

3.6 Colon and rectum

Table 3.6.1
Overview of key epidemiological parameters for Germany, ICD-10 C18 – C20

Incidence	2019		2020			
	Women	Men	Women	Men		
Incident cases	27,170	34,040	24,240	30,530		
Crude incidence rate ¹	64.6	83.0	57.5	74.4		
Age-standardised incidence rate ^{1,2}	33.2	51.8	29.6	46.2		
Median age at diagnosis	75	72	75	71		
Mortality	2019		2020		2021	
	Women	Men	Women	Men	Women	Men
Deaths	11,016	13,032	10,667	13,120	10,303	12,713
Crude mortality rate ¹	26.2	31.8	25.4	32	24.5	30.9
Age-standardised mortality rate ^{1,2}	11.2	18.3	10.7	18.1	10.3	17.4
Median age at death	80	76	80	76	81	76
Prevalence and survival rates	5 years		10 years		25 years	
	Women	Men	Women	Men	Women	Men
Prevalence	89,100	109,400	149,000	180,500	250,300	290,100
Absolute survival rate (2019–2020) ³	54 (53–56)	52 (51–54)	40 (39–41)	36 (34–38)		
Relative survival rate (2019–2020) ³	66 (64–68)	64 (62–67)	62 (60–66)	57 (54–62)		

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

About one in nine cases of cancer in Germany affects the colon or rectum. In 2020, about 30,530 men and 24,240 women were diagnosed with colorectal cancer. Thus, one in 15 men and one in 19 women will be diagnosed with colorectal cancer during their lifetime. About two thirds of cases are detected in the colon. The risk of developing colorectal cancer increases with age. More than half of patients develop the disease after the age of 70, with only around 10% of cancers occurring before the age of 55. This corresponds to a comparatively high median age at diagnosis of 75 (women) and 71 (men). After a short-term increase, a decline in age-standardised incidence rates has been observed since around 2003. Except for the ascending colon, the rate of new cases is decreasing in all sections of the colon. The annual decline in age-standardised mortality rates over the last 10 years is even more pronounced, averaging 2.5% to 3%. The relative 5-year survival rates with colorectal cancer are around 66% and 64% for women and men, respectively.

Risk factors and early detection

The most important risk factors for colorectal cancer are tobacco use and obesity. These are followed by a lack of exercise and a low-fibre diet. People who regularly drink alcohol or eat a lot of red or processed meat are also more likely to develop colorectal cancer. First-degree relatives of patients with colorectal cancer are themselves affected more frequently than average. For some rare hereditary diseases, there is a very high risk of developing the disease even at a younger age. Chronic inflammatory bowel diseases also increase the risk of cancer of the large intestine.

For the early detection of colorectal cancer, an immunological test for hidden blood in the stool can be carried out annually between the ages of 50 and 54 and every two years from the age of 55. From the age of 55 (women) or 50 (men), the statutory cancer screening programme offers a colonoscopy. If necessary, colon polyps that could develop into cancer can be removed. If the findings are normal, a repeat colonoscopy can be conducted 10 years later. As an alternative to a colonoscopy, the stool test can be used. If the test is abnormal, a colonoscopy is usually recommended. Special recommendations apply to people with an increased risk of disease.

Figure 3.6.1a
 Age-standardised incidence and mortality rates by sex, ICD-10 C18 – C20, Germany 1999 – 2020/2021
 per 100,000 (old European Standard)

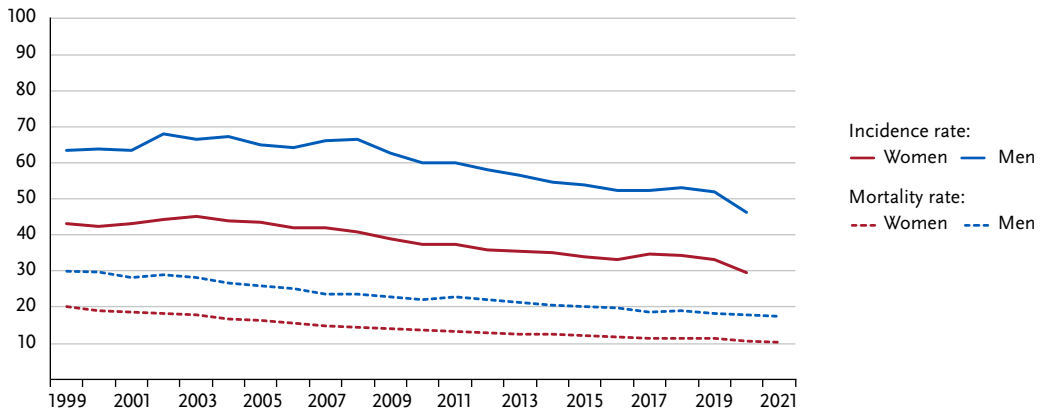


Figure 3.6.1b
 Absolute numbers of incident cases and deaths by sex, ICD-10 C18 – C20, Germany 1999 – 2020/2021

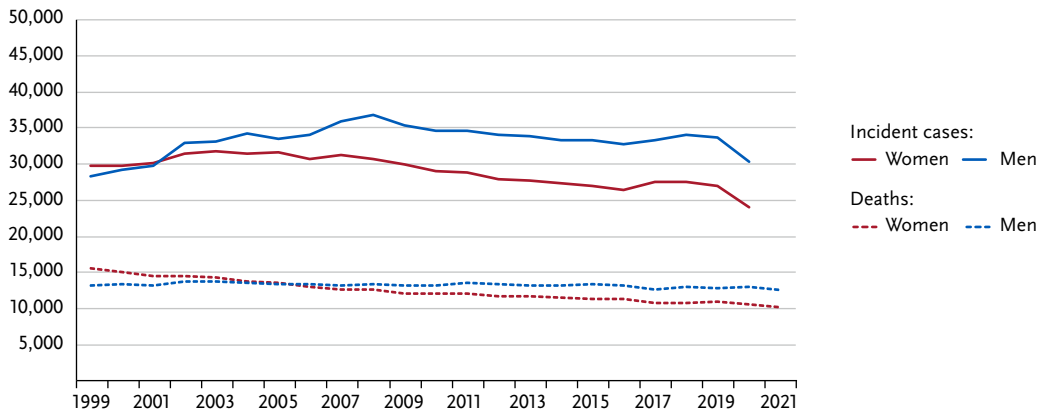


Figure 3.6.2
 Age-specific incidence rates by sex, ICD-10 C18 – C20, Germany 2019 – 2020
 per 100,000

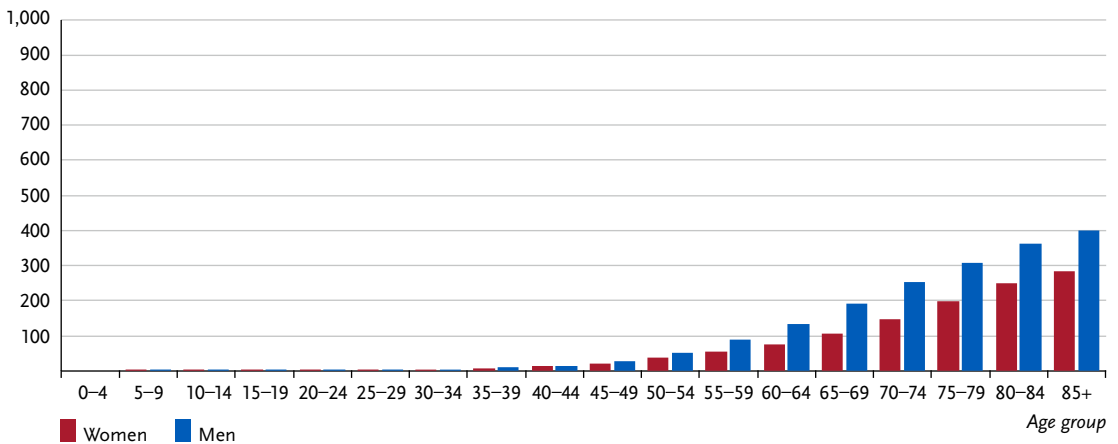


Table 3.6.2
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C18 – C20, database 2019

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 830)	5.4 %	(1 in 19)	< 0.1 %	(1 in 4,300)	2.3 %	(1 in 44)
45 years	0.3 %	(1 in 290)	5.3 %	(1 in 19)	0.1 %	(1 in 1,400)	2.3 %	(1 in 44)
55 years	0.7 %	(1 in 130)	5.0 %	(1 in 20)	0.2 %	(1 in 500)	2.2 %	(1 in 45)
65 years	1.4 %	(1 in 72)	4.5 %	(1 in 22)	0.4 %	(1 in 230)	2.1 %	(1 in 47)
75 years	2.1 %	(1 in 47)	3.6 %	(1 in 28)	0.9 %	(1 in 110)	1.9 %	(1 in 51)
Lifetime risk			5.4 %	(1 in 19)			2.3 %	(1 in 44)
Men aged	in the next 10 years		ever		in the next 10 years		ever	
35 years	0.1 %	(1 in 790)	6.6 %	(1 in 15)	0.0 %	(1 in 4,300)	2.7 %	(1 in 37)
45 years	0.4 %	(1 in 230)	6.6 %	(1 in 15)	0.1 %	(1 in 1,000)	2.7 %	(1 in 37)
55 years	1.2 %	(1 in 85)	6.4 %	(1 in 16)	0.3 %	(1 in 320)	2.7 %	(1 in 37)
65 years	2.2 %	(1 in 45)	5.7 %	(1 in 17)	0.7 %	(1 in 140)	2.6 %	(1 in 38)
75 years	2.9 %	(1 in 34)	4.5 %	(1 in 22)	1.3 %	(1 in 77)	2.4 %	(1 in 42)
Lifetime risk			6.6 %	(1 in 15)			2.7 %	(1 in 37)

Figure 3.6.3
Distribution of UICC stages at diagnosis by sex, ICD-10 C18 – C20, Germany 2019 – 2020
(top: incl. missing data and DCO cases; bottom: valid values only)

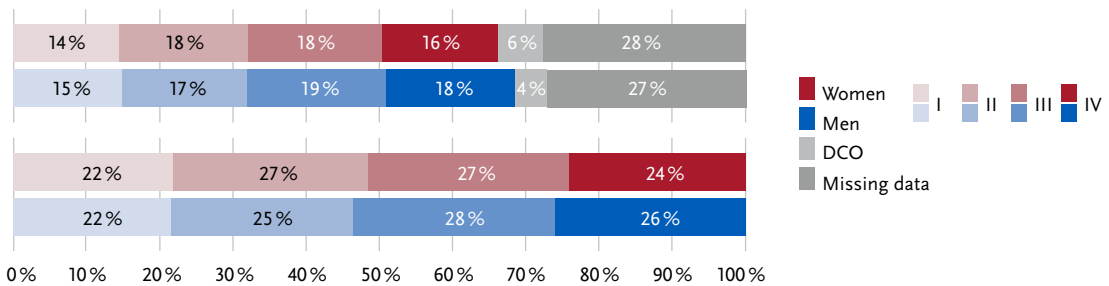


Figure 3.6.4
Absolute and relative survival rates up to 10 years after diagnosis, by sex, ICD-10 C18 – C20, Germany 2019 – 2020

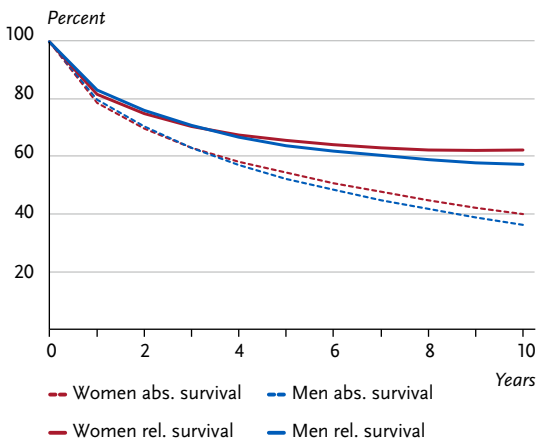


Figure 3.6.5
Relative 5-year survival by UICC stage (7th and 8th edition TNM) and sex, ICD-10 C18 – C20, Germany 2019 – 2020

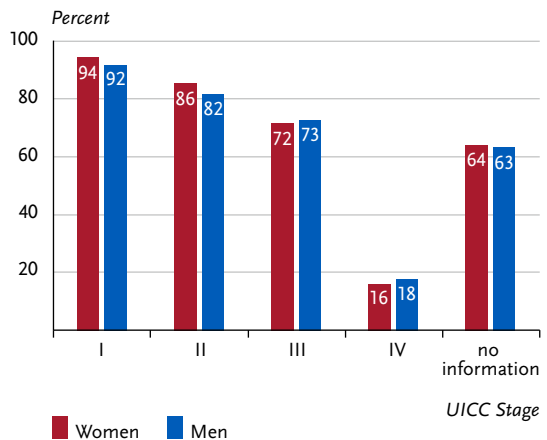


Figure 3.6.6
 Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C18 – C20, 2019 – 2020
 per 100,000 (old European Standard)

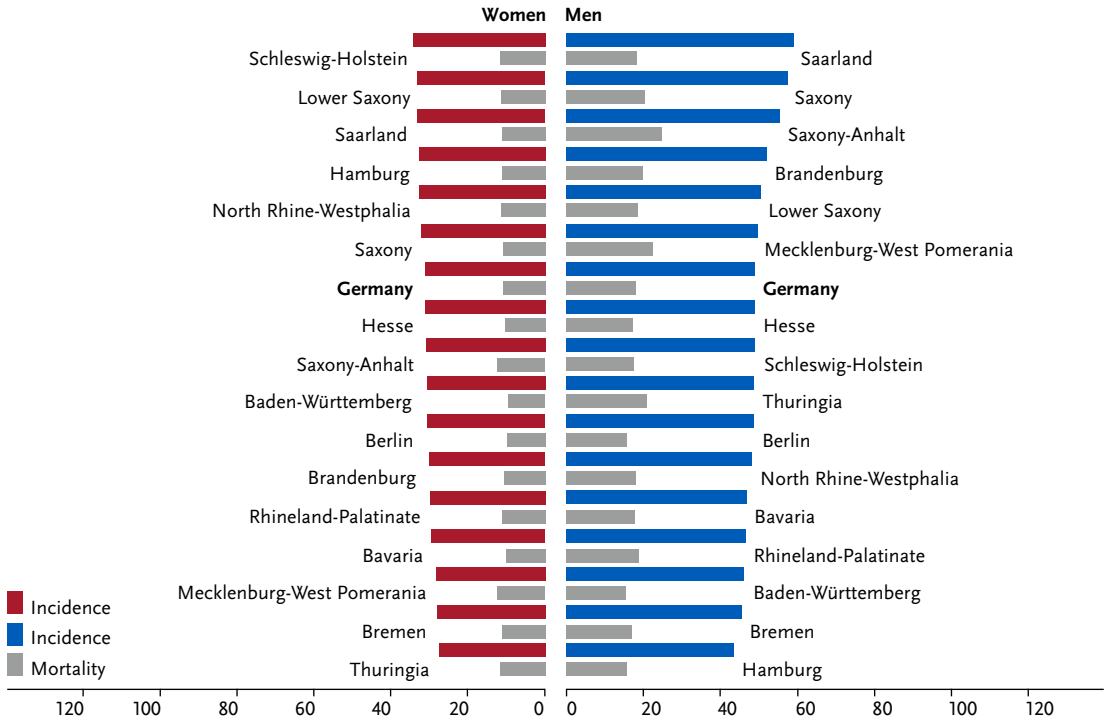
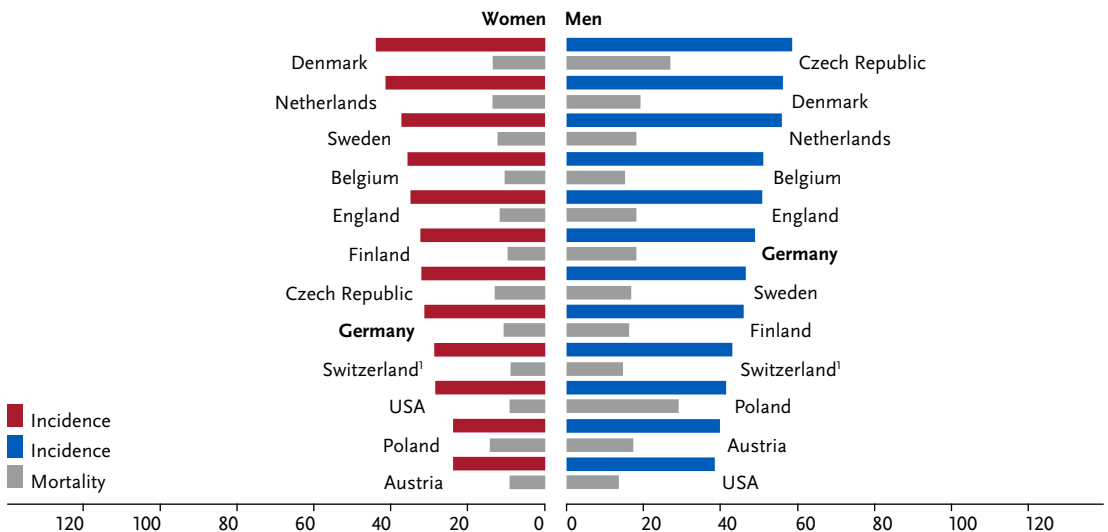


Figure 3.6.7
 International comparison of age-standardised incidence and mortality rates by sex,
 ICD-10 C18 – C20, 2019 – 2020 or latest available year (details and sources, see appendix)
 per 100,000 (old European Standard)



¹ Switzerland: incidence data for 2015 – 2019