3.10 Pancreas

Table 3.10.1
Overview of key epidemiological parameters for Germany, ICD-10 C25

Incidence	2017		2018		Prediction for 2022	
	Women	Men	Women	Men	Women	Men
Incident cases	9,660	9,620	9,160	9,860	10,300	10,700
Crude incidence rate [1]	23.1	23.6	21.8	24.1	24.5	25.9
Age-standardised incidence rate [1, 2]	11.4	14.8	10.8	15.1	11.8	15.4
Median age at diagnosis	76	72	76	72		
Mortality	**2017**		**2018**		**2019**	
	Women	Men	Women	Men	Women	Men
Deaths	9,058	8,947	9,143	9,189	9,638	9,584
Crude mortality rate [1]	21.6	21.9	21.8	22.5	22.9	23.4
Age-standardised mortality rate [1, 2]	9.9	13.3	9.9	13.5	10.3	13.8
Median age at death	77	74	78	74	78	74
Prevalence and survival rates	**5 years**		**10 years**		**25 years**	
	Women	Men	Women	Men	Women	Men
Prevalence	10,000	10,900	13,500	14,500	17,300	18,000
Absolute survival rate (2017–2018) [3]	8 (7–12)	9 (7–13)	6 (4–8)	6 (5–9)		
Relative survival rate (2017–2018) [3]	10 (8–13)	10 (8–15)	7 (6–11)	8 (6–13)		

[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 2018, approximately 19,000 people were diagnosed with pancreatic cancer (pancreatic carcinoma). Due to the unfavourable prognosis, almost as many people also died from this disease. Since the end of the 1990s, the age-standardised incidence and mortality rates have risen slightly, especially in the higher age groups from 65 years onwards. The absolute number of new cases and deaths has continuously increased over the years for both sexes, also due to the demographic development.

Malignant neoplasms of the pancreas often cause no or only unspecific symptoms in the early stages. Thus, the tumour is often only detected at an advanced stage. The relative 5-year survival rate is therefore extremely unfavourable. In Germany, it is 10% for women and men with pancreatic cancer. Therefore, pancreatic carcinoma has the lowest survival rate of all cancers, next to mesothelioma. With a share of 8.7% (women) and 7.4% (men), it is the fourth most frequent cause of cancer death in both sexes. The median age at diagnosis is 76 years for women and 72 years for men.

Risk factors

Smoking, both active and passive, and being very overweight (obesity) are considered to be established risk factors. Diabetes mellitus type 2 and chronic inflammation of the pancreas (pancreatitis) also increase the risk. This also applies to very high alcohol consumption. Infections with pathogens such as Helicobacter pylori and hepatitis B (or also HIV) are associated with the development of pancreatic carcinomas. First-degree relatives of patients with pancreatic cancer are themselves affected more often than average. This association may be due to hereditary factors, such as a BRCA-2 mutation, or a shared lifestyle. The consumption of large amounts of processed meats, smoked or grilled foods also increase the risk of pancreatic cancer.

The role played by environmental factors or occupational exposure to pollutants is not clearly understood.

Figure 3.10.1a
Age-standardised incidence and mortality rates by sex, ICD-10 C25, Germany 1999 – 2018/2019, projection (incidence) through 2022
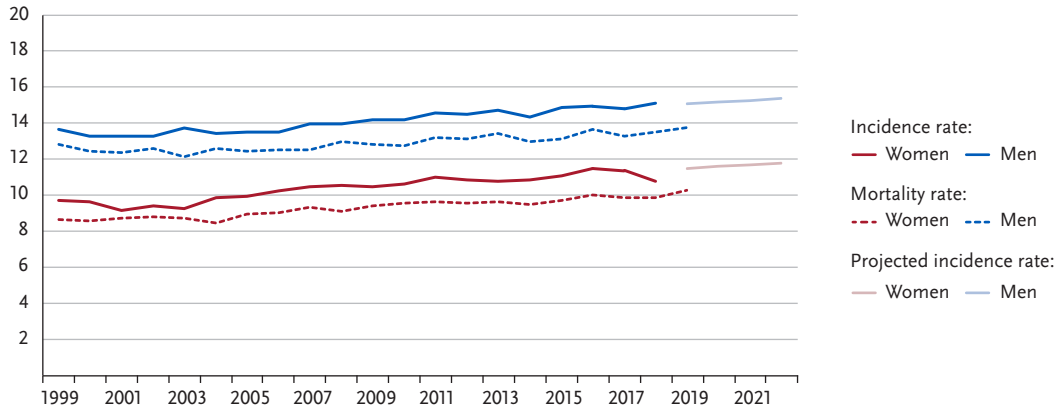*per 100,000 (old European Standard)*

Incidence rate:
— Women — Men

Mortality rate:
--- Women --- Men

Projected incidence rate:
— Women — Men

Figure 3.10.1b
Absolute numbers of incident cases and deaths by sex, ICD-10 C25, Germany 1999 – 2018/2019, projection (incidence) through 2022
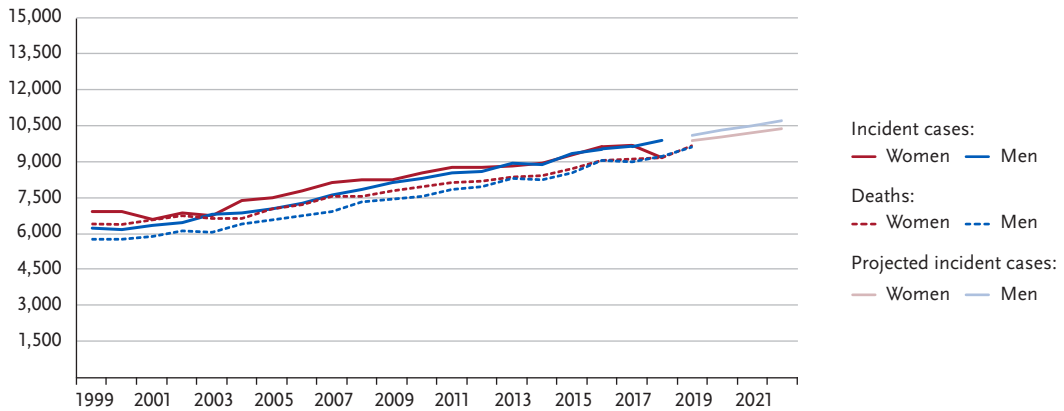

Incident cases:
— Women — Men

Deaths:
--- Women --- Men

Projected incident cases:
— Women — Men

Figure 3.10.2
Age-specific incidence rates by sex, ICD-10 C25, Germany 2017 – 2018
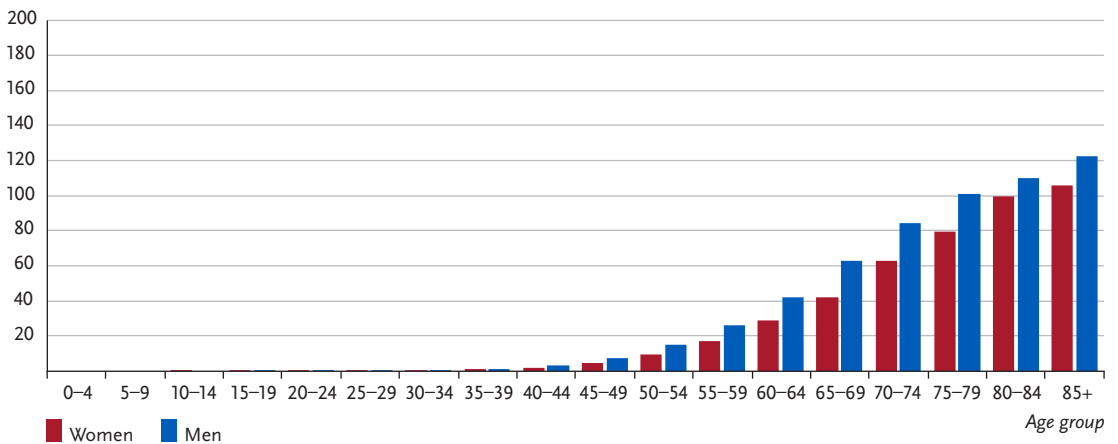*per 100,000*

■ Women ■ Men

Age group

Table 3.10.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C25, 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 5,300)	1.7 %	(1 in 58)	< 0.1 %	(1 in 10,400)	1.7 %	(1 in 57)
45 years	0.1 %	(1 in 1,300)	1.7 %	(1 in 58)	0.1 %	(1 in 2,000)	1.7 %	(1 in 57)
55 years	0.2 %	(1 in 450)	1.7 %	(1 in 60)	0.2 %	(1 in 550)	1.7 %	(1 in 58)
65 years	0.5 %	(1 in 200)	1.5 %	(1 in 66)	0.4 %	(1 in 220)	1.6 %	(1 in 61)
75 years	0.7 %	(1 in 140)	1.2 %	(1 in 85)	0.8 %	(1 in 130)	1.3 %	(1 in 74)
Lifetime risk			1.7 %	(1 in 58)			1.7 %	(1 in 58)
Men aged	**in the next 10 years**		**ever**		**in the next 10 years**		**ever**	
35 years	< 0.1 %	(1 in 4,100)	1.9 %	(1 in 53)	< 0.1 %	(1 in 7,400)	1.8 %	(1 in 56)
45 years	0.1 %	(1 in 850)	1.9 %	(1 in 53)	0.1 %	(1 in 1,230)	1.8 %	(1 in 56)
55 years	0.3 %	(1 in 300)	1.8 %	(1 in 55)	0.3 %	(1 in 360)	1.8 %	(1 in 56)
65 years	0.7 %	(1 in 150)	1.6 %	(1 in 61)	0.6 %	(1 in 170)	1.6 %	(1 in 61)
75 years	0.8 %	(1 in 120)	1.2 %	(1 in 82)	0.9 %	(1 in 120)	1.3 %	(1 in 75)
Lifetime risk			1.8 %	(1 in 54)			0.4 %	(1 in 57)

Figure 3.10.3
Distribution of UICC stages at diagnosis by sex, ICD-10 C25, Germany 2017 – 2018
top: according to 7ᵗʰ edition TNM; bottom: according to 8ᵗʰ edition TNM.
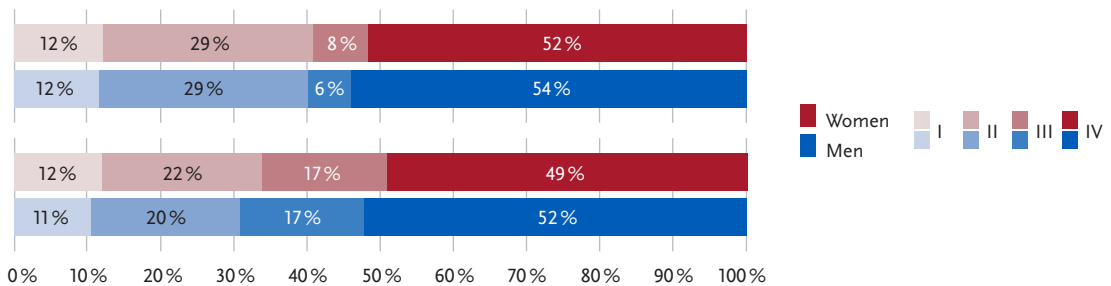*The DCO proportion was 17%. For 33% of the remaining cases, no UICC stage could be assigned.*

Figure 3.10.4
Absolute and relative survival rates up to 10 years after diagnosis by sex, ICD-10 C25, Germany 2017 – 2018
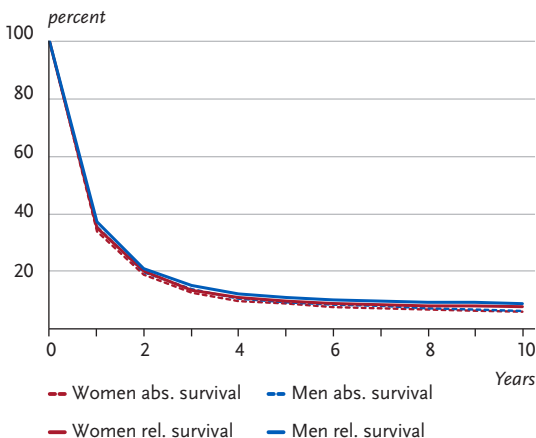

Figure 3.10.5
Relative 5-year survival by UICC stage (7ᵗʰ edition TNM) and sex, ICD-10 C25, Germany 2016 – 2018
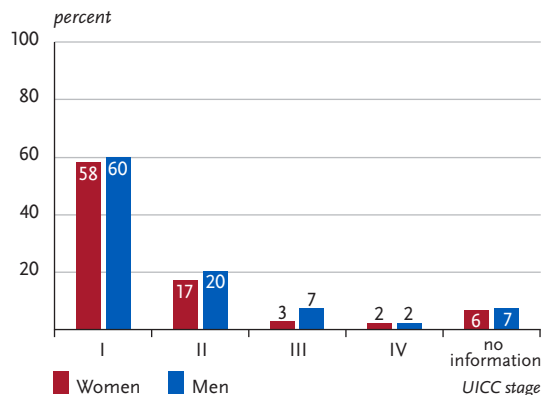
Figure 3.10.6
Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C25, 2017–2018
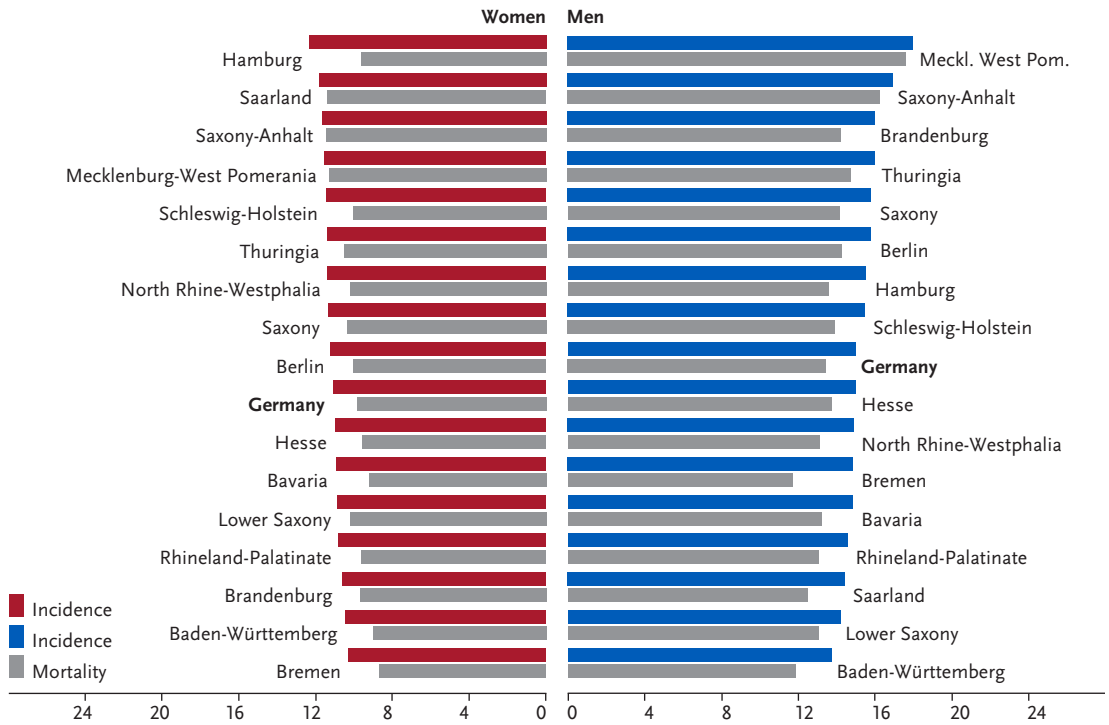*per 100,000 (old European Standard)*

Figure 3.10.7
International comparison of age-standardised incidence and mortality rates by sex, ICD-10 C25, 2017–2018 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)