## 3.3 Oesophagus

Table 3.3.1 Overview of key epidemiological parameters for Germany, ICD-10 C15

Incidence		2020				
	Women	Men	Women	Men	1	
Incident cases	1,660	5,890	1,720	5,660	1	
Crude incidence rate <sup>1</sup>	4.0	14.4	4.1	13.8		
Age-standardised incidence rate <sup>1, 2</sup>	2.2	9.4	2.2	9.0		
Median age at diagnosis	72	68	72	68		
Mortality		2019		2020		2021
	Women	Men	Women	Men	Women	Men
Deaths	1,332	4,510	1,398	4,556	1,368	4,444
Crude mortality rate 1	3.2	11.0	3.3	11.1	3.2	10.8
Age-standardised mortality rate <sup>1, 2</sup>	1.6	7.0	1.7	6.9	1.6	6.6
Median age at death	75	70	75	70	73	70
Prevalence and survival rates		5 years		10 years		25 years
	Women	Men	Women	Men	Women	Men
Prevalence	2,900	10,400	4,200	15,300	5,500	21,500
Absolute survival rate (2019 – 2020) <sup>3</sup>	21 (15 – 29)	22 (19 – 26)	14 (10 – 21)	15 (12 – 19)		
Relative survival rate (2019 – 2020) <sup>3</sup>	24 (17 – 33)	25 (22 – 31)	18 (13 – 29)	21 (16 – 27)		

per 100,000 persons age-standardised (old European Standard) in percent (lowest and highest value of the included German federal states)

## **Epidemiology**

Cancer of the oesophagus causes about 1.3% of all cancer deaths in women and 3.6% in men. The age-standardised mortality rates have changed only marginally for both women and men since 1999. In Germany, men are diagnosed with oesophageal cancer three times more frequently and, on average, four years earlier than women at the age of 68. In both sexes, the incidence rates for the age groups under 60 are falling slightly, while they tend to rise in the older age groups.

Squamous cell carcinomas account for 41% of all oesophageal cancers. The proportion of adenocarcinomas, which occur almost exclusively at the junction with the stomach, has risen to 47% in recent years. Among men, the proportion of adenocarcinomas (51%) is now significantly higher than that of squamous cell carcinomas. With relative 5-year survival rates of 24% and 25% for women and men respectively, oesophageal carcinoma is one of the cancers with unfavourable survival prospects. Only just under one in three tumours is diagnosed at an early stage (UICC I/II).

## Risk factors

In oesophageal cancer, a distinction is made between squamous cell carcinoma and the slightly more common adenocarcinoma. Adenocarcinomas often develop on the basis of gastro-oesophageal reflux disease (persistent reflux of gastric juice into the oesophagus, chronic heartburn). This leads to mucosal changes in the lower part of the oesophagus: a so-called Barrett's oesophagus develops, which is considered a precancerous condition. Other important risk factors are obesity and smoking.

The main risk factors for squamous cell carcinoma of the oesophagus are tobacco and alcohol consumption, especially in combination: when both factors come together, the harmful effect is amplified. Previous radiotherapy in the chest and neck area can also lead to an increased risk. People with head and neck tumours also have an increased risk of oesophageal cancer.

A motility disorder of the oesophagus and the sphincter muscle between the oesophagus and stomach (achalasia) significantly increases the risk of both squamous cell and adenocarcinomas. Burns to the oesophagus caused by alkalis or acids also lead to an increased risk. Familial clusters of cases of the disease have also been described. However, it is still unclear whether and to what extent hereditary predispositions or environmental factors play a role.

Figure 3.3.1a Age-standardised incidence and mortality rates by sex, ICD-10 C15, Germany 1999 – 2020/2021 per 100,000 (old European Standard)

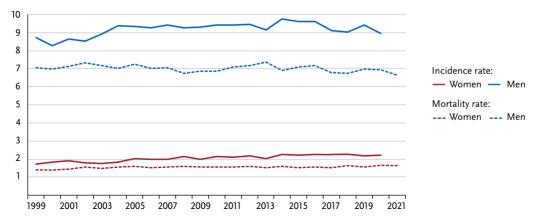


Figure 3.3.1b Absolute numbers of incident cases and deaths by sex, ICD-10 C15, Germany 1999 – 2020/2021

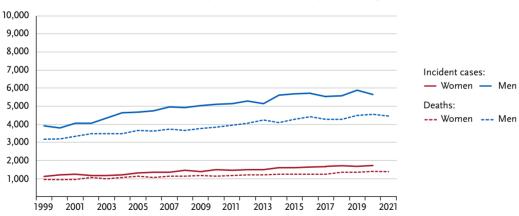


Figure 3.3.2 Age-specific incidence rates by sex, ICD-10 C15, Germany 2019 - 2020 per 100,000

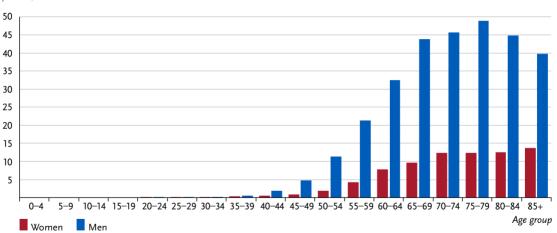


Table 3.3.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C15, database 2019

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 19,200)	0.3 %	(1 in 320)	< 0.1 %	(1 in 54,400)	0.3 %	(1 in 400)	
45 years	< 0.1 %	(1 in 6,400)	0.3 %	(1 in 330)	< 0.1 %	(1 in 11,900)	0.3 %	(1 in 400)	
55 years	0.1 %	(1 in 1,800)	0.3 %	(1 in 340)	< 0.1 %	(1 in 2,600)	0.2 %	(1 in 400)	
65 years	0.1 %	(1 in 980)	0.3 %	(1 in 400)	0.1 %	(1 in 1,400)	0.2 %	(1 in 450)	
75 years	0.1 %	(1 in 900)	0.2 %	(1 in 590)	0.1 %	(1 in 1,000)	0.2 %	(1 in 590)	
Lifetime risk			0.3 %	(1 in 330)			0.3 %	(1 in 400)	
Men aged	in the	next 10 years		ever	in the next 10 years			ever	
35 years	< 0.1 %	(1 in 8,400)	1.1 %	(1 in 93)	< 0.1 %	(1 in 10,600)	0.8 %	(1 in 120)	
45 years	0.1 %	(1 in 1,200)	1.1 %	(1 in 93)	0.1 %	(1 in 1,900)	0.8 %	(1 in 120)	
55 years	0.3 %	(1 in 380)	1.0 %	(1 in 98)	0.2 %	(1 in 580)	0.8 %	(1 in 120)	
65 years	0.4 %	(1 in 240)	0.8 %	(1 in 120)	0.3 %	(1 in 310)	0.7 %	(1 in 140)	
75 years	0.4 %	(1 in 260)	0.5 %	(1 in 190)	0.3 %	(1 in 300)	0.5 %	(1 in 200)	
Lifetime risk			1.1 %	(1 in 94)			0.8 %	(1 in 120)	

Figure 3.3.3
Distribution of UICC stages at diagnosis by sex, ICD-10 C15, Germany 2019 – 2020 (top: incl. missing data and DCO cases; bottom: valid values only)

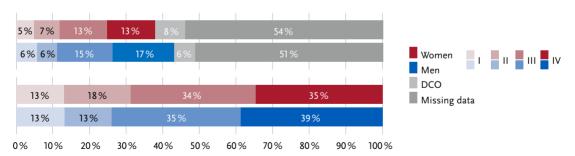


Figure 3.3.4 Absolute and relative survival rates up to 10 years after diagnosis, by sex, ICD-10 C15, Germany 2019 – 2020

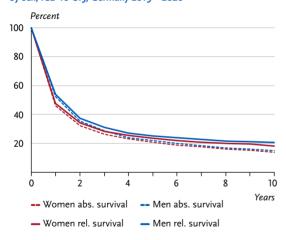


Figure 3.3.5
Relative 5-year survival by histology and sex, ICD-10 C15,
Germany 2019 – 2020

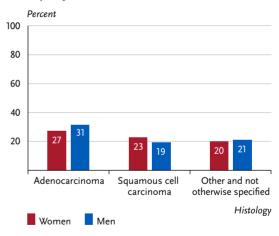


Figure 3.3.6
Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C15, 2019 – 2020 per 100,000 (old European Standard)

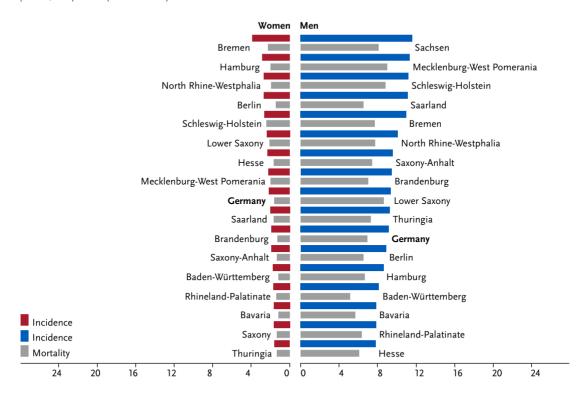
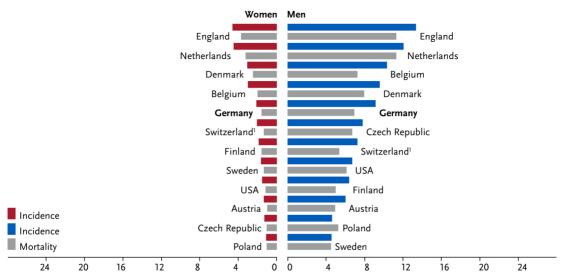


Figure 3.3.7 International comparison of age-standardised incidence and mortality rates by sex, ICD-10 C15, 2019 – 2020 or latest available year (details and sources, see appendix) per 100,000 (old European Standard)



<sup>&</sup>lt;sup>1</sup> Switzerland: incidence data for 2015 – 2019