3.8 Pancreas

Table 3.8.1
Overview of key epidemiological parameters for Germany, ICD-10 C25

	2011		2012		Prediction for 2016	
	Men	Women	Men	Women	Men	Women
Incident cases	8,280	8,420	8,250	8,480	9,100	9,500
Crude incidence rate[1]	21.1	20.5	21.0	20.6	22.7	23.0
Standardised incidence rate[1,2]	14.2	10.5	14.0	10.6	14.3	11.3
Median age at diagnosis	71	75	71	75		
Deaths	7,812	8,128	7,936	8,184		
Crude mortality rate[1]	19.9	19.8	20.2	19.9		
Standardised mortality rate[1,2]	13.2	9.6	13.1	9.6		
5-year prevalence	7,700	7,900	7,800	8,100		
		after 5 years		*after 10 years*		
Absolute survival rate (2011–2012)[3]	7 (5–10)	8 (4–11)	5 (3–6)	6 (4–7)		
Relative survival rate (2011–2012)[3]	8 (5–11)	9 (5–13)	6 (4–9)	8 (5–10)		

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

Epidemiology

The pancreas produces hormones (endocrinal function of islet cells) as well as digestive juices (exocrine function). The vast majority of malignant tumours in the pancreas originate in the exocrine portion of the pancreas. In 2012 more than 16,700 people were diagnosed with pancreatic cancer. In line with the unfavourable prognosis, almost that many people also died of the disease. The age-standardised incidence and mortality rates among men have remained almost constant since the late 1990s, whereas the rates among women are slightly increasing. The absolute number of new cases and deaths has risen steadily among both, men and women. In the early stages, malignant neoplasms of the pancreas frequently cause no or only nonspecific symptoms, thus the tumour is frequently only detected late. Accordingly, the relative 5-year survival rate is extremely unfavourable. In Germany it is 8 % for men and 9 % for women, although the rare malignant islet cell tumours have a significantly better prognosis. The pancreatic carcinoma thus has the lowest survival rate of all forms of cancer and is the fourth most frequent cause of death due to cancer.

The median age at diagnosis is 71 years for men and 75 years for women.

Risk factors

Smoking tobacco is a proven risk factor and passive smoking also plays a part. Obesity (adipositas) and type 2 diabetes mellitus also have a negative bearing. Further lifestyle-related factors have not been conclusively proven. It is believed that high consumption of processed meat goods, eating smoked or grilled foods, as well as high alcohol consumption levels can increase the risk of pancreatic cancer. Patients with chronic inflammation of the pancreas (pancreatitis) also have an increased risk. First-degree relatives of patients with a pancreatic carcinoma have a statistically higher risk of developing the cancer themselves. It is not clear, whether this is due to a hereditary predisposition or shared lifestyle. An inheritable risk does indeed appear to play a part for some patients at least. Research is being conducted to establish which genes are involved. The risk of developing this cancer is higher for people affected by certain, rare, genetic cancer syndromes. It is not yet fully clear what role is played by environmental factors or occupational exposure to harmful substances. The contact with pesticides, herbicides and fungicides may increase the risk of pancreatic carcinoma. Also an exposure to chlorinated hydrocarbons, chromium and chromium compounds, electromagnetic fields and fuel vapours may also increase the risk.

Figure 3.8.1a
Age-standardised incidence and mortality rates, by sex, ICD-10 C25, Germany 1999–2012
per 100,000 (European standard)

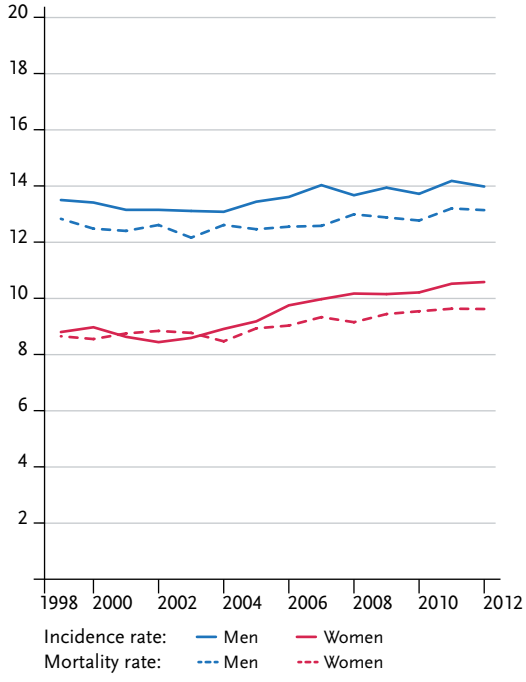

Figure 3.8.1b
Absolute numbers of incident cases and deaths, by sex, ICD-10 C25, Germany 1999–2012

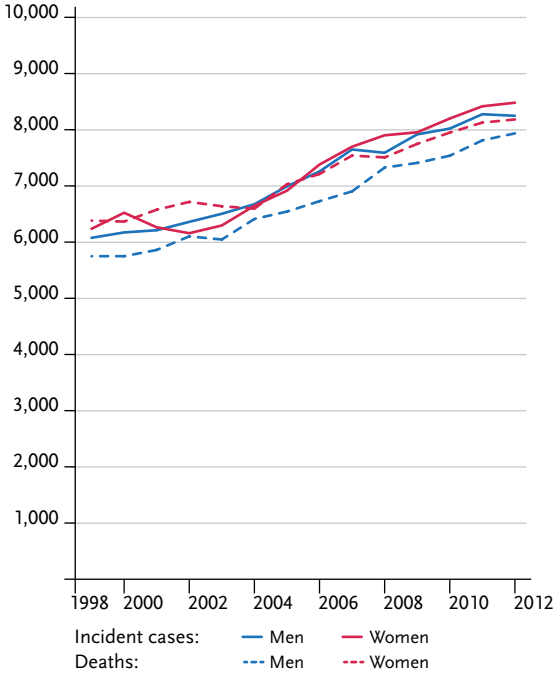

Figure 3.8.2
Age-specific incidence rates by sex, ICD-10 C25, Germany 2011–2012
per 100,000

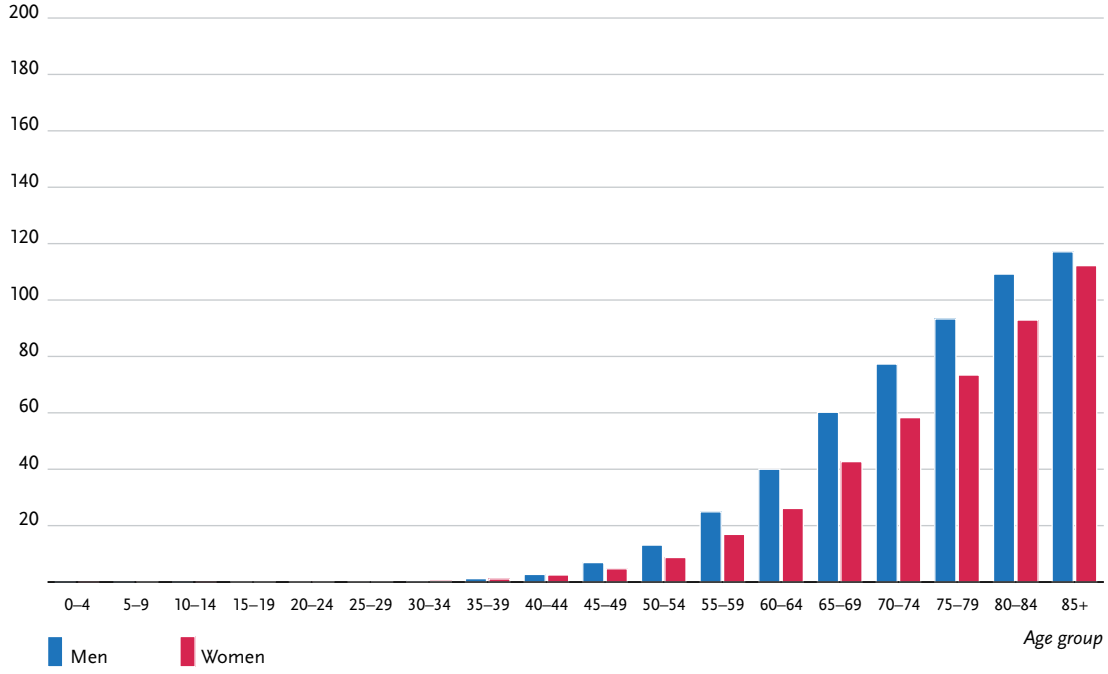

Table 3.8.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C25, database 2012

	Risk of developing cancer				Mortality risk			
Men aged	**in the next ten years**		**ever**		**in the next ten years**		**ever**	
35 years	<0.1%	(1 in 4,900)	1.7%	(1 in 59)	<0.1%	(1 in 8,700)	1.7%	(1 in 60)
45 years	0.1%	(1 in 1,000)	1.7%	(1 in 59)	0.1%	(1 in 1,200)	1.7%	(1 in 59)
55 years	0.3%	(1 in 310)	1.7%	(1 in 60)	0.3%	(1 in 360)	1.7%	(1 in 60)
65 years	0.6%	(1 in 160)	1.5%	(1 in 68)	0.6%	(1 in 180)	1.5%	(1 in 65)
75 years	0.7%	(1 in 130)	1.1%	(1 in 91)	0.8%	(1 in 120)	1.2%	(1 in 82)
Lifetime risk			1.7%	(1 in 60)			1.7%	(1 in 61)
Women aged	**in the next ten years**		**ever**		**in the next ten years**		**ever**	
35 years	<0.1%	(1 in 5,600)	1.7%	(1 in 59)	<0.1%	(1 in 12,200)	1.7%	(1 in 60)
45 years	0.1%	(1 in 1,500)	1.7%	(1 in 59)	0.1%	(1 in 1,900)	1.7%	(1 in 60)
55 years	0.2%	(1 in 470)	1.7%	(1 in 60)	0.2%	(1 in 550)	1.7%	(1 in 60)
65 years	0.5%	(1 in 210)	1.5%	(1 in 66)	0.4%	(1 in 230)	1.6%	(1 in 64)
75 years	0.7%	(1 in 140)	1.2%	(1 in 85)	0.7%	(1 in 140)	1.3%	(1 in 79)
Lifetime risk			1.7%	(1 in 59)			1,7%	(1 in 60)

Figure 3.8.3
Distribution of T-stages at first diagnosis by sex
Not presented due to the large proportion of missing data.

Figure 3.8.4a
Absolute survival rates up to 10 years after first diagnosis, by sex, ICD-10 C25, Germany 2011–2012

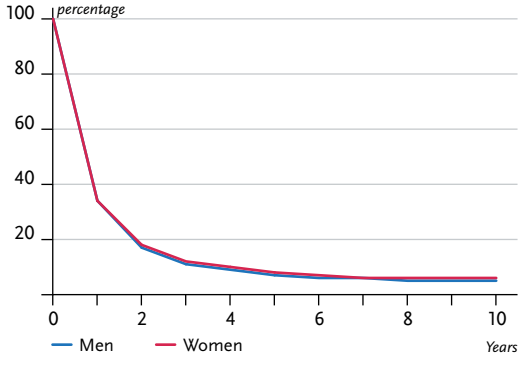

Figure 3.8.4b
Relative survival rates up to 10 years after first diagnosis, by sex, ICD-10 C25, Germany 2011–2012

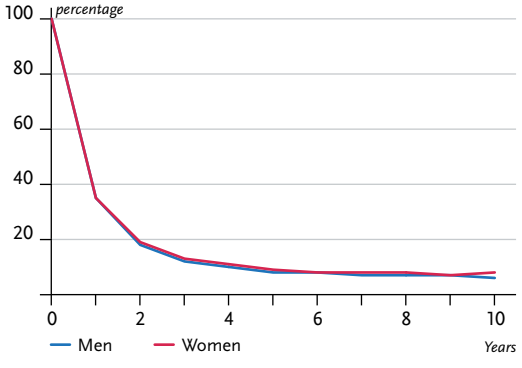

Figure 3.8.5
Registered age-standardised incidence and mortality rates in German federal states, by sex, ICD-10 C25, 2011–2012
per 100,000 (European standard)

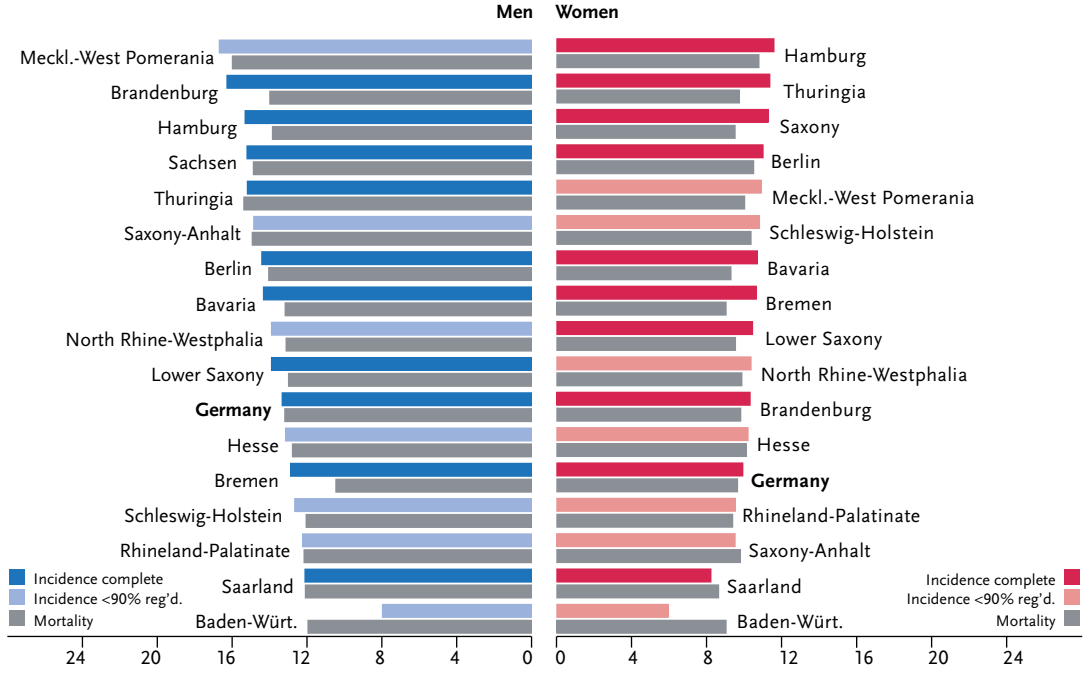

Figure 3.8.6
International comparison of age-standardised incidence and mortality rates, by sex, ICD-10 C25, 2011–2012 or latest available year (details and sources, see appendix)
per 100,000 (European standard)