

3.11 Larynx

Table 3.11.1
Overview of key epidemiological parameters for Germany, ICD-10 C32

Incidence	2019		2020			
	Women	Men	Women	Men		
Incident cases	550	2,990	510	2,690		
Crude incidence rate ¹	1.3	7.3	1.2	6.5		
Age-standardised incidence rate ^{1,2}	0.9	4.9	0.8	4.3		
Median age at diagnosis	66	67	67	67		
Mortality	2019		2020		2021	
	Women	Men	Women	Men	Women	Men
Deaths	213	1,217	198	1,070	195	1,107
Crude mortality rate ¹	0.5	3.0	0.5	2.6	0.5	2.7
Age-standardised mortality rate ^{1,2}	0.3	1.8	0.2	1.6	0.2	1.6
Median age at death	73	70	74	71	70	72
Prevalence and survival rates	5 years		10 years		25 years	
	Women	Men	Women	Men	Women	Men
Prevalence	2,000	10,400	3,400	17,300	5,300	28,200
Absolute survival rate (2019–2020) ³	60	56 (48–59)	42	37 (30–41)		
Relative survival rate (2019–2020) ³	65	64 (54–69)	51	51 (40–55)		

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

The larynx is almost only ever affected by squamous cell carcinomas. Men develop it significantly more often than women: Of the approximately 3,200 new cases in 2020, only about one in six affected women. Over the course of a lifetime, one in 200 men and only one in 1,000 women in Germany will develop laryngeal cancer. In 2020, the median age at diagnosis was 67 for women and men, which is earlier than for cancer overall. The age-specific incidence rates for women and men peak between the ages of 65 and 75.

The incidence and mortality rates for men have been falling since the end of the 1990s. The rates for women, on the other hand, have remained almost constant.

The relative 5-year survival rates for women (65%) and men (64%) do not differ significantly. At 55%, a higher proportion of early tumour stages (stages I/II) are diagnosed in men than in women at 49% (according to the 8th TNM edition).

Risk factors

Regular cigarette consumption as well as excessive consumption of alcohol are the main risk factors for the development of laryngeal cancer. The combination of both factors is particularly harmful.

It is also known that these tumours are associated with (occupational) exposure to asbestos, ionising radiation such as uranium, aerosols containing sulphuric acid, polycyclic aromatic hydrocarbons and coal and tar products. Cement and wood dust appear to be less significant.

Infections with human papillomaviruses (HPV), in particular with the HPV high-risk type 16, are responsible for the development of a small proportion of laryngeal carcinomas.

The influence of lifestyle and diet is not yet clear, as tobacco and alcohol consumption override the influence of other factors in the majority of those affected. However, there are indications that an unbalanced, vitamin-poor diet with excessive consumption of meat and fried food can increase the risk.

A genetic predisposition is also assumed, as laryngeal carcinomas sometimes occur more frequently within a family.

Figure 3.11.1a
Age-standardised incidence and mortality rates by sex, ICD-10 C32, Germany 1999 – 2020/2021 per 100,000 (old European Standard)

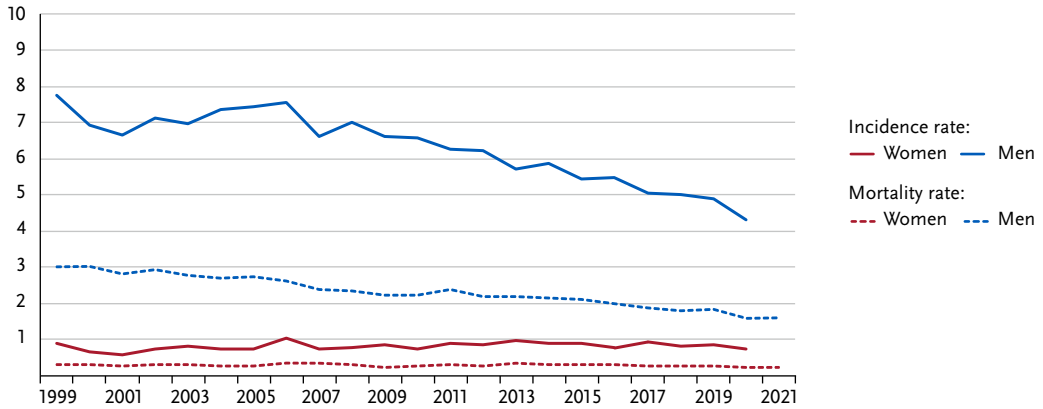


Figure 3.11.1b
Absolute numbers of incident cases and deaths by sex, ICD-10 C32, Germany 1999 – 2020/2021

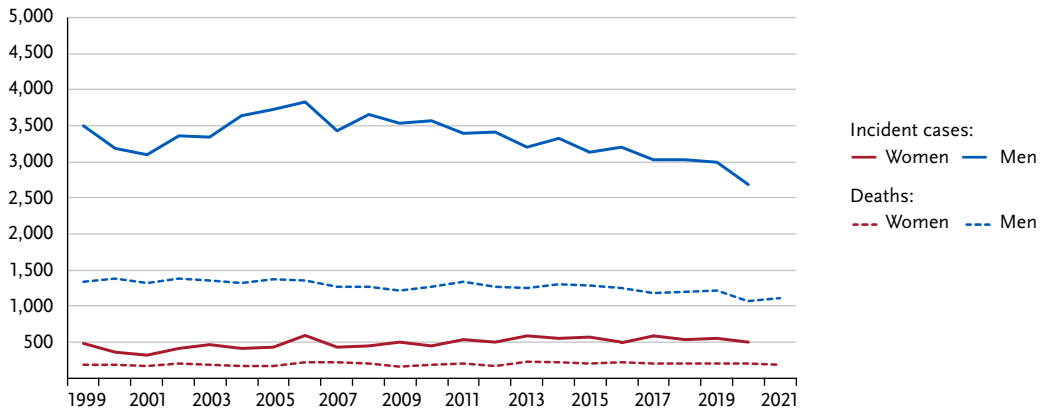


Figure 3.11.2
Age-specific incidence rates by sex, ICD-10 C32, Germany 2019 – 2020 per 100,000

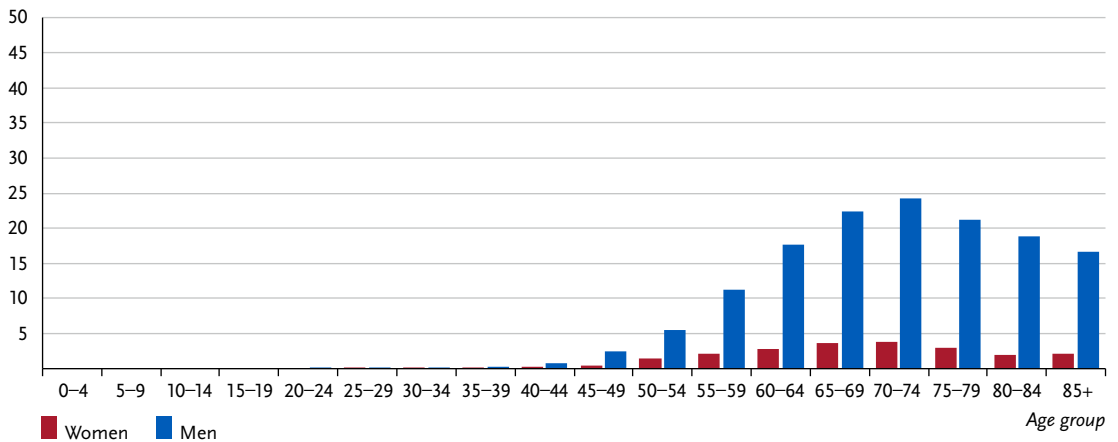


Table 3.11.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C32, database 2019

Women aged	Risk of developing cancer				Mortality risk			
	in the next 10 years		ever		in the next 10 years		ever	
35 years	< 0.1 %	(1 in 36,000)	0.1 %	(1 in 1,000)	< 0.1 %	(1 in 2,143,900)	< 0.1 %	(1 in 2,500)
45 years	< 0.1 %	(1 in 10,700)	0.1 %	(1 in 1,100)	< 0.1 %	(1 in 124,100)	< 0.1 %	(1 in 2,500)
55 years	< 0.1 %	(1 in 3,800)	0.1 %	(1 in 1,200)	< 0.1 %	(1 in 16,400)	< 0.1 %	(1 in 2,500)
65 years	< 0.1 %	(1 in 2,700)	0.1 %	(1 in 1,600)	< 0.1 %	(1 in 5,900)	< 0.1 %	(1 in 2,800)
75 years	< 0.1 %	(1 in 4,300)	0.0 %	(1 in 3,300)	< 0.1 %	(1 in 6,700)	< 0.1 %	(1 in 4,700)
Lifetime risk			0.1 %	(1 in 1,000)			< 0.1 %	(1 in 2,500)
Men aged	in the next 10 years		ever		in the next 10 years		ever	
35 years	< 0.1 %	(1 in 12,300)	0.5 %	(1 in 180)	< 0.1 %	(1 in 91,600)	0.2 %	(1 in 440)
45 years	< 0.1 %	(1 in 2,300)	0.5 %	(1 in 190)	< 0.1 %	(1 in 8,400)	0.2 %	(1 in 430)
55 years	0.1 %	(1 in 690)	0.5 %	(1 in 190)	< 0.1 %	(1 in 2,100)	0.2 %	(1 in 440)
65 years	0.2 %	(1 in 450)	0.4 %	(1 in 250)	0.1 %	(1 in 1,200)	0.2 %	(1 in 510)
75 years	0.2 %	(1 in 590)	0.2 %	(1 in 430)	0.1 %	(1 in 1,100)	0.1 %	(1 in 720)
Lifetime risk			0.5 %	(1 in 190)			0.2 %	(1 in 440)

Figure 3.11.3
Distribution of UICC stages at diagnosis by sex, ICD-10 C32, Germany 2019 – 2020
(top: incl. missing data and DCO cases; bottom: valid values only)

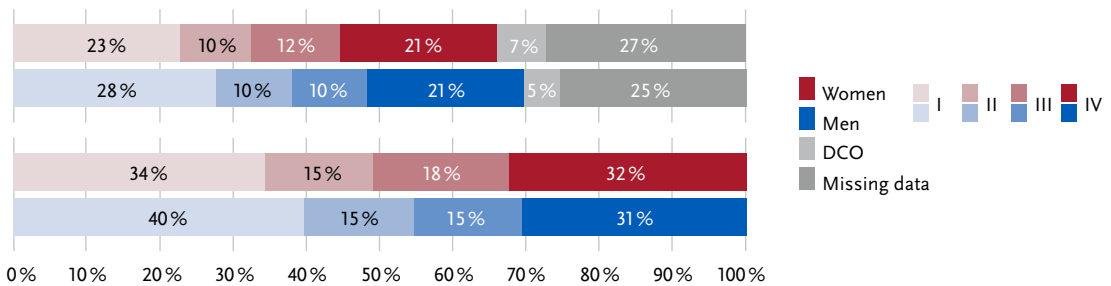


Figure 3.11.4
Absolute and relative survival rates up to 10 years after diagnosis, by sex, ICD-10 C32, Germany 2019 – 2020

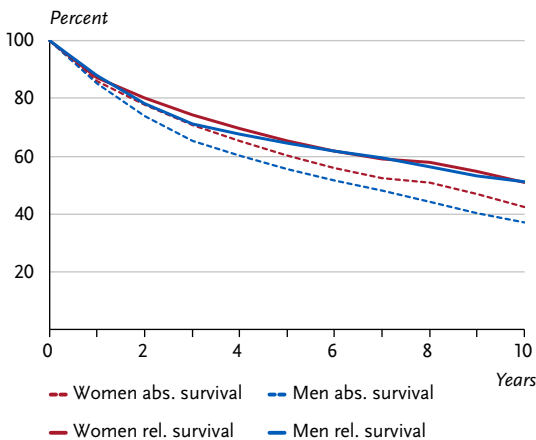


Figure 3.11.5
Relative 5-year survival by UICC stage (7th and 8th edition TNM) and sex, ICD-10 C32, Germany 2019 – 2020

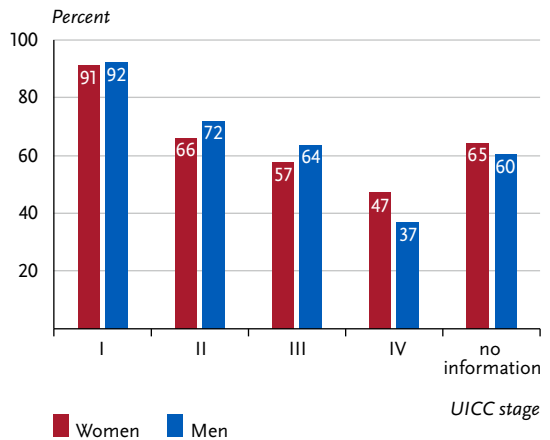


Figure 3.11.6
 Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C32, 2019 – 2020
 per 100,000 (old European Standard)

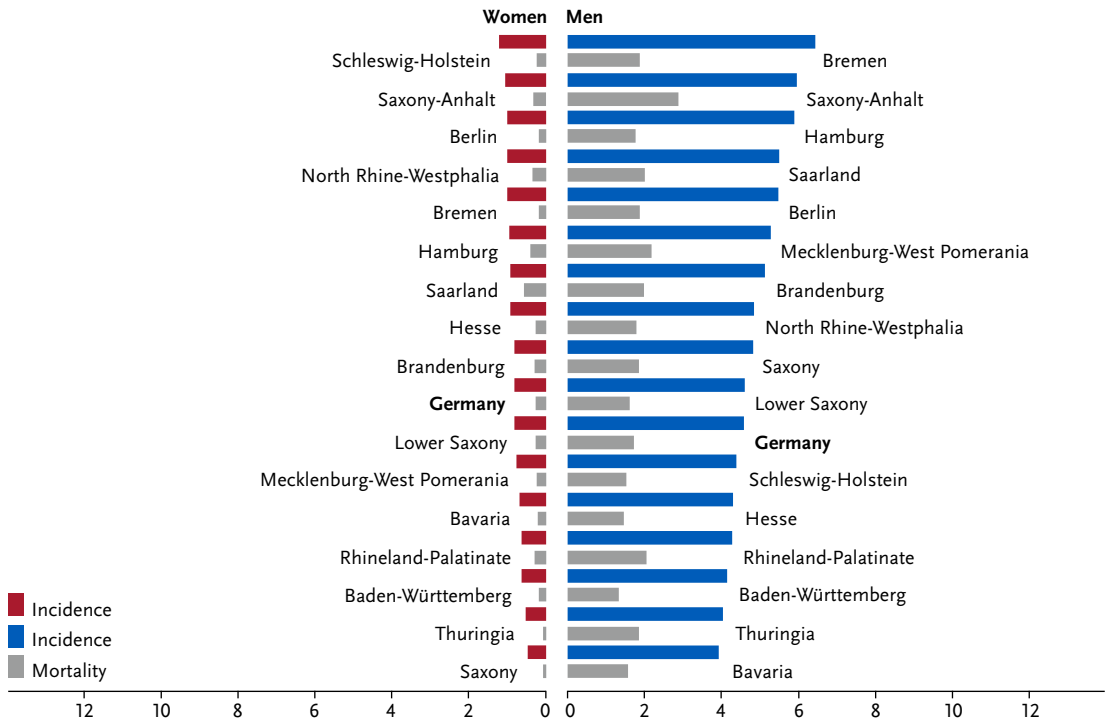
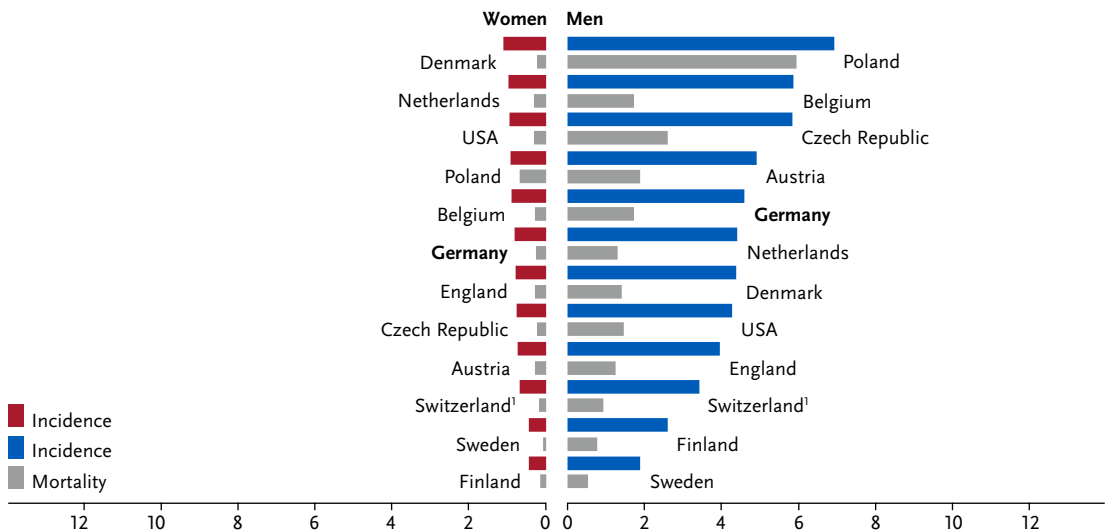


Figure 3.11.7
 International comparison of age-standardised incidence and mortality rates by sex,
 ICD-10 C32, 2019 – 2020 or latest available year (details and sources, see appendix)
 per 100,000 (old European Standard)



¹ Switzerland: incidence data for 2015 – 2019