)	11 (5-16)		
Relative 5-year survival rate (2009-2010) ³			15 (11-20)	12 (6-19)		

¹ per 100,000 persons ² age-standardised (European standard) ³ in percentages (lowest and highest value of the included German federal states)

Epidemiology

Liver cancer is relatively uncommon, but in view of its poor prognosis it ranks among the ten most frequent causes of death due to cancer for both men and women. There are approximately 8,300 new cases in Germany every year, and roughly the same number of deaths. The median age at diagnosis is 70 years for men and 74 years for women. Only about 4 % of cases are diagnosed before 45 years of age. One in 86 men and one in 200 women in Germany develop a malignant liver tumour in the course of their life.

Some 65 % of malignant tumours develop from liver cells (hepatocellular carcinoma), and almost 25 % from cells in the intrahepatic bile ducts (cholangiocarcinoma). This proportion is significantly higher for women.

Since 1980, the mortality rate for men has risen steadily by a total of 52 %, even after age-standardisation, while it has remained more or less unchanged for women in the same period. The increased mortality rate in men was independent of the histology of the tumour. The age-standardised incidence rate for liver cancer in men has also increased slightly over the past 10 years.

Currently, incidence and mortality rates in the north-western federal states are somewhat lower than in the rest of Germany.

The survival prospects for liver cancer depend on the stage of the tumour at diagnosis and on the condition of the liver (cirrhosis). Only just over 10 % of patients survive the first five years after diagnosis.

Risk factors and early detection

Proven risk factors for liver cancer are chronic infection with hepatitis-B or hepatitis-C virus. There is also a relationship between regular high alcohol consumption and the risk of developing liver cancer. Foodstuffs contaminated with aflatoxin B₁ (produced by the fungi *Aspergillus parasiticus* and *A. flavus*) constitute a further risk factor. Tobacco consumption is also associated with an increased risk. From the lifestyle-related risk factors, type 2 diabetes mellitus and obesity are also associated with an increased risk of liver cancer. Finally, hereditary metabolic diseases such as haemochromatosis can also increase this risk.

Early detection examinations for the general population are not included in the statutory health insurance. It is recommended that regular examinations should be undertaken by all patients with cirrhosis of the liver, with long-standing hepatitis infections, and with nonalcoholic fatty liver disease. Ultrasound examination is suitable for this, while blood tests (for alpha-fetoprotein) are only of minor relevance.

Figure 3.6.1a
Age-standardised incidence and mortality rates, by sex,
ICD-10 C22, Germany 1999 – 2010
per 100,000 (European standard)

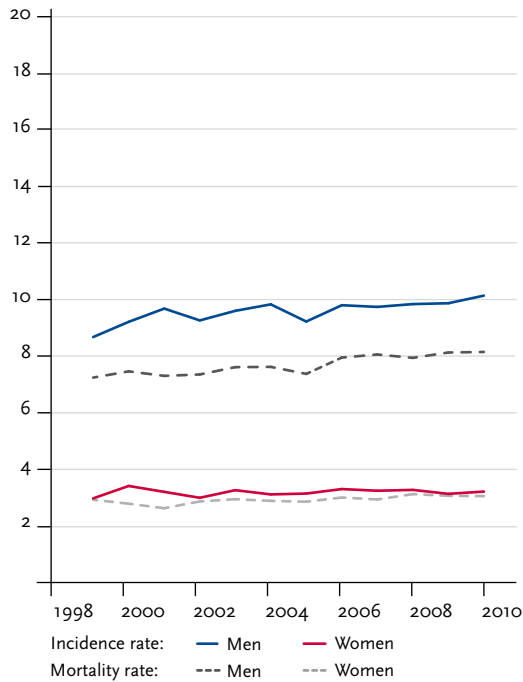


Figure 3.6.1b
Absolute numbers of incident cases and deaths, by sex,
ICD-10 C22, Germany 1999 – 2010

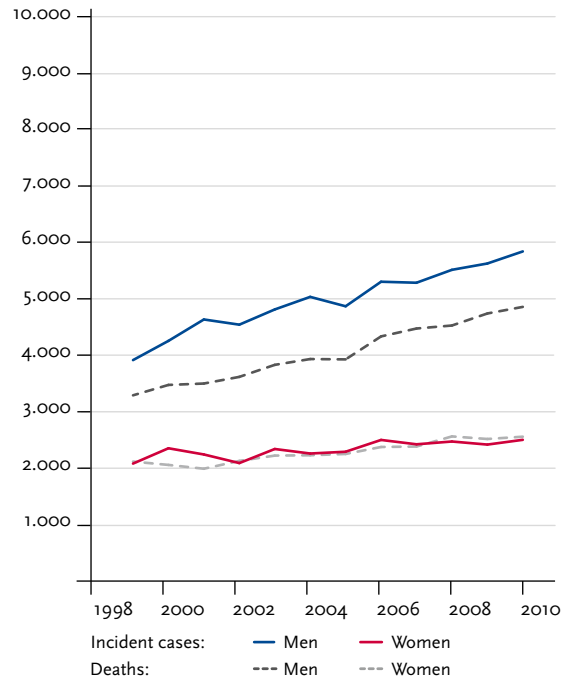


Figure 3.6.2
Age-specific incidence rates by sex, ICD-10 C22, Germany 2009 – 2010
per 100,000

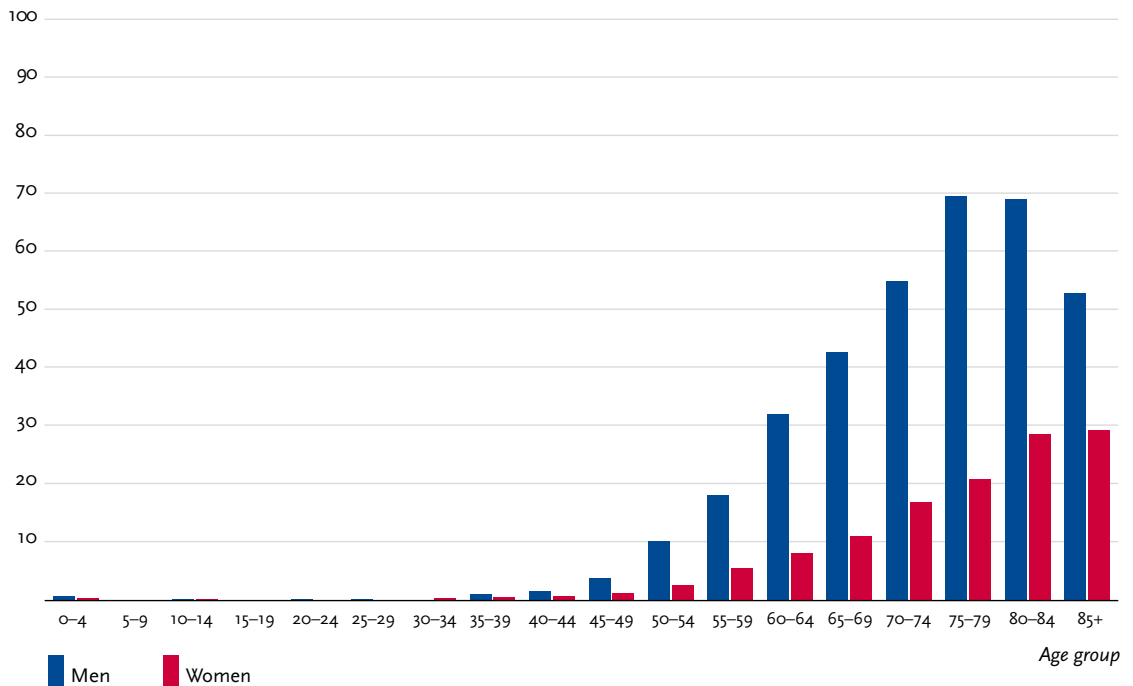


Table 3.6.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C22, database 2010

Men aged	Risk of developing cancer				Mortality risk			
	in the next ten years		ever		in the next ten years		ever	
35 years	<0.1%	(1 in 6,700)	1.2%	(1 in 85)	<0.1%	(1 in 15,000)	1.0%	(1 in 98)
45 years	0.1%	(1 in 1,400)	1.2%	(1 in 85)	<0.1%	(1 in 2,100)	1.0%	(1 in 98)
55 years	0.3%	(1 in 390)	1.2%	(1 in 87)	0.2%	(1 in 590)	1.0%	(1 in 98)
65 years	0.4%	(1 in 220)	1.0%	(1 in 100)	0.4%	(1 in 260)	0.9%	(1 in 110)
75 years	0.5%	(1 in 190)	0.7%	(1 in 140)	0.5%	(1 in 200)	0.7%	(1 in 140)
Lifetime risk			1.2%	(1 in 86)			1.0%	(1 in 100)
Women aged	in the next ten years		ever		in the next ten years		ever	
35 years	<0.1%	(1 in 22,000)	0.5%	(1 in 200)	<0.1%	(1 in 22,000)	0.5%	(1 in 190)
45 years	<0.1%	(1 in 4,900)	0.5%	(1 in 200)	<0.1%	(1 in 5,900)	0.5%	(1 in 190)
55 years	0.1%	(1 in 1,400)	0.4%	(1 in 210)	0.1%	(1 in 1,800)	0.5%	(1 in 200)
65 years	0.1%	(1 in 740)	0.4%	(1 in 230)	0.1%	(1 in 780)	0.5%	(1 in 210)
75 years	0.2%	(1 in 510)	0.3%	(1 in 290)	0.2%	(1 in 430)	0.4%	(1 in 250)
Lifetime risk			0.5%	(1 in 200)			0.5%	(1 in 190)

Figure 3.6.3
Distribution of T-stages at first diagnosis by sex
Not presented due to the large proportion of missing data.

Figure 3.6.4a
Absolute survival rates up to 5 years after first diagnosis,
by sex, ICD-10 C22, Germany 2009 – 2010

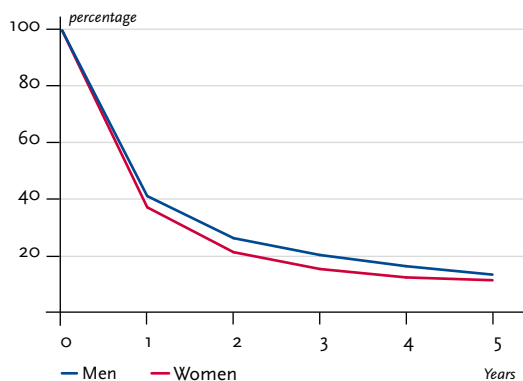


Figure 3.6.4b
Relative survival rates up to 5 years after first diagnosis,
by sex, ICD-10 C22, Germany 2009 – 2010

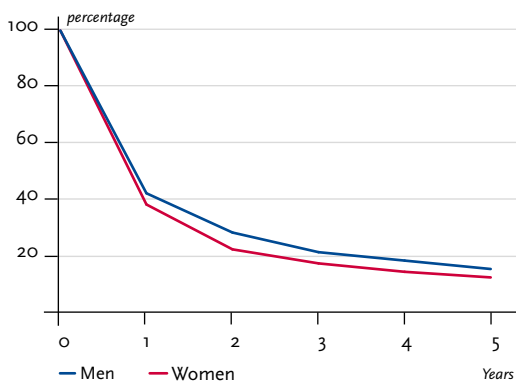


Figure 3.6.5
Registered age-standardised incidence and mortality rates in German federal states, by sex,
ICD-10 C22, 2009 – 2010
per 100,000 (European standard)

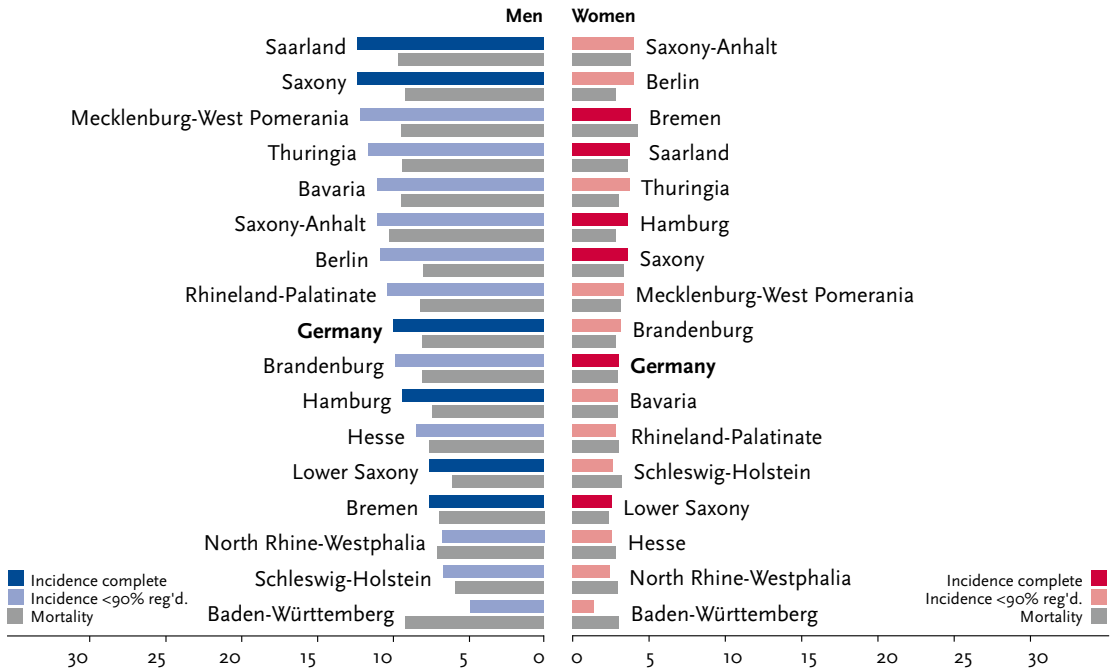


Figure 3.6.6
International comparison of age-standardised incidence and mortality rates, by sex,
ICD-10 C22, 2009 – 2010 or latest available year (details and sources, see appendix)
per 100,000 (European standard)

