

### 3.7 Gall bladder and biliary tract

**Table 3-7.1**  
Overview of key epidemiological parameters for Germany, ICD-10 C23–C24

	2011		2012		Prediction for 2016	
	Men	Women	Men	Women	Men	Women
Incident cases	2,350	3,050	2,170	2,780	2,400	2,600
Crude incidence rate <sup>1</sup>	6.0	7.4	5.5	6.8	5.9	6.2
Standardised incidence rate <sup>1,2</sup>	3.9	3.7	3.6	3.4	3.7	3.0
Median age at diagnosis	73	76	72	76		
Deaths	1,421	2,149	1,415	2,122		
Crude mortality rate <sup>1</sup>	3.6	5.2	3.6	5.2		
Standardised mortality rate <sup>1,2</sup>	2.4	2.4	2.3	2.4		
5-year prevalence	3,700	3,900	3,700	3,800		
	<i>after 5 years</i>		<i>after 10 years</i>			
Absolute survival rate (2011–2012) <sup>3</sup>	18 (9–41)	13 (7–19)	12 (5–17)	9 (2–15)		
Relative survival rate (2011–2012) <sup>3</sup>	21 (10–48)	15 (9–23)	18 (8–26)	14 (3–26)		

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

#### Epidemiology

In Germany, about 4,950 new cases of malignant tumours of the gall bladder (approx. 37 %) and of the biliary tract outside the liver (63 %) were diagnosed in 2012. Women develop gall bladder carcinomas more frequently, whereas tumours in the extra hepatic biliary tracts are diagnosed more frequently in men.

Histologically, the majority of these are adenocarcinomas. Other histological variants such as squamous-cell carcinomas or hybrid forms are rare. As with liver cancer, the risk of developing this type increases steadily with age. The lifetime risk is about 0.6 % for women and 0.5 % for men.

Since 1999 the age-standardised incidence rate in Germany has declined for women (especially for gall bladder carcinomas) and remained largely unchanged for men. However, because of demographic changes the absolute number of new cases has increased slightly among men. The age-standardised mortality rates for the same period have decreased constantly in both genders.

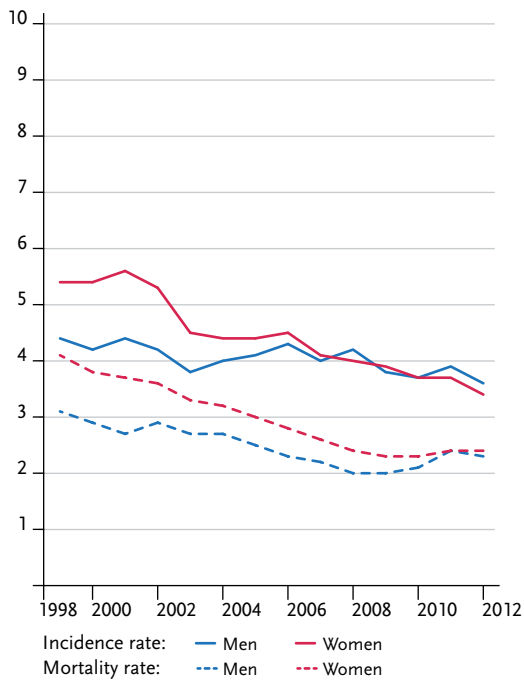
The survival prospects with malignant tumours of the gall bladder and biliary tract are generally poor, yet better than for liver cancer. The relative 5-year survival rate for women is 15 % and 21 % for men. Details with regard to tumour stage at point of diagnosis exist for approximately 60 % of gall bladder cases registered, most of which were diagnosed in stage T2 and T3.

#### Risk factors and early detection

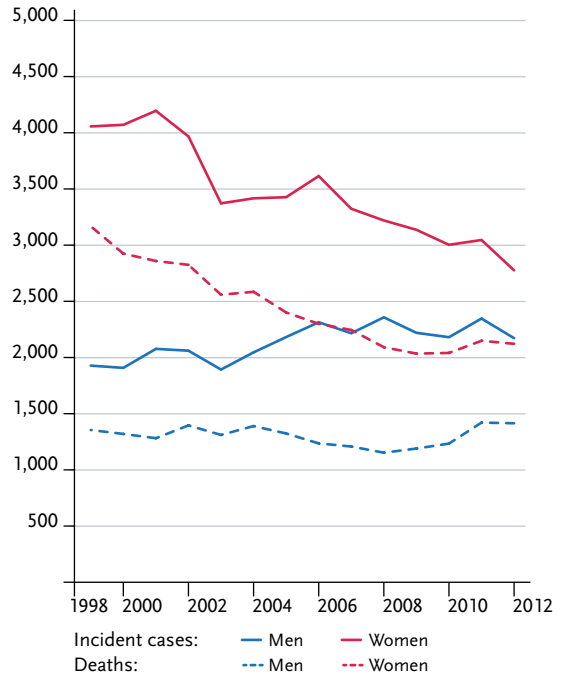
The triggers for carcinomas of the gall bladder and biliary tract are not absolutely clear. Overweight is considered to be a risk factor for both. The presence of gallstones can be a risk for gall bladder carcinomas. In the current scientific debate, chronic inflammatory diseases of the biliary tract, such as a primary sclerosing cholangitis (PSC), choledochal cysts, the inflammatory bowel disease ulcerative colitis, liver diseases as a result of the high consumption of alcohol, hepatitis-C virus infection, and HIV infection, Diabetes and smoking are all deemed to be possible risk factors. A further risk factor, especially in Asia, is an infection with the parasitic liver flukes *Clonorchis sinensis* or *Opisthorchis viverrini*.

Various markers are being tested for their suitability for early detection among persons at risk, however, without any practical consequences. There is no screening programme on offer for the general population. Often, however, early stage diagnosis is made upon removing the gall bladder for other reasons.

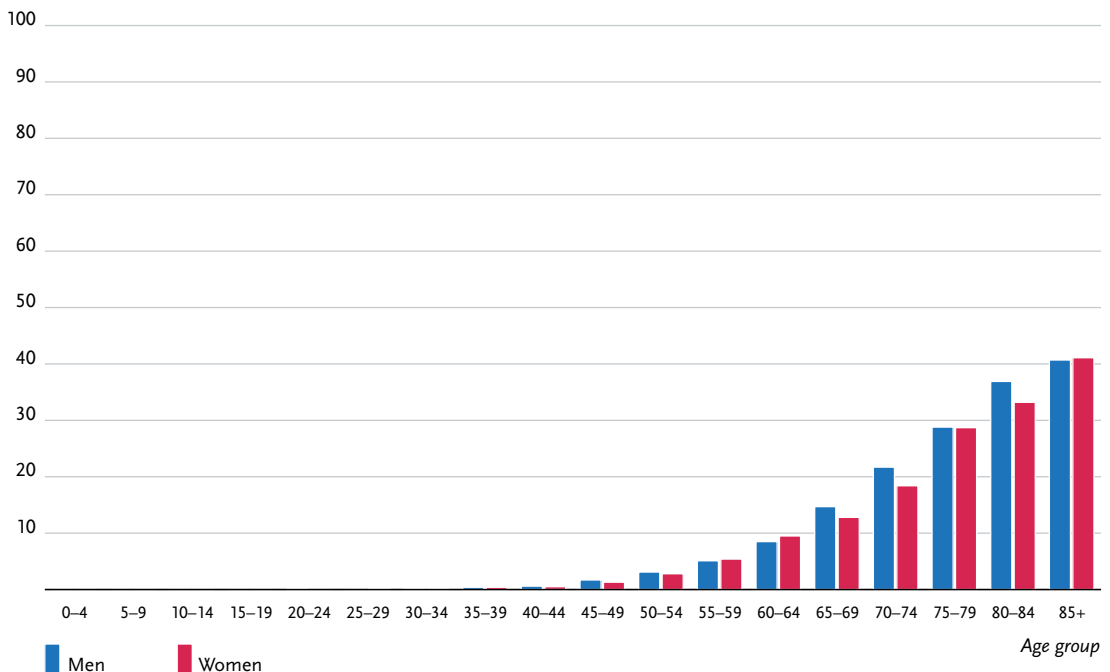
**Figure 3.7.1a**  
Age-standardised incidence and mortality rates,  
by sex, ICD-10 C23–C24, Germany 1999–2012  
per 100,000 (European standard)



**Figure 3.7.1b**  
Absolute numbers of incident cases and deaths,  
by sex, ICD-10 C23–C24, Germany 1999–2012



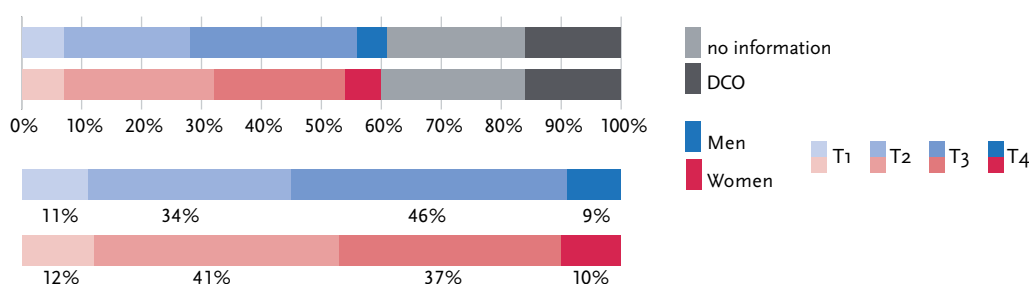
**Figure 3.7.2**  
Age-specific incidence rates by sex, ICD-10 C23–C24, Germany 2011–2012  
per 100,000



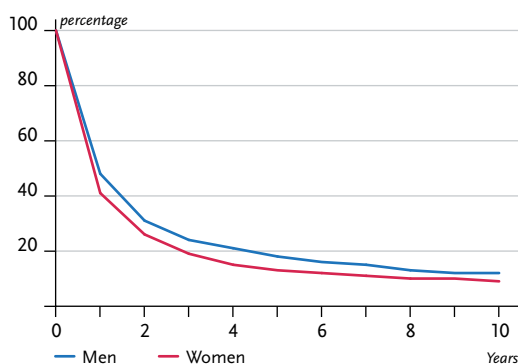
**Table 3.7.2**  
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C23–C24, database 2012

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 16,600)	0.5%	(1 in 220)	<0.1%	(1 in 42,800)	0.3%	(1 in 320)
45 years	<0.1%	(1 in 4,200)	0.5%	(1 in 220)	<0.1%	(1 in 9,800)	0.3%	(1 in 320)
55 years	0.1%	(1 in 1,500)	0.5%	(1 in 220)	<0.1%	(1 in 2,900)	0.3%	(1 in 320)
65 years	0.2%	(1 in 660)	0.4%	(1 in 230)	0.1%	(1 in 1,000)	0.3%	(1 in 320)
75 years	0.2%	(1 in 430)	0.4%	(1 in 290)	0.2%	(1 in 590)	0.3%	(1 in 370)
Lifetime risk			0.5%	(1 in 220)			0.3%	(1 in 320)
Women aged	in the next ten years		ever		in the next ten years		ever	
35 years	<0.1%	(1 in 24,200)	0.6%	(1 in 180)	<0.1%	(1 in 75,000)	0.4%	(1 in 230)
45 years	<0.1%	(1 in 4,900)	0.6%	(1 in 180)	<0.1%	(1 in 8,900)	0.4%	(1 in 230)
55 years	0.1%	(1 in 1,400)	0.6%	(1 in 180)	<0.1%	(1 in 2,100)	0.4%	(1 in 230)
65 years	0.1%	(1 in 710)	0.5%	(1 in 200)	0.1%	(1 in 1,000)	0.4%	(1 in 240)
75 years	0.2%	(1 in 400)	0.4%	(1 in 240)	0.2%	(1 in 520)	0.3%	(1 in 290)
Lifetime risk			0.6%	(1 in 180)			0.4%	(1 in 230)

**Figure 3.7.3**  
Distribution of T-stages at first diagnosis by sex (top: all cases; bottom: only valid reports)  
ICD-10 only C23, Germany 2011–2012



**Figure 3.7.4a**  
Absolute survival rates up to 10 years after first diagnosis,  
by sex, ICD-10 C23–C24, Germany 2011–2012



**Figure 3.7.4b**  
Relative survival rates up to 10 years after first diagnosis,  
by sex, ICD-10 C23–C24, Germany 2011–2012

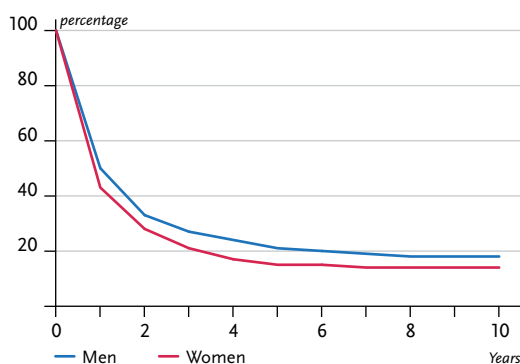


Figure 3.7.5

Registered age-standardised incidence and mortality rates in German federal states, by sex,  
ICD-10 C23–C24, 2011–2012  
per 100,000 (European standard)

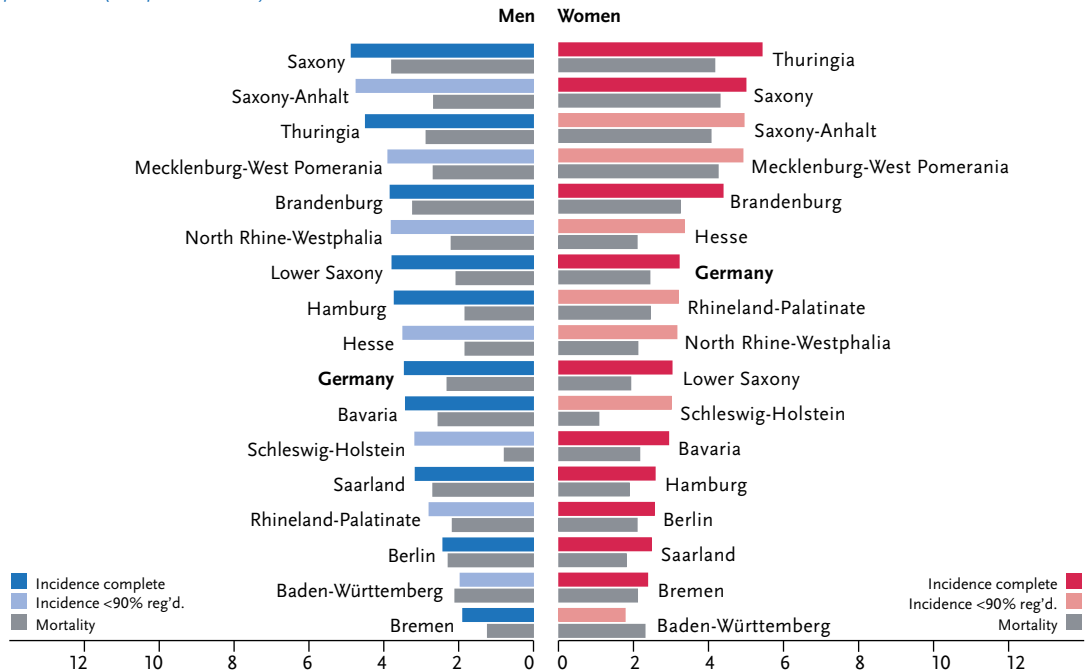
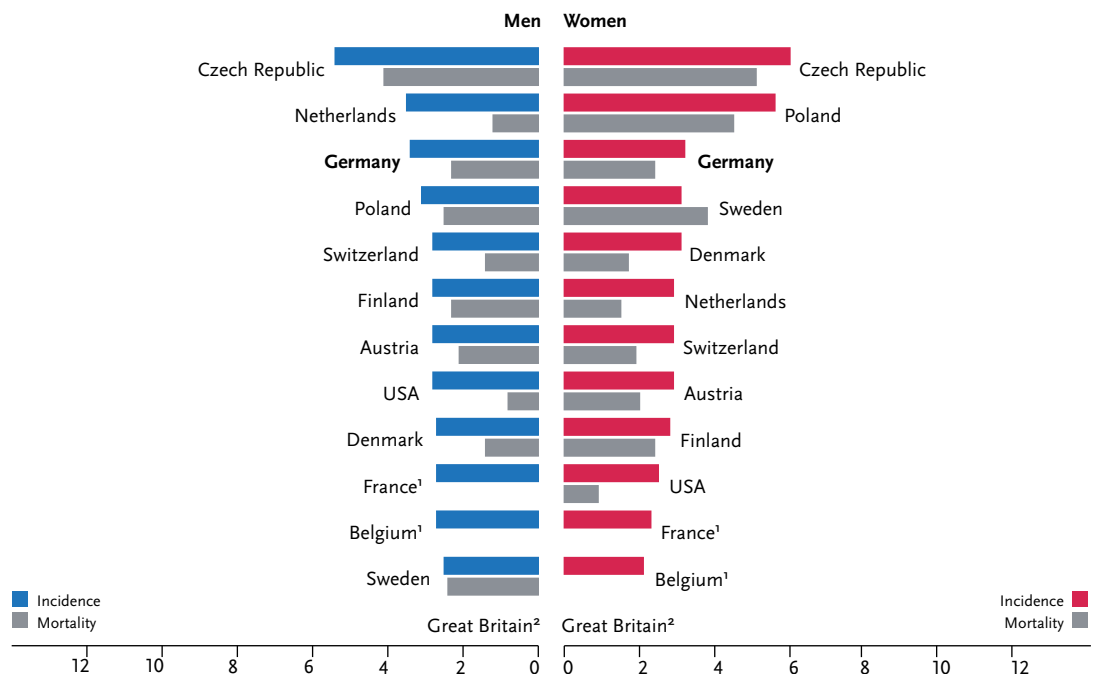


Figure 3.7.6

International comparison of age-standardised incidence and mortality rates, by sex,  
ICD-10 C23–C24, 2011–2012 or latest available year (details and sources, see appendix)  
per 100,000 (European standard)



<sup>1</sup> no comparable data for mortality

<sup>2</sup> no comparable data