

3.9 Larynx

Table 3.9.1
Overview of key epidemiological parameters for Germany, ICD-10 C32

	2009		2010		Prediction for 2014	
	Men	Women	Men	Women	Men	Women
Incident cases	3,330	510	3,230	460	3,300	600
Crude incidence rate ¹	8.3	1.2	8.1	1.1	8.3	1.4
Standardised incidence rate ^{1,2}	6.3	0.9	6.0	0.8	5.7	1.0
Median age at diagnosis	66	64	66	63		
Deaths	1,215	162	1,261	188		
Crude mortality rate ¹	3.0	0.4	3.1	0.5		
Standardised mortality rate ^{1,2}	2.2	0.3	2.2	0.3		
5-year prevalence	12,100	1,700	12,000	1,700		
Absolute 5-year survival rate (2009-2010) ³	58 (50-62)		59			
Relative 5-year survival rate (2009-2010) ³	65 (56-70)		65			

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

Epidemiology

Men are affected by laryngeal cancer considerably more frequently than women due to their higher consumption of tobacco and alcohol. Currently one in 170 men in Germany develops laryngeal cancer during their lifetime, but only one in 1,200 women (lifetime risk). The median age of diagnosis in women is 63 years and in men 66 years.

The incidence and mortality rates for men have continued to decline since the turn of the millennium, very markedly among younger individuals. For the same period, the rates for women have not increased further. Here too, incidence rates among the under 50 year-olds are in decline. In the first decade of this century this resulted in a decrease in the mortality and incidence rates among men, with the number of cases among women remaining unchanged.

The relative 5-year survival rates for men and women do not differ, each with a rate of 65%. Tumours of the larynx are diagnosed at an early stage (T1) in approximately one third of all cases. The vast majority of all cases of laryngeal cancer are squamous-cell carcinomas.

Risk factors

Smoking is the most important risk factor for the development of laryngeal cancer. Alcohol consumption also increases the probability of developing this cancer, whereby the combination of both factors is particularly harmful. The influences of lifestyle, diet, or environmental factors are not yet completely clear, because in the majority of cases the influence of tobacco and alcohol consumption overshadows other effects. However, there are indications that increased consumption of red meat, as well as a vitamin-deficient diet may increase risk. There is a known link between tumours of the larynx and occupational exposure to asbestos, nickel or polycyclic aromatic hydrocarbons. The role of infections with human papilloma viruses (HPV) has not been completely clarified to date. There are indications that infections with *Helicobacter pylori* may also be of significance.

First-degree relatives of patients have a higher risk of developing laryngeal cancer, but it is not clear in detail, whether this is attributable to risk-genes which are directly involved in the development of the tumour or to genes which determine the individual susceptibility to carcinogens.

Figure 3.9.1a
Age-standardised incidence and mortality rates, by sex,
ICD-10 C32, Germany 1999 – 2010
per 100,000 (European standard)

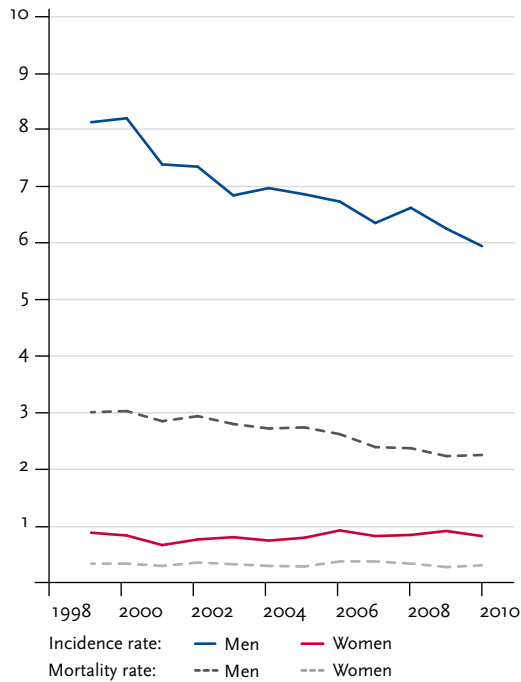


Figure 3.9.1b
Absolute numbers of incident cases and deaths, by sex,
ICD-10 C32, Germany 1999 – 2010

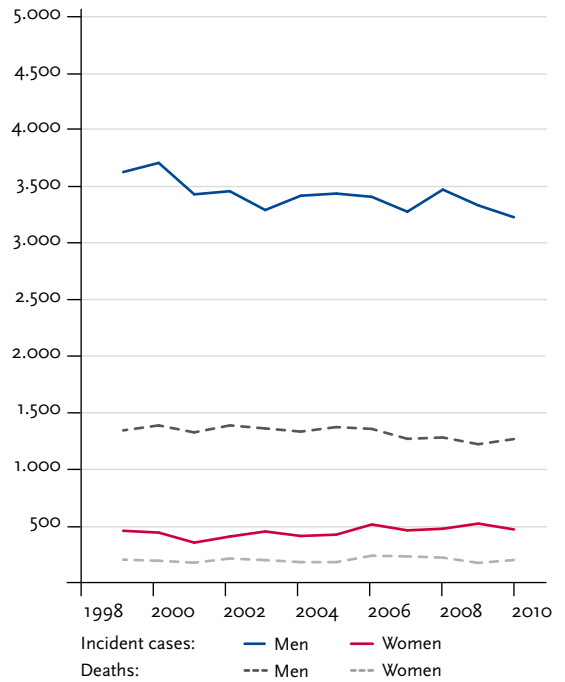


Figure 3.9.2
Age-specific incidence rates by sex, ICD-10 C32, Germany 2009 – 2010
per 100,000

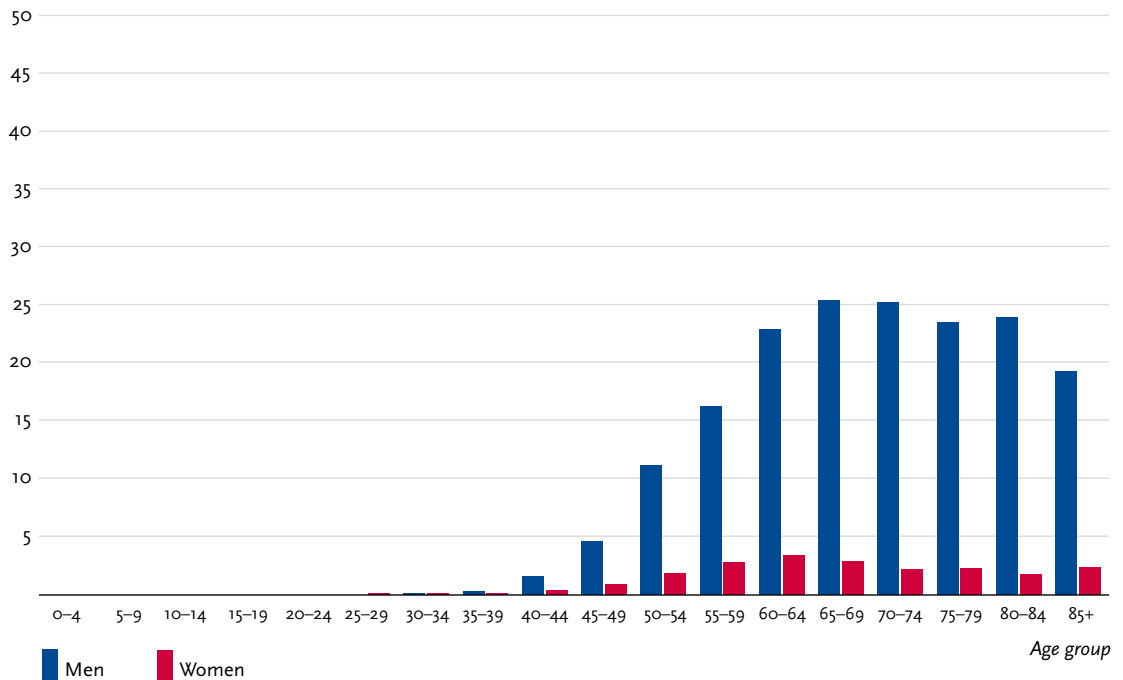


Table 3.9.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C32, database 2010

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 9,000)	0.6%	(1 in 160)	<0.1%	(1 in 49,000)	0.3%	(1 in 390)
45 years	0.1%	(1 in 1,400)	0.6%	(1 in 160)	<0.1%	(1 in 4,500)	0.3%	(1 in 380)
55 years	0.2%	(1 in 550)	0.6%	(1 in 180)	0.1%	(1 in 1,700)	0.2%	(1 in 400)
65 years	0.2%	(1 in 440)	0.4%	(1 in 240)	0.1%	(1 in 1,200)	0.2%	(1 in 480)
75 years	0.2%	(1 in 570)	0.2%	(1 in 420)	0.1%	(1 in 980)	0.2%	(1 in 640)
Lifetime risk			0.6%	(1 in 170)			0.3%	(1 in 390)
Women aged	in the next ten years		ever		in the next ten years		ever	
35 years	<0.1%	(1 in 38,000)	0.1%	(1 in 1,200)	<0.1%	(1 in 181,000)	<0.1%	(1 in 2,800)
45 years	<0.1%	(1 in 7,200)	0.1%	(1 in 1,200)	<0.1%	(1 in 28,000)	<0.1%	(1 in 2,800)
55 years	<0.1%	(1 in 3,600)	0.1%	(1 in 1,400)	<0.1%	(1 in 14,000)	<0.1%	(1 in 3,100)
65 years	<0.1%	(1 in 4,900)	<0.1%	(1 in 2,300)	<0.1%	(1 in 8,800)	<0.1%	(1 in 3,700)
75 years	<0.1%	(1 in 5,400)	<0.1%	(1 in 3,700)		(1 in 9,100)		(1 in 5,700)
Lifetime risk			0.1%	(1 in 1,200)			<0.1%	(1 in 2,800)

Figure 3.9.3
Distribution of T-stages at first diagnosis by sex (top: all cases; bottom: only valid reports)
ICD-10 C32, Germany 2009 – 2010

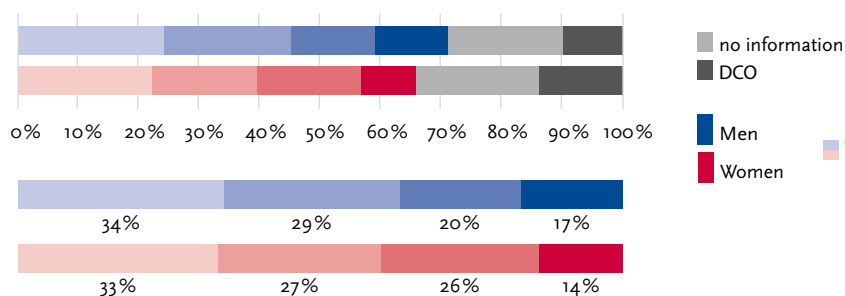


Figure 3.9.4a
Absolute survival rates up to 5 years after first diagnosis,
by sex, ICD-10 C32, Germany 2009 – 2010

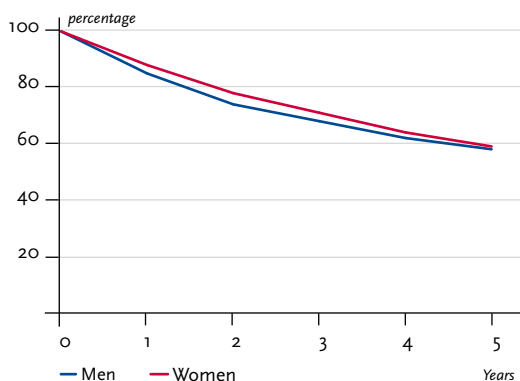


Figure 3.9.4b
Relative survival rates up to 5 years after first diagnosis,
by sex, ICD-10 C32, Germany 2009 – 2010

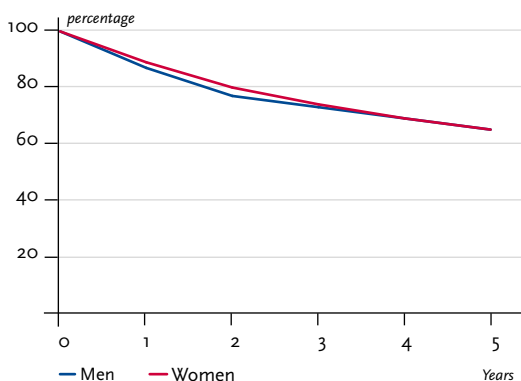


Figure 3.9.5
Registered age-standardised incidence and mortality rates in German federal states, by sex,
ICD-10 C32, 2009 – 2010
per 100,000 (European standard)

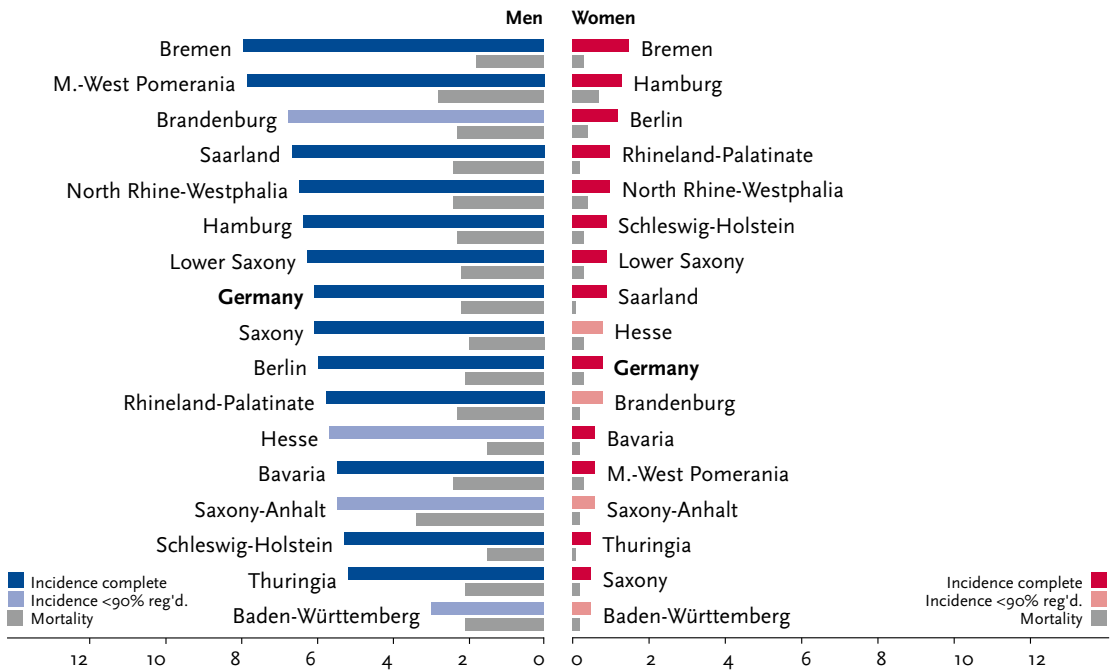


Figure 3.9.6
International comparison of age-standardised incidence and mortality rates, by sex,
ICD-10 C32, 2009 – 2010 or latest available year (details and sources, see appendix)
per 100,000 (European standard)

