

3.11 Larynx

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

Incidence	2017		2018		Prediction for 2022	
	Women	Men	Women	Men	Women	Men
Incident cases	570	2,820	540	2,770	640	2,600
Crude incidence rate ¹	1.4	6.9	1.3	6.8	1.5	6.4
Age-standardised incidence rate ^{1,2}	0.9	4.7	0.8	4.6	1.0	4.1
Median age at diagnosis	65	67	66	67		
Mortality	2017		2018		2019	
	Women	Men	Women	Men	Women	Men
Deaths	201	1,182	203	1,201	213	1,217
Crude mortality rate ¹	0.5	2.9	0.5	2.9	0.5	3.0
Age-standardised mortality rate ^{1,2}	0.3	1.9	0.3	1.8	0.3	1.8
Median age at death	71	70	72	72	73	70
Prevalence and survival rates	5 years		10 years		25 years	
	Women	Men	Women	Men	Women	Men
Prevalence	2,000	10,400	3,300	17,700	5,400	30,000
Absolute survival rate (2017–2018) ³	59	56 (48–62)	44	37 (30–41)		
Relative survival rate (2017–2018) ³	63	64 (54–72)	52	51 (41–56)		

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 this cancer considerably more often than women: There were approximately 3,310 new cases in 2018, but only about one in five affected a woman. In the course of a lifetime, one in 200 men, but only one in 1,100 women in Germany will develop laryngeal cancer. The median age at diagnosis in 2018 was 66 for women and 67 for men, which is earlier than for cancer overall. The age-specific incidence rates show an age peak between 60 and 75 years for women, and between 65 and 75 years for men.

The incidence and mortality rates for men have decreased 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 (63%) and men (64%) do not differ significantly. A higher proportion of early tumour stages (stages I/II) are diagnosed in men (52%) than in women (46%) (according to the 7th TNM edition).

Risk factors

Regular cigarette consumption and excessive consumption of alcohol are 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 from uranium, aerosols containing sulphuric acid, polycyclic aromatic hydrocarbons and coal and tar products. Cement and wood dust appear to be less important.

Infections with human papillomaviruses (HPV), especially HPV 16, are responsible for the development of a small proportion of laryngeal carcinomas.

The influence of lifestyle and diet has not yet been clearly clarified, 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 an increased incidence of laryngeal carcinoma has sometimes been observed within a family.

Figure 3.11.1a
 Age-standardised incidence and mortality rates by sex, ICD-10 C32, Germany 1999–2018/2019, projection (incidence) through 2022
 per 100,000 (old European Standard)

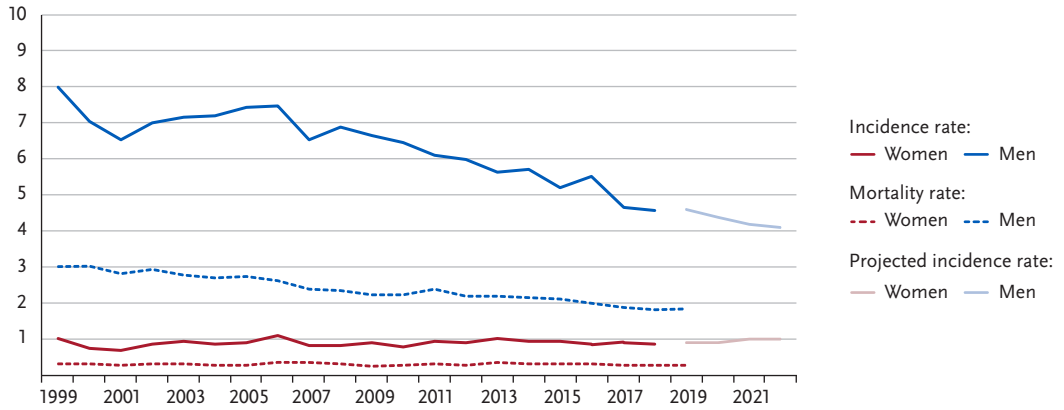


Figure 3.11.1b
 Absolute numbers of incident cases and deaths by sex, ICD-10 C32, Germany 1999–2018/2019, projection (incidence) through 2022

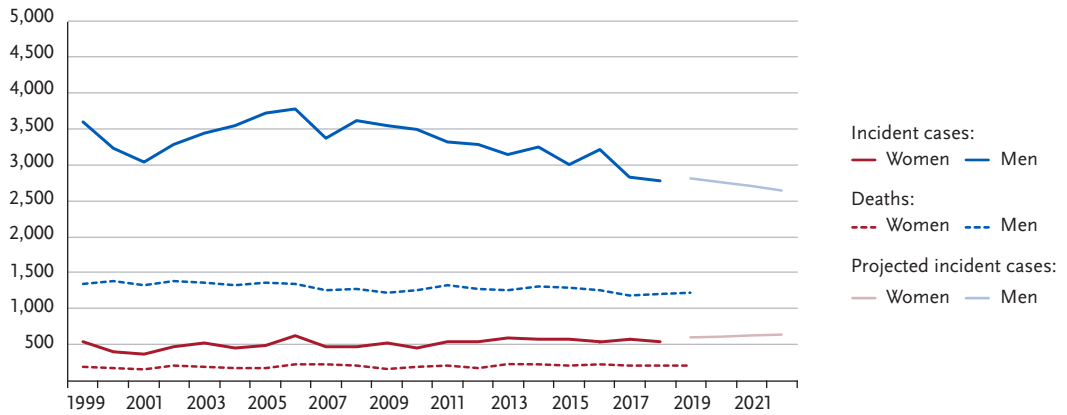


Figure 3.11.2
 Age-specific incidence rates by sex, ICD-10 C32, Germany 2017–2018
 per 100,000

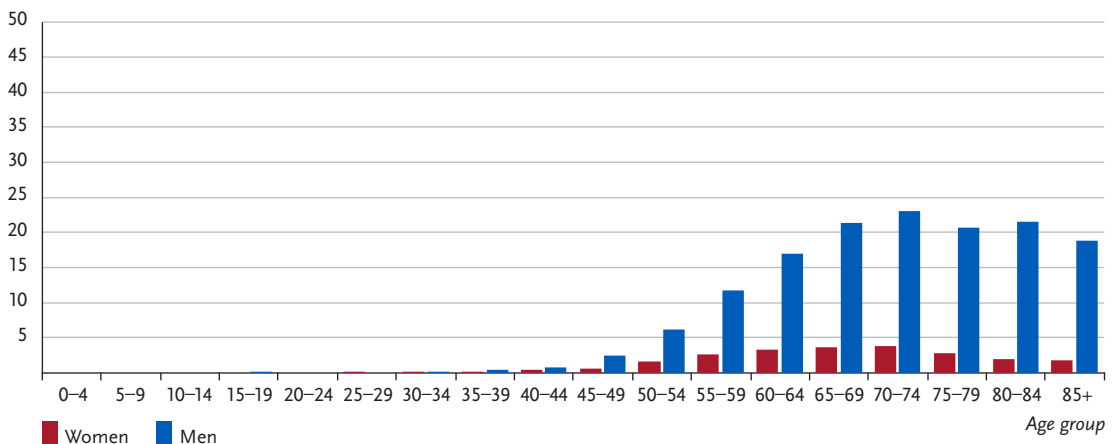


Table 3.11.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C32, database 2018

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 46,500)	0.1 % (1 in 1,000)	*	< 0.1 % (1 in 2,600)		
45 years	< 0.1 % (1 in 9,500)	0.1 % (1 in 1,100)	< 0.1 % (1 in 67,200)	< 0.1 % (1 in 2,600)			
55 years	< 0.1 % (1 in 3,600)	0.1 % (1 in 1,200)	< 0.1 % (1 in 15,300)	< 0.1 % (1 in 2,600)			
65 years	< 0.1 % (1 in 2,900)	0.1 % (1 in 1,700)	< 0.1 % (1 in 7,400)	< 0.1 % (1 in 3,000)			
75 years	< 0.1 % (1 in 4,900)	< 0.1 % (1 in 3,400)	< 0.1 % (1 in 8,500)	< 0.1 % (1 in 4,500)			
Lifetime risk		0.1 % (1 in 1,100)		< 0.1 % (1 in 2,600)			
Men aged	in the next 10 years		ever		in the next 10 years		ever
	35 years	< 0.1 % (1 in 14,800)	0.5 % (1 in 200)	< 0.1 % (1 in 69,100)	0.2 % (1 in 430)		
45 years	< 0.1 % (1 in 2,400)	0.5 % (1 in 200)	< 0.1 % (1 in 9,900)	0.2 % (1 in 430)			
55 years	0.1 % (1 in 740)	0.5 % (1 in 210)	< 0.1 % (1 in 2,300)	0.2 % (1 in 440)			
65 years	0.2 % (1 in 490)	0.4 % (1 in 260)	0.1 % (1 in 1,200)	0.2 % (1 in 490)			
75 years	0.2 % (1 in 630)	0.2 % (1 in 450)	0.1 % (1 in 1,000)	0.2 % (1 in 640)			
Lifetime risk		0.5 % (1 in 200)		0.2 % (1 in 440)			

* No deaths in the period under consideration

Figure 3.11.3
Distribution of UICC stages at diagnosis by sex, ICD-10 C32, Germany 2017–2018
top: according to 7th edition TNM; bottom: according to 8th edition TNM.
The DCO proportion was 5%. For 35% of the remaining cases, no UICC stage could be assigned.

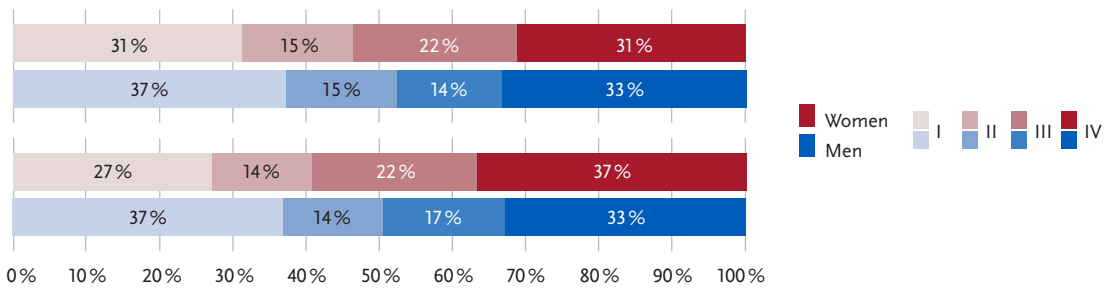


Figure 3.11.4
Absolute and relative survival rates up to 10 years after diagnosis by sex, ICD-10 C32, Germany 2017–2018

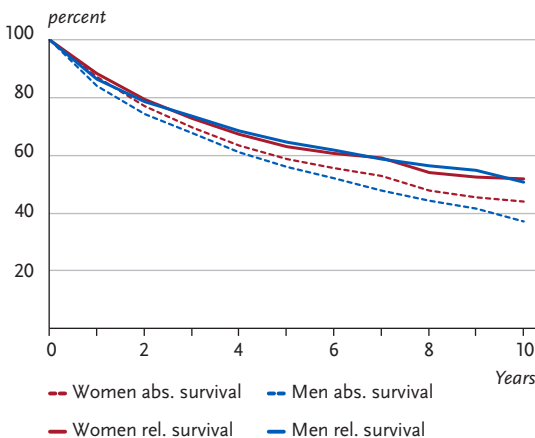


Figure 3.11.5
Relative 5-year survival by UICC stage (7th edition TNM) and sex, ICD-10 C32, Germany 2016–2018

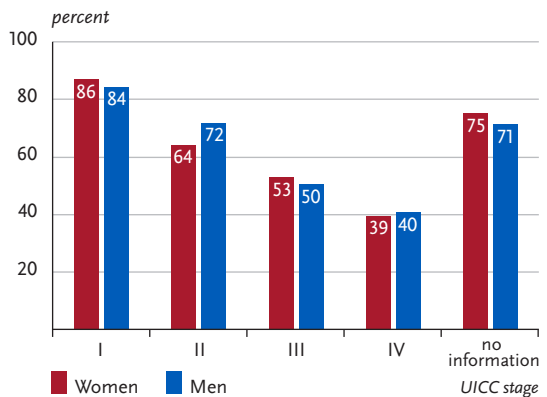


Figure 3.11.6
 Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C32, 2017–2018
 per 100,000 (old European Standard)

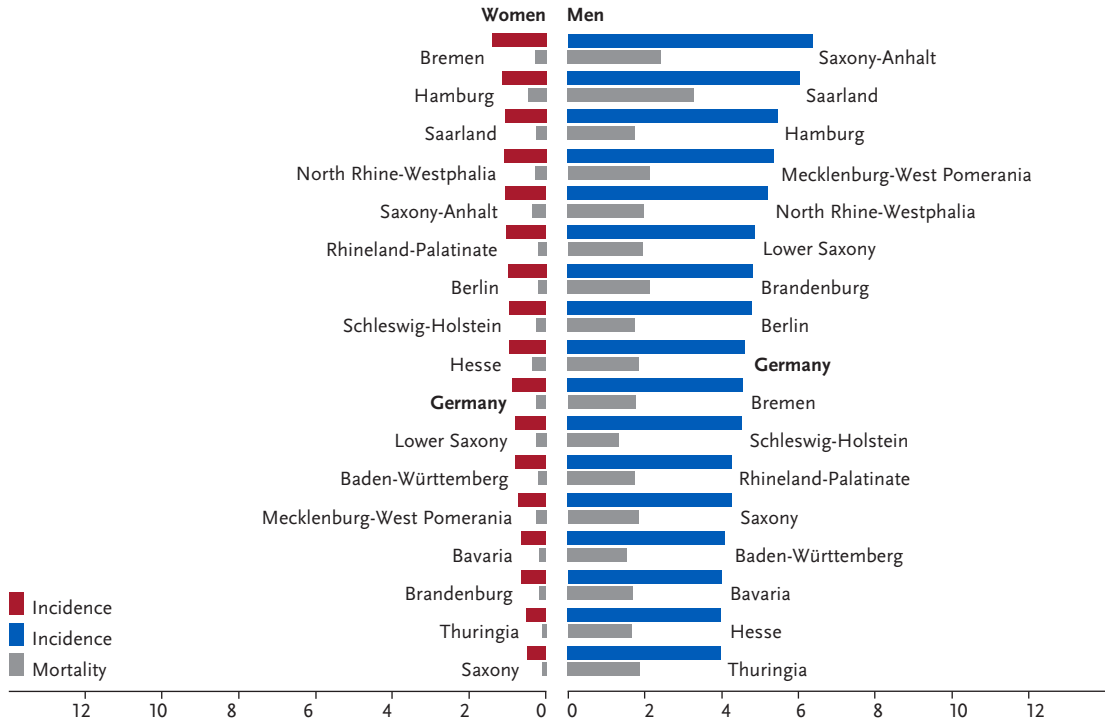
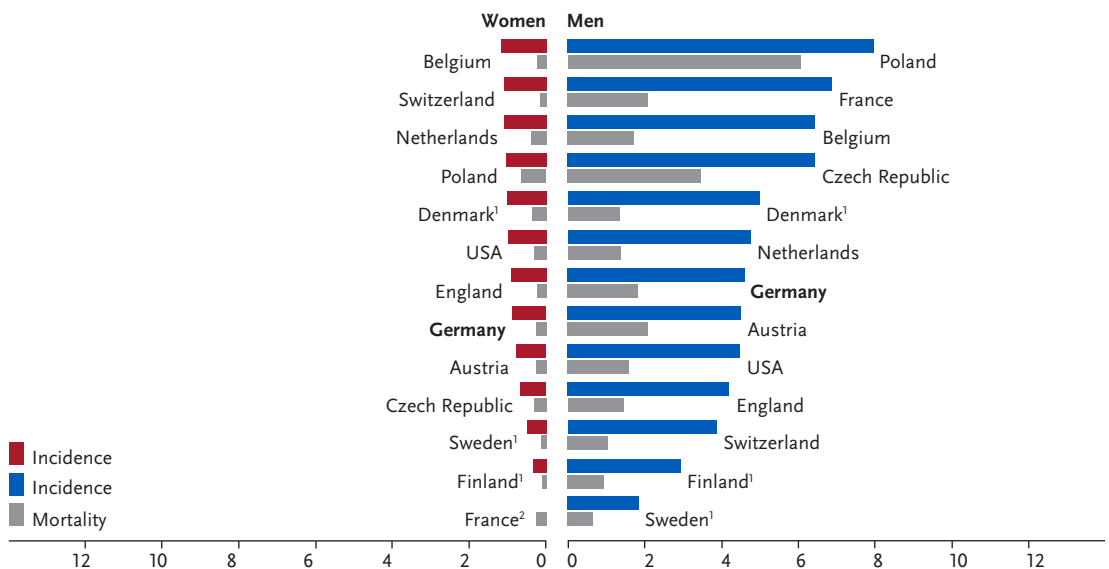


Figure 3.11.7
 International comparison of age-standardised incidence and mortality rates by sex,
 ICD-10 C32, 2017–2018 or latest available year (details and sources, see appendix)
 per 100,000 (old European Standard)



¹ Data include C10.1
² Incidence for women not available