

3.2 Oral cavity and pharynx

Table 3.2.1
Overview of key epidemiological parameters for Germany, ICD-10 Co0-C14

Incidence	2019		2020			
	Women	Men	Women	Men		
Incident cases	4,490	9,730	4,050	9,140		
Crude incidence rate ¹	10.7	23.7	9.6	22.3		
Age-standardised incidence rate ^{1,2}	6.6	16.6	5.8	15.3		
Median age at diagnosis	67	64	68	65		
Mortality	2019		2020		2021	
	Women	Men	Women	Men	Women	Men
Deaths	1,479	3,888	1,397	3,955	1,421	3,796
Crude mortality rate ¹	3.5	9.5	3.3	9.6	3.4	9.2
Age-standardised mortality rate ^{1,2}	1.9	6.3	1.7	6.3	1.7	5.9
Median age at death	73	67	74	67	72	68
Prevalence and survival rates	5 years		10 years		25 years	
	Women	Men	Women	Men	Women	Men
Prevalence	14,800	29,600	23,800	47,700	34,700	69,400
Absolute survival rate (2019–2020) ³	57 (54–65)	46 (42–53)	41 (39–44)	31 (27–36)		
Relative survival rate (2019–2020) ³	64 (62–73)	52 (46–61)	53 (50–58)	41 (35–47)		

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

Cancers of the oral cavity and pharynx represent a heterogeneous group of malignant neoplasms. Histologically, 84% are squamous cell carcinomas, which originate in particular from the mucous membranes of the oral cavity, nasopharynx, oropharynx and hypopharynx. About 3% of neoplasms in the oral cavity and pharynx are adenocarcinomas, which occur mainly in the salivary glands. Men develop the disease more frequently and two to three years earlier than women. The age-standardised incidence rates increased for both genders between 1999 and 2011. Since 2011, they have remained more or less constant for women and have even fallen slightly for men. The corresponding mortality rates have fallen slightly for men over the entire period, and are almost unchanged for women.

Overall, women have higher relative 5-year survival rates (64%) compared to men (52%). A lower proportion of cancers of the floor of the mouth, tongue and throat that are promoted by tobacco and alcohol consumption, which are associated with lower survival rates, contribute to this. According to the UICC tumour staging data currently only available for oral cavity cancers (Co2 – Co6), about one in three oral cavity tumours in women is diagnosed at early stage I, but only one in four in men.

Risk factors

The most important risk factors for the development of cancer in the oral cavity and pharynx are any form of tobacco and alcohol consumption. If both factors act together, the effect increases considerably. Another main risk factor is chronic infection with high-risk human papillomaviruses (HPV), especially HPV 16. HPV infections cause cancer in the oropharynx in particular, and much less frequently in the oral cavity or other regions of the throat.

Infections with Epstein-Barr viruses and the consumption of large quantities of food containing nitrosamines (e.g. salted fish) are also considered risk factors for nasopharyngeal carcinoma. Regarding carcinomas of the lip, UV radiation contributes to the development of cancer.

There is evidence that an unbalanced, vitamin-poor diet with excessive consumption of meat and fried food can increase the risk.

A genetic predisposition to the development of carcinomas in the head and neck area is also assumed, as an increased familial occurrence can be observed in isolated cases.

Figure 3.2.1a
Age-standardised incidence and mortality rates by sex, ICD-10 C00 – C14, Germany 1999 – 2020/2021
per 100,000 (old European Standard)

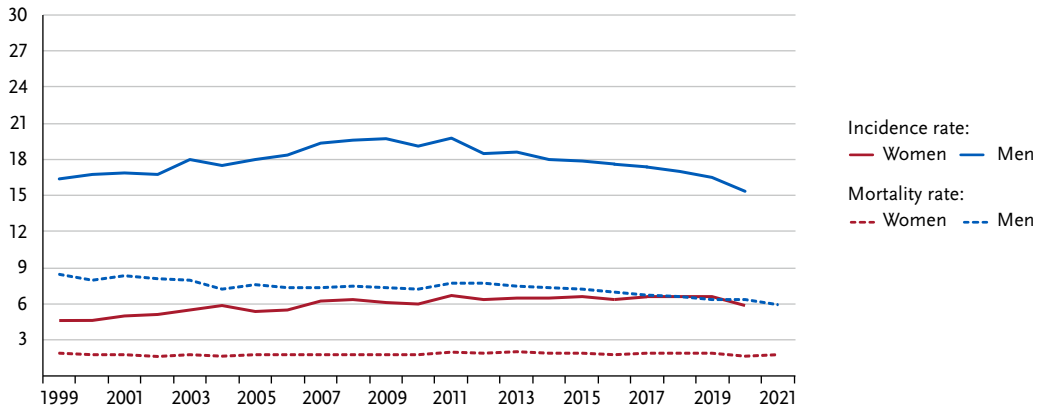


Figure 3.2.1b
Absolute numbers of incident cases and deaths by sex, ICD-10 C00 – C14, Germany 1999 – 2020/2021

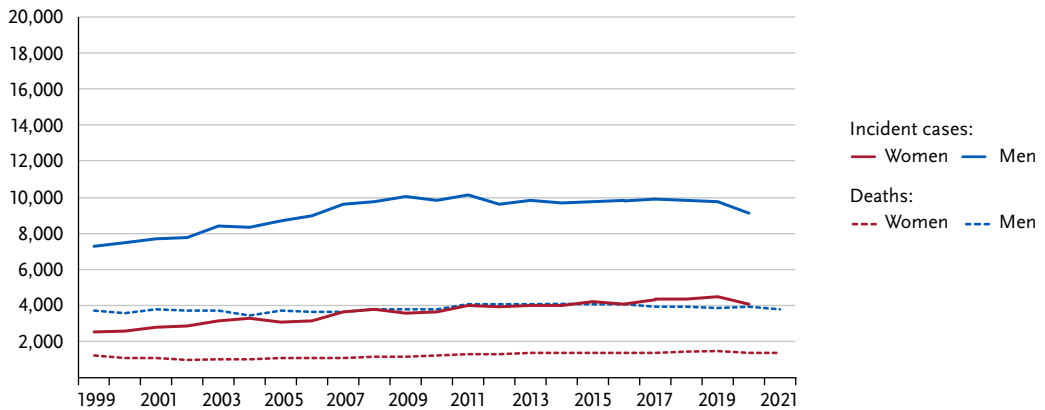


Figure 3.2.2
Age-specific incidence rates by sex, ICD-10 C00 – C14, Germany 2019 – 2020
per 100,000

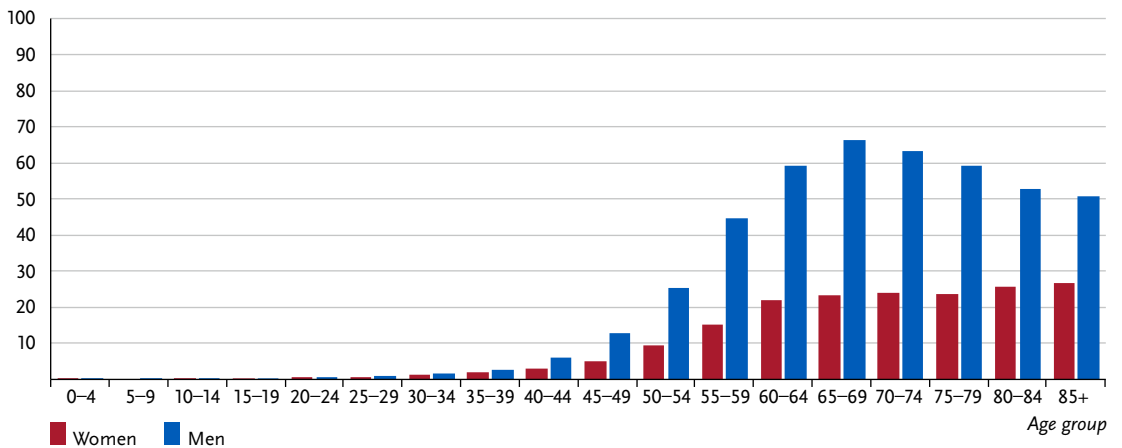


Table 3.2.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 Co0 – C14, database 2019

Risk of developing cancer				Mortality risk	
Women aged	in the next 10 years	ever	in the next 10 years	ever	ever
35 years	< 0.1 % (1 in 3,600)	0.8 % (1 in 125)	< 0.1 % (1 in 24,100)	0.3 % (1 in 360)	0.3 % (1 in 360)
45 years	0.1 % (1 in 1,200)	0.8 % (1 in 128)	< 0.1 % (1 in 6,100)	0.3 % (1 in 360)	0.3 % (1 in 360)
55 years	0.2 % (1 in 530)	0.7 % (1 in 140)	< 0.1 % (1 in 2,000)	0.3 % (1 in 380)	0.3 % (1 in 380)
65 years	0.2 % (1 in 420)	0.5 % (1 in 182)	0.1 % (1 in 1,300)	0.2 % (1 in 440)	0.2 % (1 in 440)
75 years	0.2 % (1 in 460)	0.4 % (1 in 285)	0.1 % (1 in 1,100)	0.2 % (1 in 600)	0.2 % (1 in 600)
Lifetime risk		0.8 % (1 in 123)		0.3 % (1 in 360)	0.3 % (1 in 360)
Men aged	in the next 10 years	ever	in the next 10 years	ever	ever
35 years	< 0.1 % (1 in 2,200)	1.7 % (1 in 59)	< 0.1 % (1 in 11,600)	0.7 % (1 in 140)	0.7 % (1 in 140)
45 years	0.2 % (1 in 470)	1.7 % (1 in 60)	0.1 % (1 in 1,700)	0.7 % (1 in 140)	0.7 % (1 in 140)
55 years	0.5 % (1 in 200)	1.5 % (1 in 66)	0.2 % (1 in 520)	0.7 % (1 in 150)	0.7 % (1 in 150)
65 years	0.6 % (1 in 170)	1.1 % (1 in 90)	0.3 % (1 in 380)	0.5 % (1 in 190)	0.5 % (1 in 190)
75 years	0.5 % (1 in 210)	0.6 % (1 in 150)	0.2 % (1 in 450)	0.3 % (1 in 310)	0.3 % (1 in 310)
Lifetime risk		1.7 % (1 in 59)		0.7 % (1 in 140)	0.7 % (1 in 140)

Figure 3.2.3
Distribution of UICC stages at diagnosis by sex, ICD-10 Co2 – Co6, Germany 2019 – 2020
(top: incl. missing data and DCO cases; bottom: valid values only)

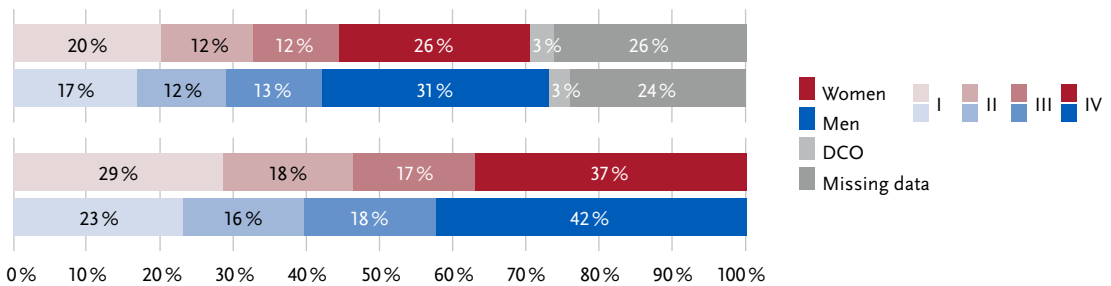


Figure 3.2.4
Absolute and relative survival rates up to 10 years after diagnosis, by sex, ICD-10 Co0 – C14, Germany 2019 – 2020

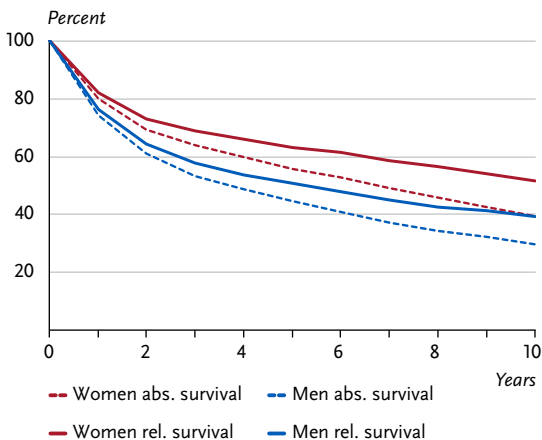


Figure 3.2.5
Relative 5-year survival by site and sex, ICD-10 Co0 – C14, Germany 2019 – 2020

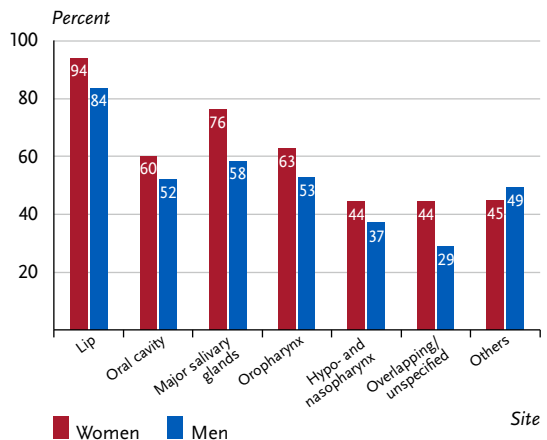


Figure 3.2.6
 Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C00 – C14, 2019 – 2020
 per 100,000 (old European Standard)

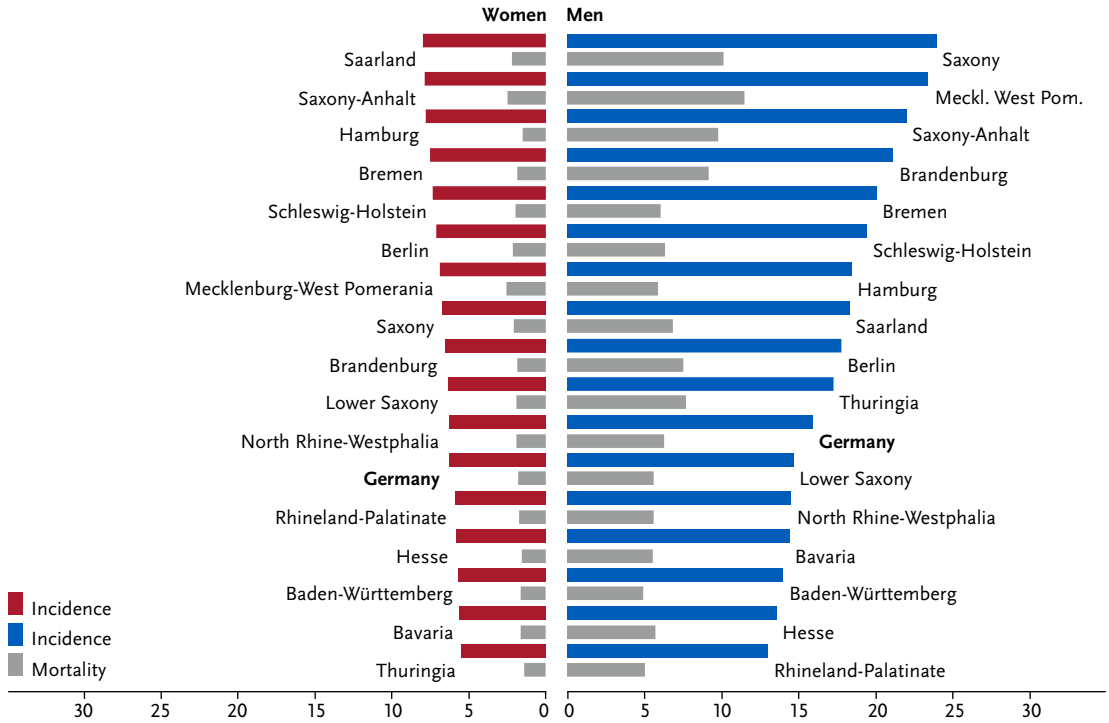
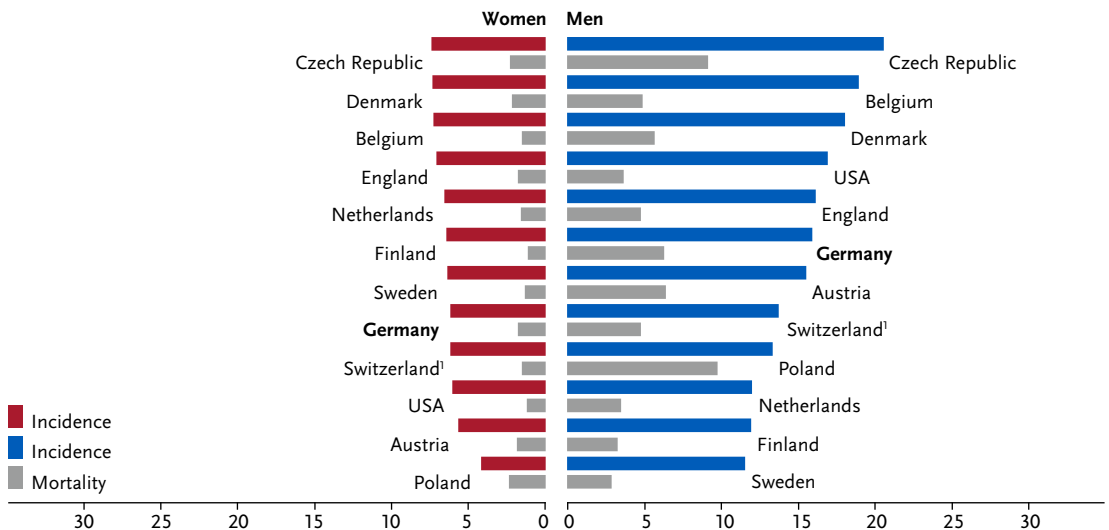


Figure 3.2.7
 International comparison of age-standardised incidence and mortality rates by sex,
 ICD-10 C00 – C14, 2019 – 2020 or latest available year (details and sources, see appendix)
 per 100,000 (old European Standard)



¹ Switzerland: incidence data for 2015 – 2019