

3.9 Gallbladder and biliary tract

Table 3.9.1
Overview of key epidemiological parameters for Germany, ICD-10 C23 – C24

Incidence	2019		2020			
	Women	Men	Women	Men		
Incident cases	2,630	2,580	2,600	2,530		
Crude incidence rate ¹	6.2	6.3	6.2	6.2		
Age-standardised incidence rate ^{1,2}	3.0	3.7	2.9	3.6		
Median age at diagnosis	77	75	76	75		
Mortality	2019		2020		2021	
	Women	Men	Women	Men	Women	Men
Deaths	2,031	1,691	2,102	1,738	1,992	1,683
Crude mortality rate ¹	4.9	4.1	5.0	4.3	4.8	4.1
Age-standardised mortality rate ^{1,2}	2.1	2.3	2.1	2.3	2.0	2.3
Median age at death	79	76	80	77	80	76
Prevalence and survival rates	5 years		10 years		25 years	
	Women	Men	Women	Men	Women	Men
Prevalence	3,900	3,900	5,900	5,600	9,100	7,600
Absolute survival rate (2019–2020) ³	16 (12–22)	19 (11–22)	11 (9–16)	13 (8–16)		
Relative survival rate (2019–2020) ³	19 (15–25)	23 (14–26)	16 (12–22)	20 (12–24)		

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

In Germany, around 5,130 new cases of malignant tumours of the gallbladder (approx. 28%) and the bile ducts outside the liver (72%) were diagnosed in 2020. The proportion of bile duct tumours outside the liver was significantly higher among men (81%) than among women (63%). Histologically, the tumours were predominantly adenocarcinomas. Of the tumours of the bile ducts, around 9% were so-called Klatskin tumours.

The risk of developing these cancers increases continuously with age. One in 200 women and one in 200 men will develop a tumour of the gallbladder or bile ducts in the course of their lives.

Since 1999, the age-standardised incidence and mortality rates among women have fallen, particularly in relation to cancer of the gallbladder. Among men, the incidence has remained largely constant, with a slight decline in recent years. The age-standardised mortality rate fell until around 2009, only to rise again slightly thereafter.

The relative 5-year survival rates for malignant tumours of the gallbladder and bile ducts are rather low at 19% for women and 23% for men.

Risk factors

The causes of bile duct and gallbladder carcinomas have not been clearly identified. The main common risk factor is age. Primary sclerosing cholangitis (PSC) is also considered a risk factor for both cancers. Other possible risk factors for bile duct carcinomas outside the liver are anomalies of the bile ducts (Caroli malformation), bile duct stones in the common bile duct, choledochal cysts and chronic inflammatory bowel disease. Large gallbladder polyps, inflammation of the gallbladder (and its consequence, the porcelain gallbladder), gallbladder stones and obesity can increase the risk of gallbladder cancer.

Screening examinations of the general population have not proven useful. Regular check-ups can be considered for certain risk groups (such as patients with gallbladder polyps, stones or PSC).

Figure 3.9.1a
 Age-standardised incidence and mortality rates by sex, ICD-10 C23 – C24, Germany 1999 – 2020/2021
 per 100,000 (old European Standard)

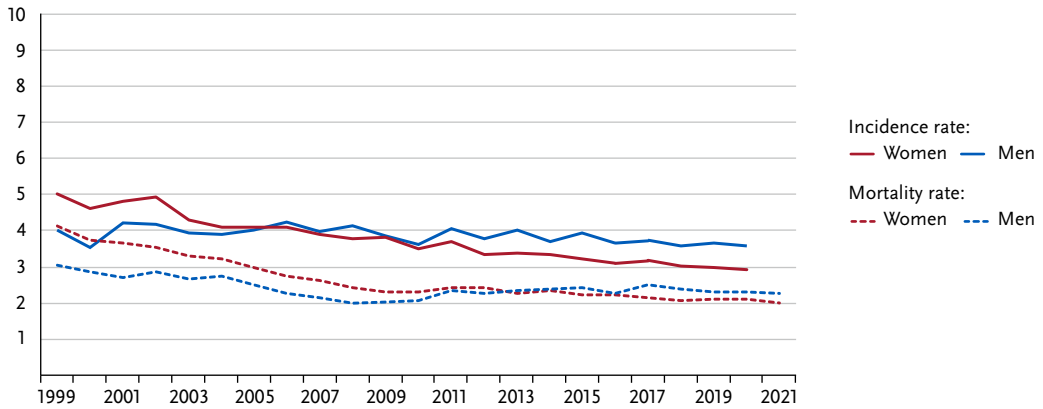


Figure 3.9.1b
 Absolute numbers of incident cases and deaths by sex, ICD-10 C23 – C24, Germany 1999 – 2020/2021

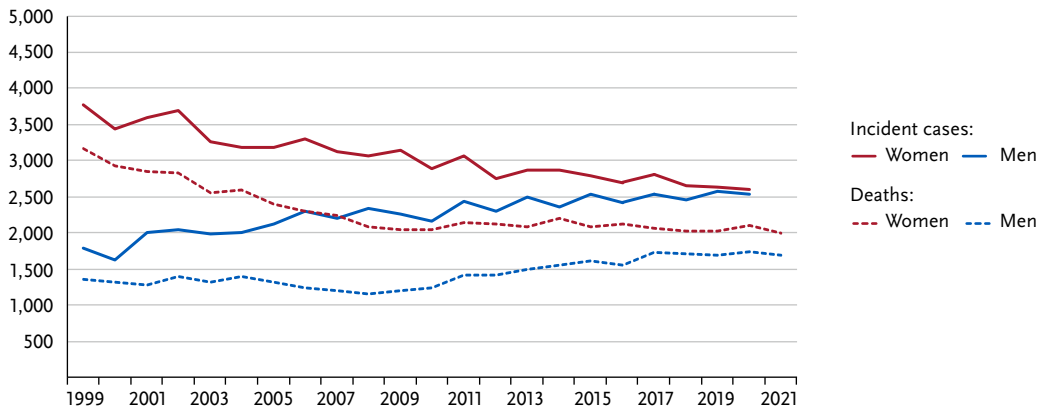


Figure 3.9.2
 Age-specific incidence rates by sex, ICD-10 C23 – C24, Germany 2019 – 2020
 per 100,000

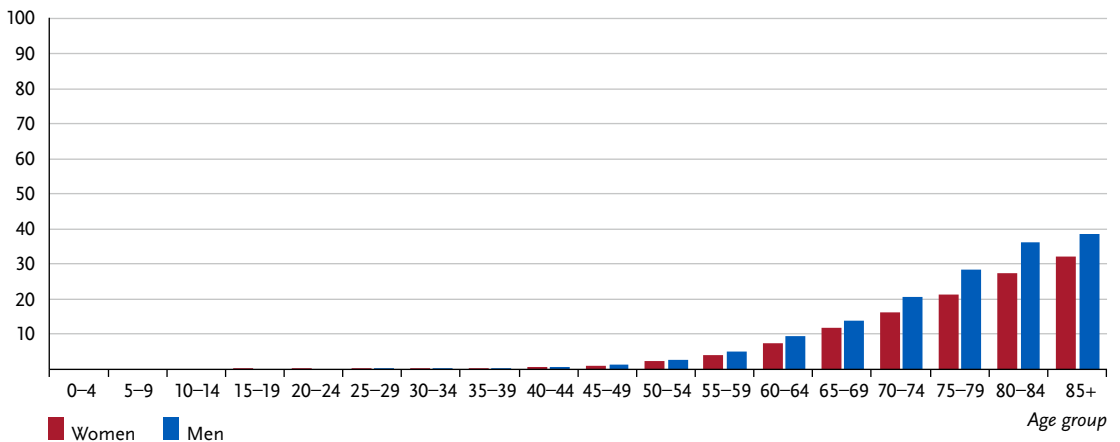


Table 3.9.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C23 – C24, database 2019

Women aged	Risk of developing cancer				Mortality risk			
	in the next 10 years		ever		in the next 10 years		ever	
35 years	< 0.1 %	(1 in 17,500)	0.5 %	(1 in 200)	< 0.1 %	(1 in 47,300)	0.4 %	(1 in 250)
45 years	< 0.1 %	(1 in 5,100)	0.5 %	(1 in 200)	< 0.1 %	(1 in 9,200)	0.4 %	(1 in 250)
55 years	0.1 %	(1 in 1,800)	0.5 %	(1 in 210)	< 0.1 %	(1 in 2,900)	0.4 %	(1 in 250)
65 years	0.1 %	(1 in 740)	0.5 %	(1 in 220)	0.1 %	(1 in 1,100)	0.4 %	(1 in 260)
75 years	0.2 %	(1 in 470)	0.4 %	(1 in 270)	0.2 %	(1 in 590)	0.3 %	(1 in 310)
Lifetime risk			0.5 %	(1 in 200)			0.4 %	(1 in 250)
Men aged	in the next 10 years		ever		in the next 10 years		ever	
35 years	< 0.1 %	(1 in 26,600)	0.5 %	(1 in 200)	< 0.1 %	(1 in 72,700)	0.3 %	(1 in 290)
45 years	< 0.1 %	(1 in 4,600)	0.5 %	(1 in 100)	< 0.1 %	(1 in 11,400)	0.3 %	(1 in 290)
55 years	0.1 %	(1 in 1,400)	0.5 %	(1 in 200)	< 0.1 %	(1 in 3,000)	0.3 %	(1 in 290)
65 years	0.2 %	(1 in 630)	0.5 %	(1 in 220)	0.1 %	(1 in 970)	0.3 %	(1 in 290)
75 years	0.3 %	(1 in 390)	0.4 %	(1 in 260)	0.2 %	(1 in 550)	0.3 %	(1 in 330)
Lifetime risk			0.5 %	(1 in 200)			0.3 %	(1 in 290)

Figure 3.9.3
Distribution of UICC stages at diagnosis by sex, ICD-10 C23 – C24.1, Germany 2019 – 2020
(top: incl. missing data and DCO cases; bottom: valid values only)

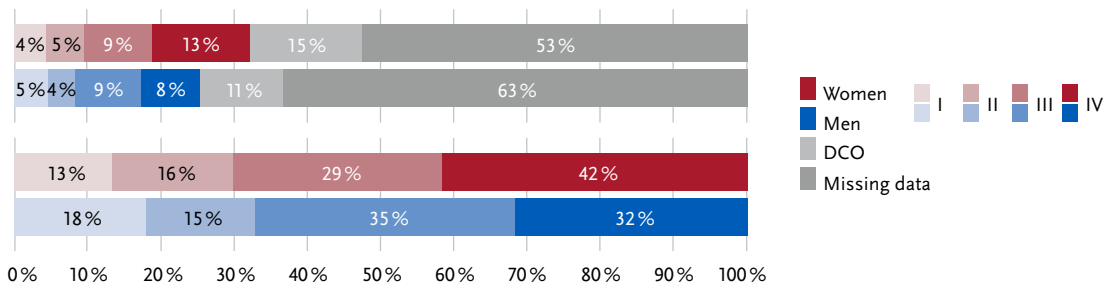


Figure 3.9.4
Absolute and relative survival rates up to 10 years after diagnosis, by sex, ICD-10 C23 – C24, Germany 2019 – 2020

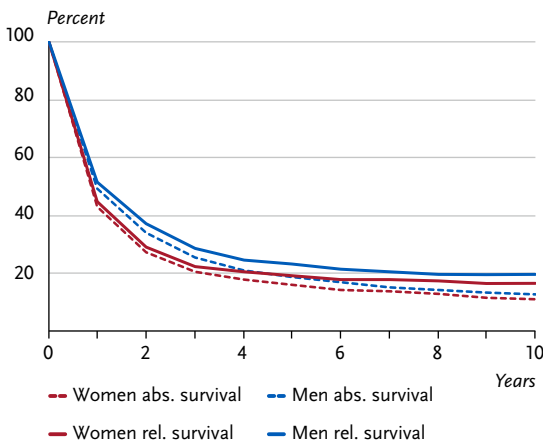


Figure 3.9.5
Relative 5-year survival by site and sex, ICD-10 C23 – C24, Germany 2019 – 2020

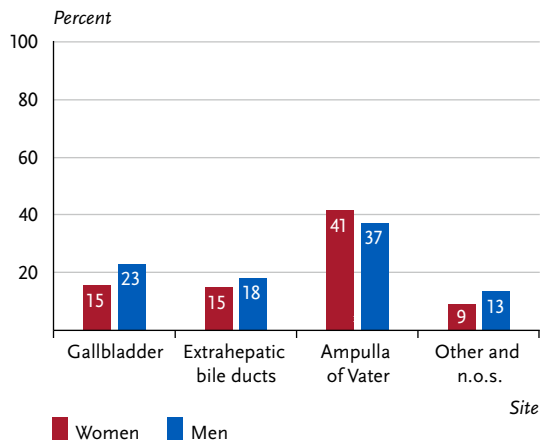


Figure 3.9.6
 Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C23 – C24, 2019 – 2020
 per 100,000 (old European Standard)

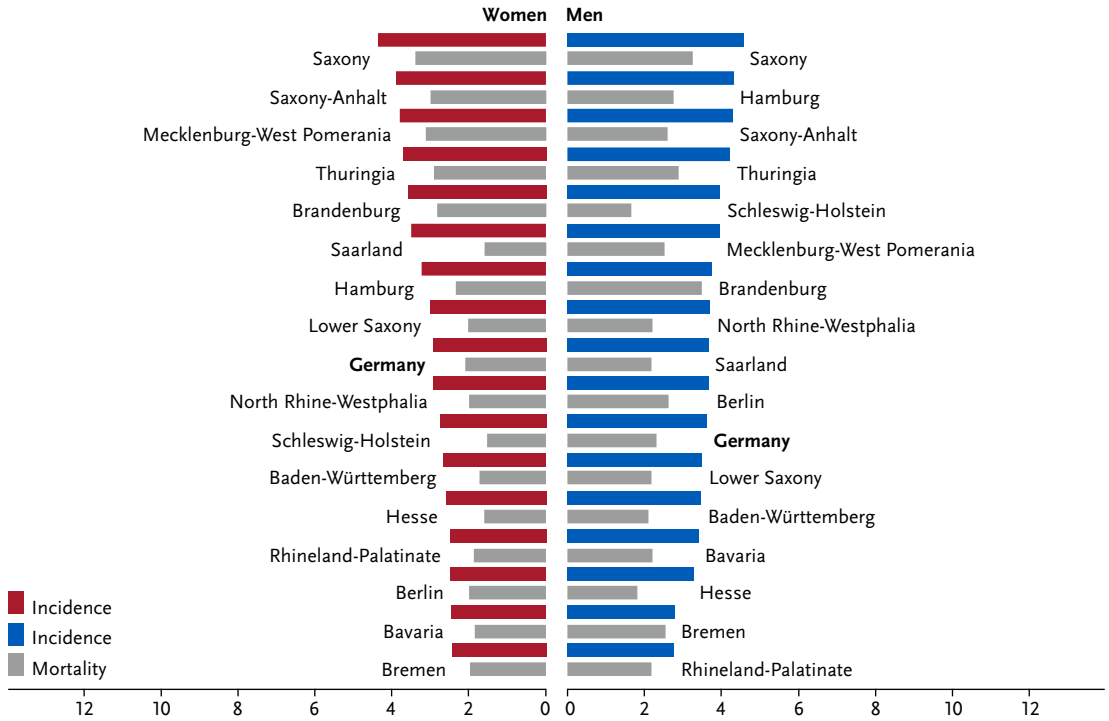
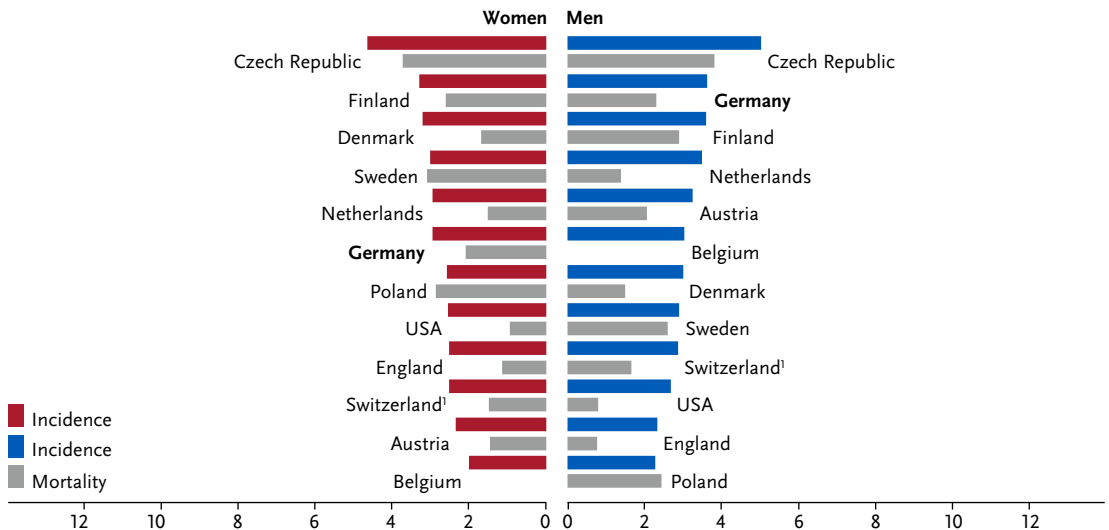


Figure 3.9.7
 International comparison of age-standardised incidence and mortality rates by sex,
 ICD-10 C23 – C24, 2019 – 2020 or latest available year (details and sources, see appendix)
 per 100,000 (old European Standard)



¹ Switzerland: incidence data for 2015 – 2019