

3.9 Gallbladder and biliary tract

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

| Incidence | 2017 | | 2018 | | Prediction for 2022 | |
|---|------------|------------|------------|------------|---------------------|-------|
| | Women | Men | Women | Men | Women | Men |
| Incident cases | 2,830 | 2,480 | 2,700 | 2,380 | 2,500 | 2,600 |
| Crude incidence rate ¹ | 6.8 | 6.1 | 6.4 | 5.8 | 5.9 | 6.3 |
| Age-standardised incidence rate ^{1,2} | 3.2 | 3.6 | 3.0 | 3.5 | 2.7 | 3.6 |
| Median age at diagnosis | 77 | 75 | 77 | 74 | | |
| Mortality | 2017 | | 2018 | | 2019 | |
| | Women | Men | Women | Men | Women | Men |
| Deaths | 2,072 | 1,727 | 2,017 | 1,706 | 2,031 | 1,691 |
| Crude mortality rate ¹ | 4.9 | 4.2 | 4.8 | 4.2 | 4.8 | 4.1 |
| Age-standardised mortality rate ^{1,2} | 2.1 | 2.5 | 2.1 | 2.4 | 2.1 | 2.3 |
| Median age at death | 79 | 76 | 79 | 76 | 79 | 76 |
| Prevalence and survival rates | 5 years | | 10 years | | 25 years | |
| | Women | Men | Women | Men | Women | Men |
| Prevalence | 3,600 | 3,800 | 5,800 | 5,500 | 9,800 | 8,300 |
| Absolute survival rate (2017–2018) ³ | 14 (9–16) | 17 (15–19) | 11 (7–12) | 11 (10–15) | | |
| Relative survival rate (2017–2018) ³ | 17 (11–20) | 20 (18–24) | 17 (11–20) | 17 (15–24) | | |

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, about 5,080 new cases of malignant tumours of the gallbladder (about 27%) and extrahepatic bile ducts (73%) were diagnosed in 2018. The proportion of extrahepatic bile duct tumours was much higher in men (83%) than in women (64%). Histologically, these are predominantly adenocarcinomas. Of the tumours of the bile ducts, about 9% were so-called Klatskin tumours.

Similar to liver cancer, the risk of disease increases continuously with age. One in 200 women and one in 220 men will develop this tumour in the course of their lives.

Since 1999, age-standardised incidence and mortality rates have decreased in women, especially with regard to cancers of the gallbladder. In men, incidence has remained largely constant, with a slight decline in recent years. Age-standardised mortality rates declined until about 2009, then increased slightly.

Relative 5-year survival rates for malignant tumours of the gallbladder and extrahepatic bile ducts are rather low, at 17% for women and 20% for men.

Risk factors

The causes of bile duct and gallbladder tumours have not been clearly identified. The main risk factor is age. Primary sclerosing cholangitis (PSC) is also considered a risk factor for both cancers. Other possible risk factors for extrahepatic bile duct carcinomas are congenital abnormalities of the biliary tract (Caroli syndrome), bile duct stones in the main bile duct, choledochal cysts and chronic inflammatory bowel disease. Larger gallbladder polyps, inflammation of the gallbladder (and its sequela, the porcelain gallbladder), gallbladder stones as well as obesity can increase the risk of gallbladder carcinoma.

Screening examinations of the general population are not useful. For certain risk groups (such as patients with gallbladder polyps, stones or PSC), regular check-ups may be considered.

Figure 3.9.1a
 Age-standardised incidence and mortality rates by sex, ICD-10 C23–C24, Germany 1999–2018/2019, projection (incidence) through 2022
 per 100,000 (old European Standard)

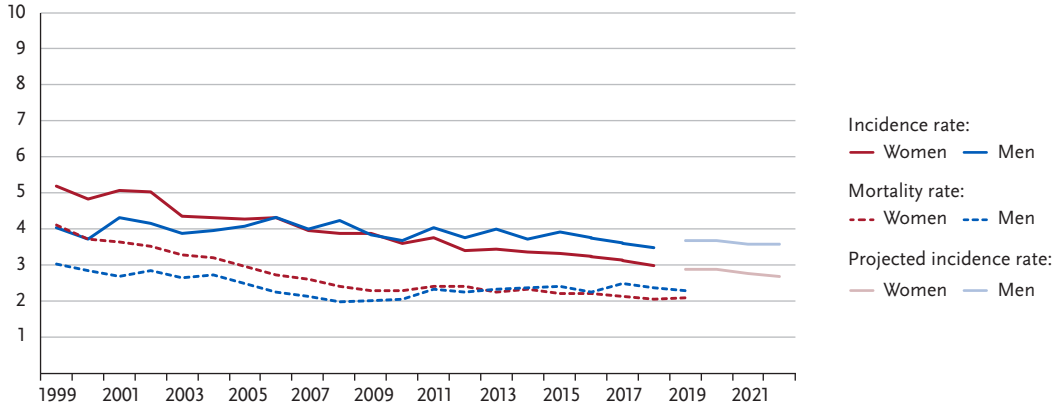


Figure 3.9.1b
 Absolute numbers of incident cases and deaths by sex, ICD-10 C23–C24, Germany 1999–2018/2019, projection (incidence) through 2022

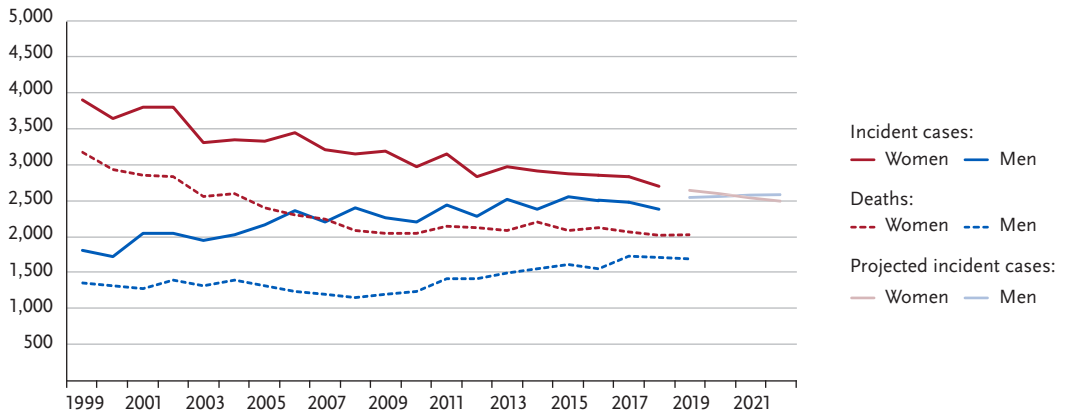


Figure 3.9.2
 Age-specific incidence rates by sex, ICD-10 C23–C24, Germany 2017–2018
 per 100,000

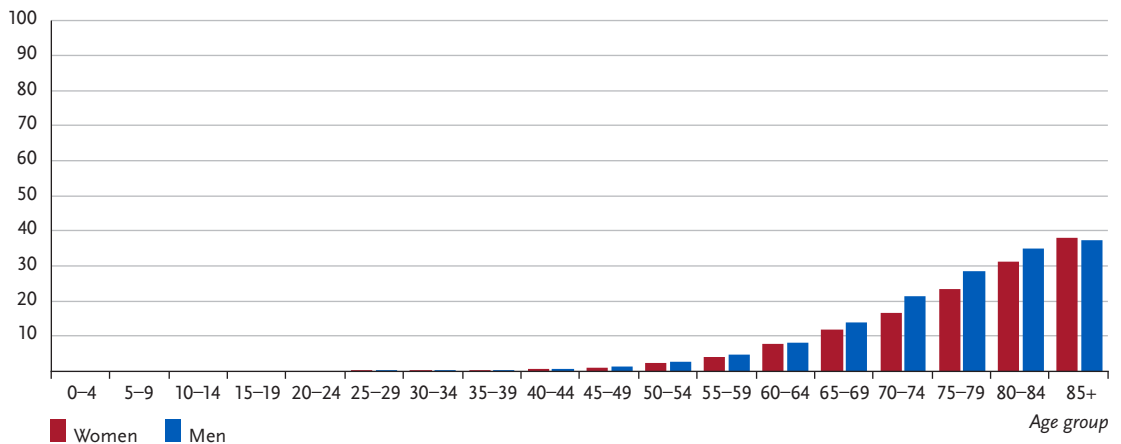


Table 3.9.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C23–C24, database 2018

| 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 22,300) | 0.5 % | (1 in 200) | < 0.1 % | (1 in 110,900) | 0.4 % | (1 in 260) | |
| 45 years | < 0.1 % | (1 in 5,600) | 0.5 % | (1 in 200) | < 0.1 % | (1 in 11,300) | 0.4 % | (1 in 260) | |
| 55 years | 0.1 % | (1 in 1,700) | 0.5 % | (1 in 200) | < 0.1 % | (1 in 2,800) | 0.4 % | (1 in 260) | |
| 65 years | 0.1 % | (1 in 770) | 0.5 % | (1 in 210) | 0.1 % | (1 in 1,100) | 0.4 % | (1 in 270) | |
| 75 years | 0.2 % | (1 in 450) | 0.4 % | (1 in 260) | 0.2 % | (1 in 560) | 0.3 % | (1 in 310) | |
| Lifetime risk | | | 0.5 % | (1 in 200) | | | 0.4 % | (1 in 260) | |
| Men aged | | in the next 10 years | | ever | in the next 10 years | | ever | | |
| 35 years | < 0.1 % | (1 in 16,800) | 0.5 % | (1 in 220) | < 0.1 % | (1 in 56,700) | 0.3 % | (1 in 290) | |
| 45 years | < 0.1 % | (1 in 4,800) | 0.5 % | (1 in 220) | < 0.1 % | (1 in 8,800) | 0.3 % | (1 in 290) | |
| 55 years | 0.1 % | (1 in 1,600) | 0.5 % | (1 in 220) | < 0.1 % | (1 in 2,700) | 0.3 % | (1 in 290) | |
| 65 years | 0.2 % | (1 in 640) | 0.4 % | (1 in 230) | 0.1 % | (1 in 1,000) | 0.3 % | (1 in 290) | |
| 75 years | 0.2 % | (1 in 440) | 0.3 % | (1 in 290) | 0.2 % | (1 in 550) | 0.3 % | (1 in 330) | |
| Lifetime risk | | | 0.5 % | (1 in 220) | | | 0.3 % | (1 in 290) | |

Figure 3.9.3
Distribution of UICC stages at diagnosis by sex, ICD-10 C23–C24.1, Germany 2017–2018
top: according to 7th edition TNM; bottom: according to 8th edition TNM.
The DCO proportion was 10%. For 37% of the remaining cases, no UICC stage could be assigned.

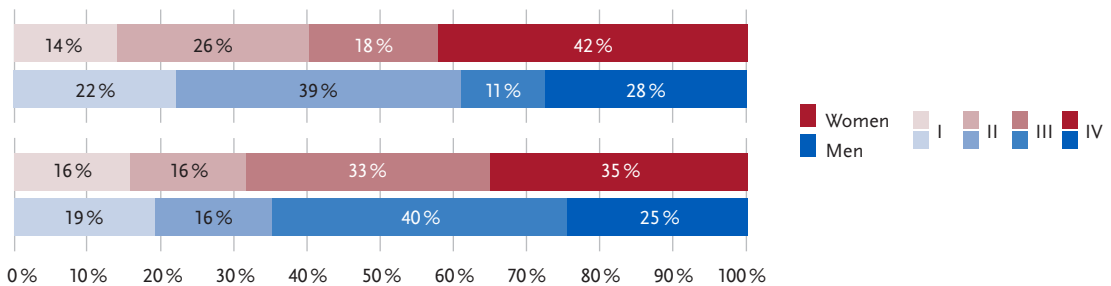


Figure 3.9.4
Absolute and relative survival rates up to 10 years after diagnosis by sex, ICD-10 C23–C24, Germany 2017–2018

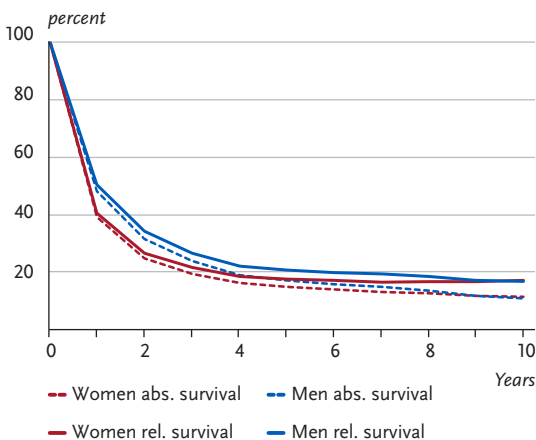


Figure 3.9.5
Relative 5-year survival by UICC stage (7th edition TNM) and sex, ICD-10 C23–C24, Germany 2016–2018

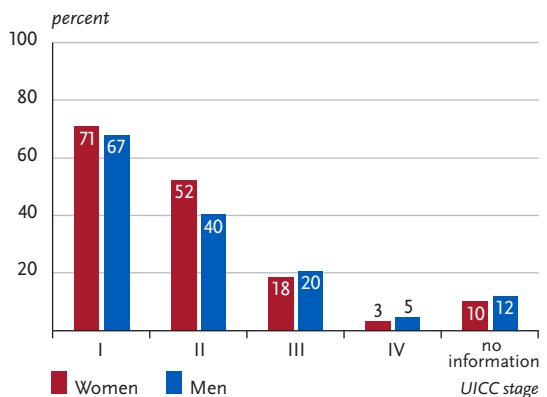


Figure 3.9.6
 Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C23–C24, 2017–2018
 per 100,000 (old European Standard)

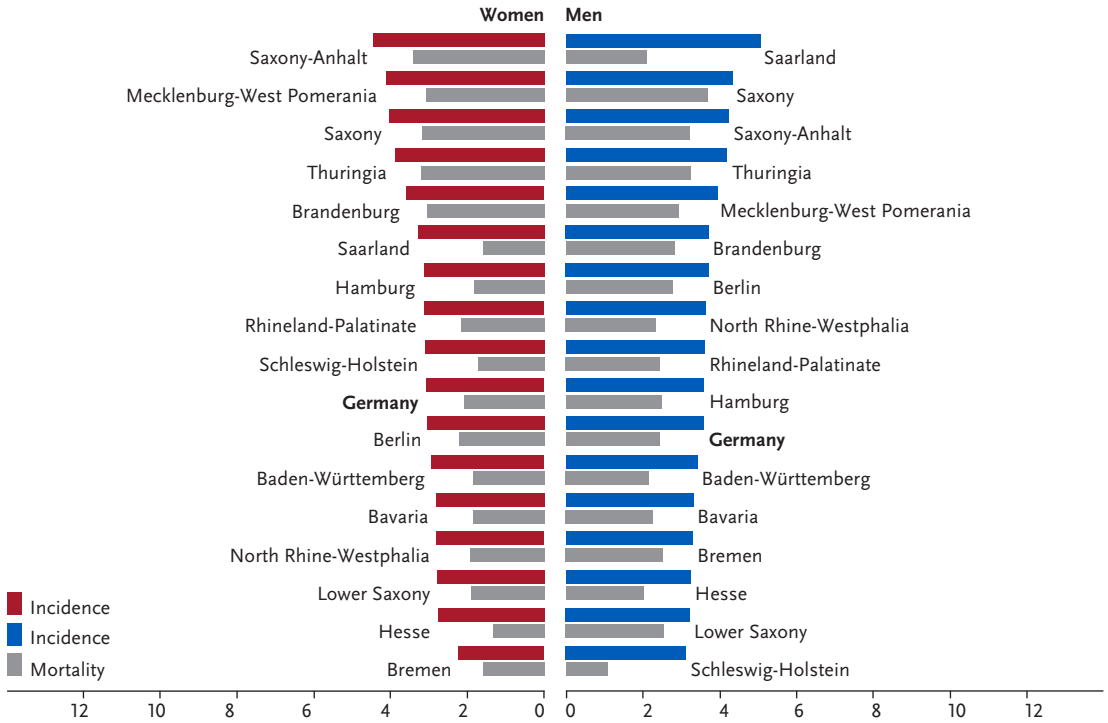
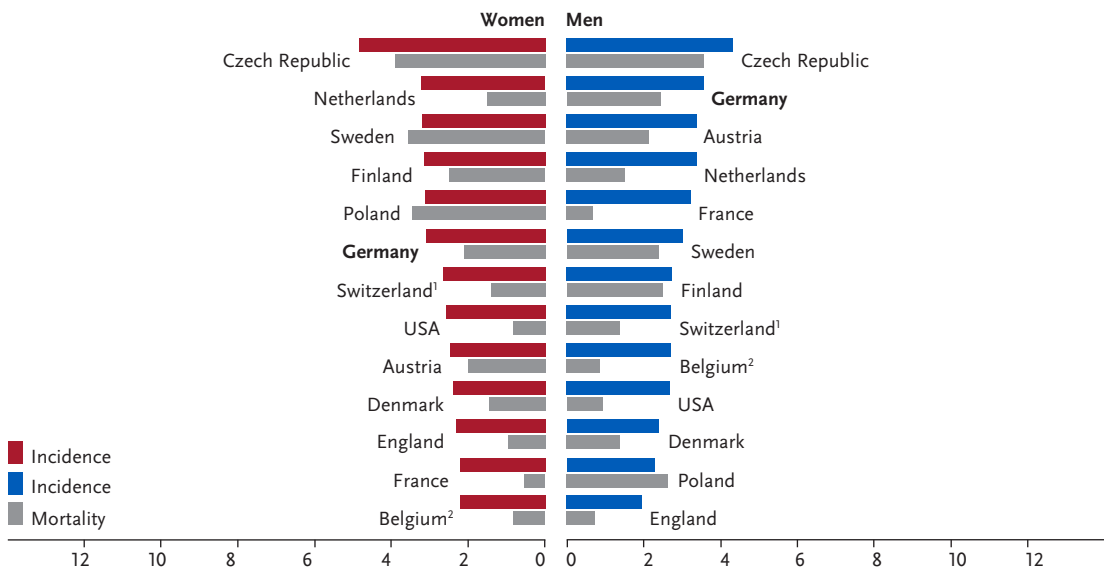


Figure 3.9.7
 International comparison of age-standardised incidence and mortality rates by sex,
 ICD-10 C23–C24, 2017–2018 or latest available year (details and sources, see appendix)
 per 100,000 (old European Standard)



¹ Mortality for 2013 to 2017
² Mortality for 2016