

### 3.3 Oesophagus

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

	2011		2012		Prediction for 2016	
	Men	Women	Men	Women	Men	Women
Incident cases	4,950	1,410	5,030	1,510	5,600	1,600
Crude incidence rate <sup>1</sup>	12.6	3.4	12.8	3.7	13.9	3.9
Standardised incidence rate <sup>1,2</sup>	9.1	2.0	9.0	2.2	9.3	2.2
Median age at diagnosis	67	71	67	71		
Deaths	3,966	1,172	4,072	1,188		
Crude mortality rate <sup>1</sup>	10.1	2.9	10.4	2.9		
Standardised mortality rate <sup>1,2</sup>	7.1	1.6	7.2	1.6		
5-year prevalence	8,600	2,300	8,800	2,400		
	<i>after 5 years</i>		<i>after 10 years</i>			
Absolute survival rate (2011–2012) <sup>3</sup>	19 (9–25)	21 (10–27)	14 (6–18)	16 (6–26)		
Relative survival rate (2011–2012) <sup>3</sup>	22 (11–28)	24 (12–31)	18 (9–25)	22 (9–35)		

<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, cancers of the oesophagus cause about 3 % of all cancer deaths among men and approximately 1 % among women, though their share of all cancer cases is lower. In Germany, men are diagnosed with cancer of the oesophagus around four to five times more frequently than women and at an average age of 67, typically four years earlier.

Squamous-cell carcinomas account for 50 % to 60 % of all cases of cancer of the oesophagus. In recent years, the proportion of adenocarcinomas, which are almost exclusively found in the lower third of the oesophagus, has risen to more than one third of cases.

The age-standardised incidence and mortality rates have continued to increase in women since the turn of the millennium and have remained virtually unchanged in men. Only women aged between 60 and 70 years of age show increases.

Despite improvements in recent years, the oesophageal carcinoma ranks among those cancers with rather unfavourable survival prospects. The relative 5-year survival rates are currently 22 % for men and 24 % for women. In line with the unfavourable survival rates only around one in every seven tumours is diagnosed whilst still at an early stage (T1).

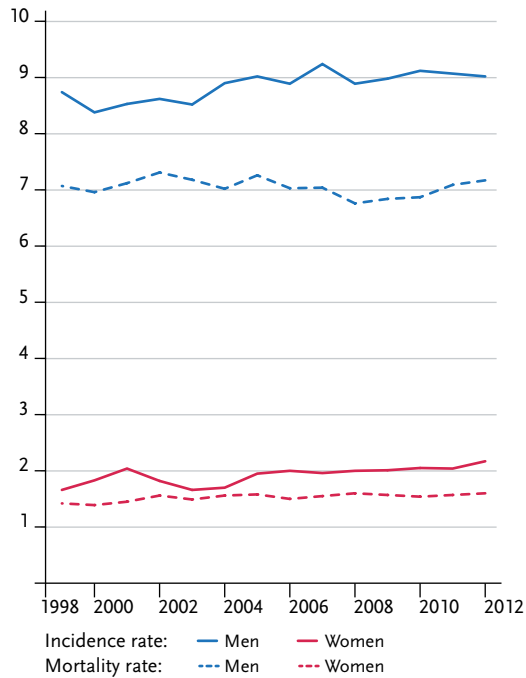
#### Risk factors

The most important risk factors for the development of the more frequent squamous-cell carcinoma in the oesophagus include alcohol and tobacco consumption. In combination, the two factors reinforce one another. Studies have also shown that those affected, often eat little fruit and vegetables.

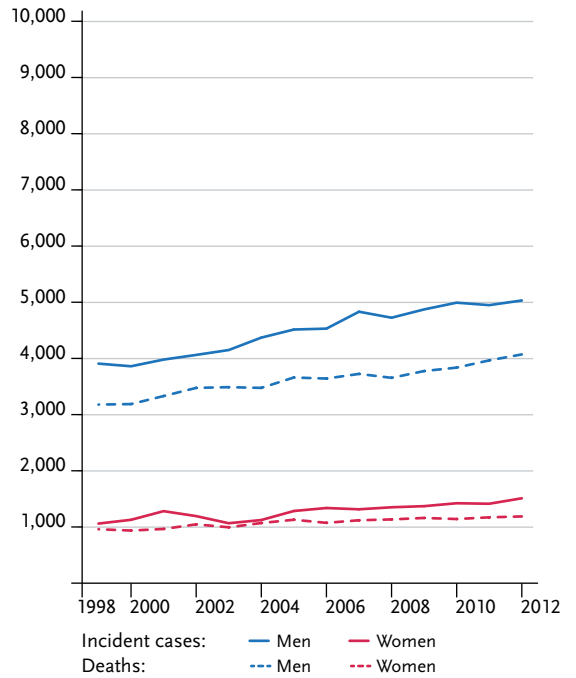
Adenocarcinomas, which are somewhat less frequent, often originate in combination with a gastro-oesophageal reflux disease (long-term flow of gastric juices back into the oesophagus, chronic heartburn). This leads to changes to the mucous lining of the lower part of the oesophagus, causing a Barrett's oesophagus, which is regarded as a precursor to cancer. Also in the case of adenocarcinoma, a consumption below the average of fruit and vegetables increases the risk of developing the disease.

Recently, adenocarcinomas of the oesophagus have been associated with smoking, being overweight and possibly also with type 2 diabetes. Family clusters of cases are known, and genetic predisposition is involved as investigations show. The possible influence of the human papilloma viruses is a topic of controversial debate.

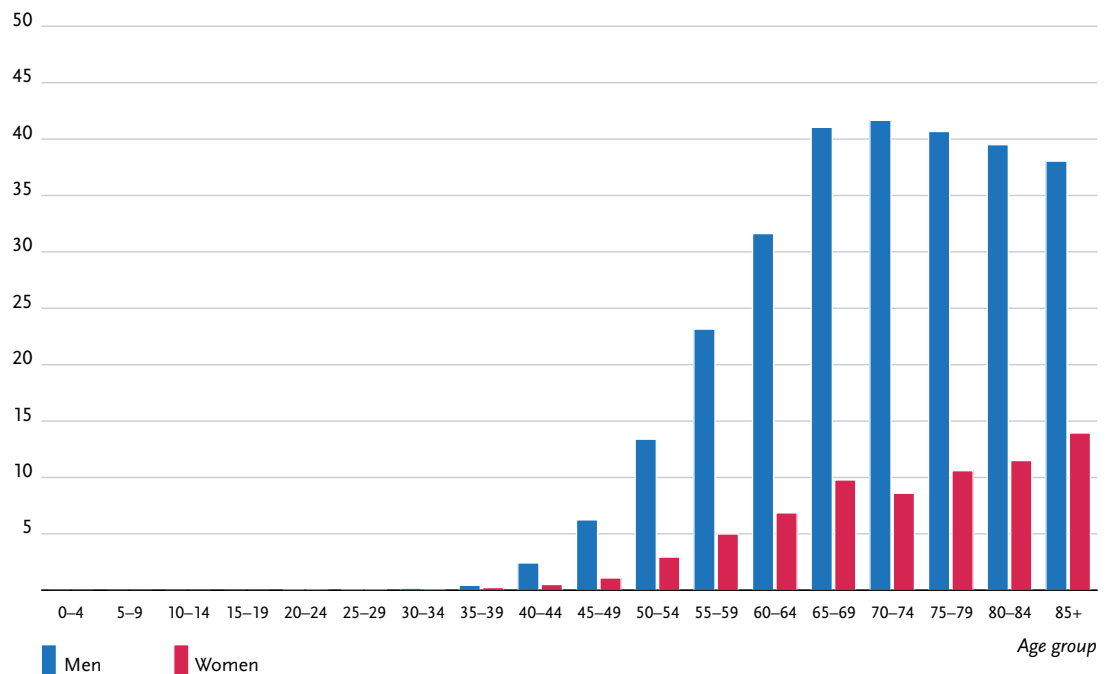
**Figure 3.3.1a**  
Age-standardised incidence and mortality rates,  
by sex, ICD-10 C15, Germany 1999–2012  
per 100,000 (European standard)



**Figure 3.3.1b**  
Absolute numbers of incident cases and deaths,  
by sex, ICD-10 C15, Germany 1999–2012



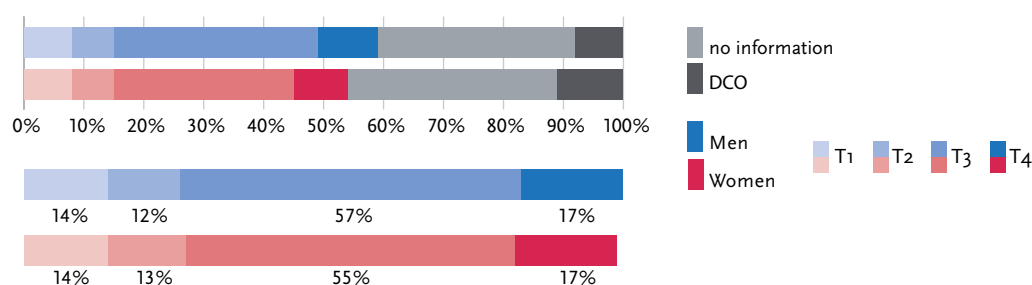
**Figure 3.3.2**  
Age-specific incidence rates by sex, ICD-10 C15, Germany 2011–2012  
per 100,000



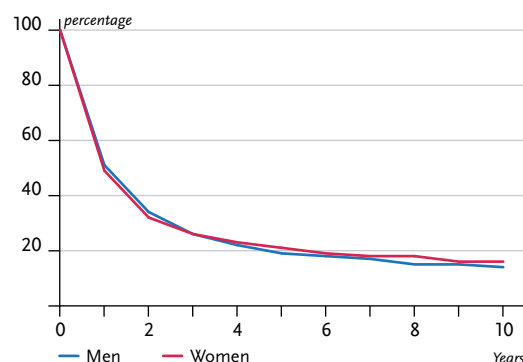
**Table 3.3.2**  
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C15, database 2012

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 6,700)	1.0%	(1 in 100)	<0.1%	(1 in 10,200)	0.8%	(1 in 120)
45 years	0.1%	(1 in 1,000)	1.0%	(1 in 100)	0.1%	(1 in 1,500)	0.8%	(1 in 120)
55 years	0.3%	(1 in 380)	0.9%	(1 in 110)	0.2%	(1 in 500)	0.8%	(1 in 130)
65 years	0.4%	(1 in 270)	0.7%	(1 in 140)	0.3%	(1 in 340)	0.6%	(1 in 160)
75 years	0.3%	(1 in 310)	0.4%	(1 in 230)	0.3%	(1 in 330)	0.4%	(1 in 230)
Lifetime risk			1.0%	(1 in 100)			0.8%	(1 in 130)
Women aged	in the next ten years		ever		in the next ten years		ever	
35 years	<0.1%	(1 in 24,700)	0.3%	(1 in 340)	<0.1%	(1 in 40,700)	0.2%	(1 in 420)
45 years	<0.1%	(1 in 4,400)	0.3%	(1 in 340)	<0.1%	(1 in 7,800)	0.2%	(1 in 420)
55 years	0.1%	(1 in 1,700)	0.3%	(1 in 360)	<0.1%	(1 in 2,300)	0.2%	(1 in 440)
65 years	0.1%	(1 in 1,100)	0.2%	(1 in 430)	0.1%	(1 in 1,500)	0.2%	(1 in 510)
75 years	0.1%	(1 in 1,100)	0.2%	(1 in 630)	0.1%	(1 in 1,300)	0.1%	(1 in 680)
Lifetime risk			0.3%	(1 in 340)			0.2%	(1 in 420)

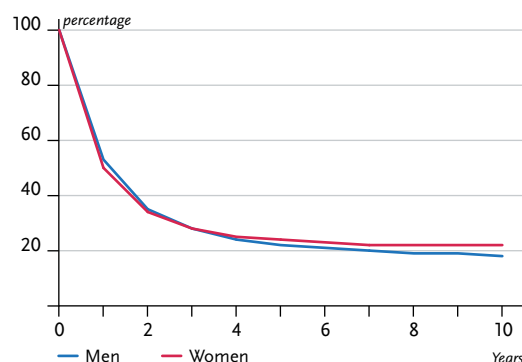
**Figure 3.3.3**  
Distribution of T-stages at first diagnosis by sex (top: all cases; bottom: only valid reports)  
ICD-10 C15, Germany 2011–2012



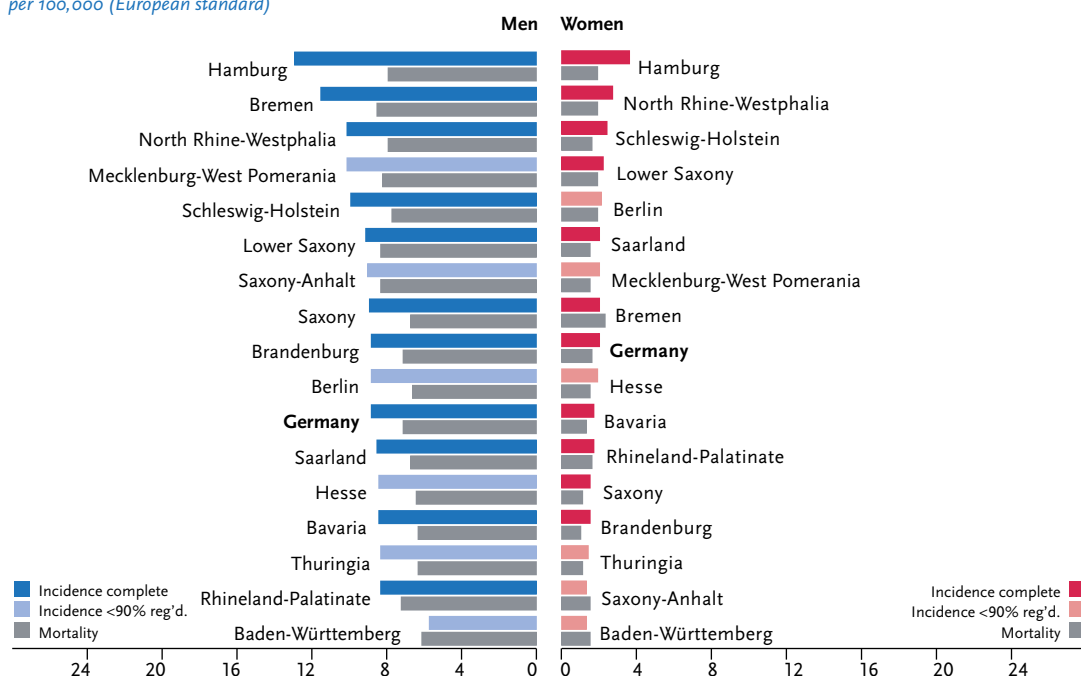
**Figure 3.3.4a**  
Absolute survival rates up to 10 years after first diagnosis, by sex, ICD-10 C15, Germany 2011–2012



**Figure 3.3.4b**  
Relative survival rates up to 10 years after first diagnosis, by sex, ICD-10 C15, Germany 2011–2012



**Figure 3.3.5**  
Registered age-standardised incidence and mortality rates in German federal states, by sex,  
ICD-10 C15, 2011–2012  
per 100,000 (European standard)



**Figure 3.3.6**  
International comparison of age-standardised incidence and mortality rates, by sex,  
ICD-10 C15, 2011–2012 or latest available year (details and sources, see appendix)  
per 100,000 (European standard)



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