

3.21 Ovaries

Table 3.21.1
Overview of key epidemiological parameters for Germany, ICD-10 C56

Incidence	2019	2020	
	Women	Women	
Incident cases	7,490	7,180	
Crude incidence rate ¹	17.8	17.0	
Age-standardised incidence rate ^{1,2}	11.1	10.7	
Median age at diagnosis	68	68	
Mortality	2019	2020	2021
	Women	Women	Women
Deaths	5,291	5,265	5,379
Crude mortality rate ¹	12.6	12.5	12.8
Age-standardised mortality rate ^{1,2}	6.5	6.4	6.3
Median age at death	75	75	74
Prevalence and survival rates	5 years	10 years	25 years
	Women	Women	Women
Prevalence	21,700	34,400	61,900
Absolute survival rate (2019–2020) ³	40 (37–47)	28 (26–32)	
Relative survival rate (2019–2020) ³	44 (40–52)	34 (32–40)	

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

Ovarian cancer (malignant neoplasm of the ovary) accounts for about one third of malignant neoplasms of the female genitalia and half of all deaths from cancer in these organs. The incidence rates increase continuously up to the age of 85, the median age at diagnosis is 68 years. Some rare forms of ovarian cancer, e.g. germ cell tumours, can already occur in childhood and young age. Histologically, however, malignant ovarian tumours are predominantly moderately to poorly differentiated serous adenocarcinomas. About one in 74 women will develop ovarian cancer in her lifetime. Incidence and mortality rates have continued to decrease significantly in Germany since the turn of the millennium, and the absolute numbers of new cases are also decreasing.

The survival prospects of patients with ovarian cancer are rather poor, partly due to the fact that the disease is often diagnosed at a late stage (73% in stage III/IV). The relative 5-year survival in stage III is currently 42% and falls to 21% in stage IV. If the disease is detected early, the relative survival rates are 90% in stage I.

Risk factors

The risk of developing ovarian cancer increases with age. Being overweight also plays a role. Hormonal factors also have an impact on the risk: childlessness and infertility increase the risk, while multiple childbirths and longer periods of breastfeeding reduce the risk. In women with multiple cysts in the ovaries, hormonal factors presumably increase the risk. Hormone replacement therapy, especially with oestrogen mono preparations in post-menopausal women is also a risk factor. On the other hand, ovulation inhibitors (“the pill”) have a protective effect. Sterilisation by occlusion of the fallopian tubes reduces the risk of ovarian cancer. Since asbestos is also considered a risk factor for ovarian cancer, any occupational exposure must be reported as a suspected occupational disease.

Women whose first-degree relatives have had breast or ovarian cancer, as well as women with breast, uterine body or colorectal cancer themselves, are more likely to develop ovarian cancer. This is often due to genetic mutations in the BRCA1 or BRCA2 genes. There are other hereditary gene mutations that significantly increase the risk of developing the disease. According to new research findings, up to a quarter of patients are found to have such inherited mutations.

Figure 3.21.1a
 Age-standardised incidence and mortality rates, ICD-10 C56, Germany 1999 – 2020/2021
 per 100,000 (old European Standard)

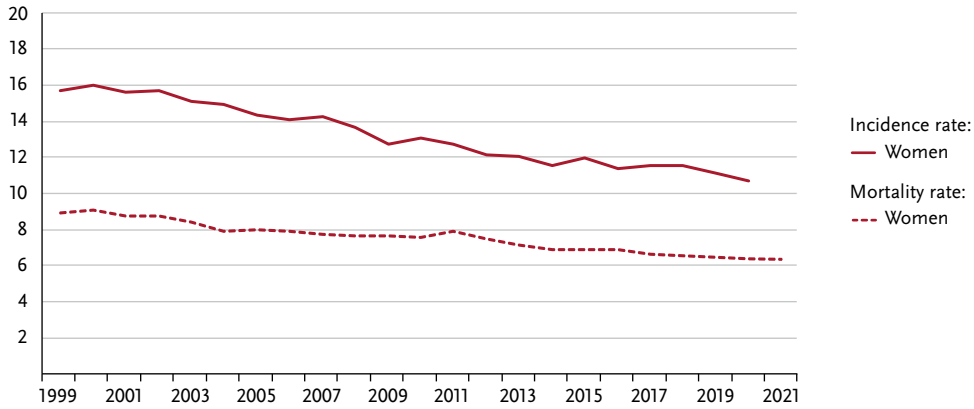


Figure 3.21.1b
 Absolute numbers of incident cases and deaths, ICD-10 C56, Germany 1999 – 2020/2021

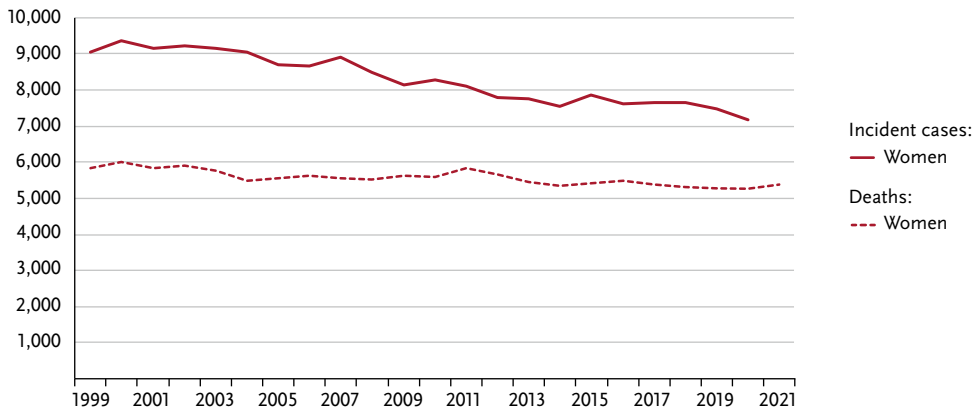


Figure 3.21.2
 Age-specific incidence rates, ICD-10 C56, Germany 2019 – 2020
 per 100,000

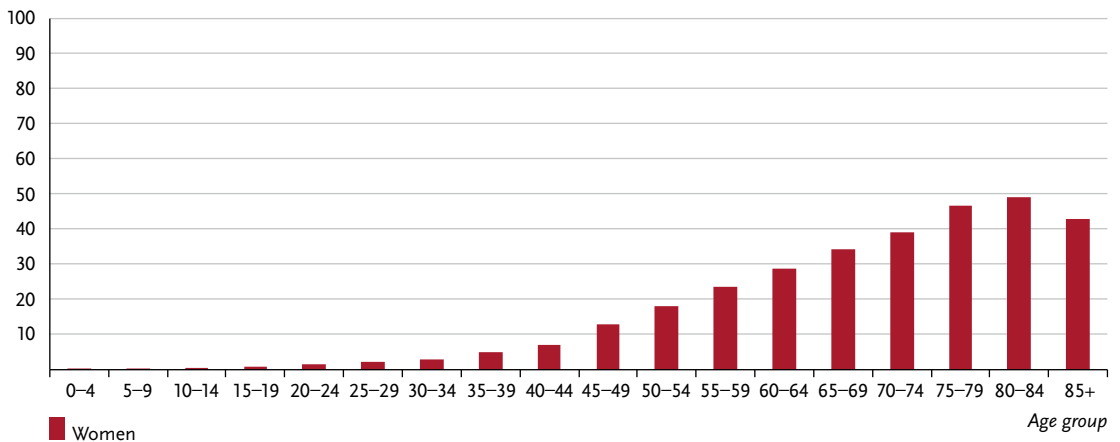


Table 3.21.2
Cancer incidence and mortality risks in Germany by age, ICD-10 C56, database 2019

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 1,600)	1.3 % (1 in 76)	< 0.1 % (1 in 6,400)	1.0 % (1 in 100)
45 years	0.2 % (1 in 650)	1.3 % (1 in 79)	0.1 % (1 in 1,700)	1.0 % (1 in 100)
55 years	0.3 % (1 in 380)	1.1 % (1 in 88)	0.1 % (1 in 690)	0.9 % (1 in 110)
65 years	0.4 % (1 in 280)	0.9 % (1 in 110)	0.3 % (1 in 380)	0.8 % (1 in 120)
75 years	0.4 % (1 in 240)	0.6 % (1 in 160)	0.4 % (1 in 250)	0.6 % (1 in 160)
Lifetime risk		1.4 % (1 in 74)		1.0 % (1 in 100)

Figure 3.21.3
Distribution of UICC stages at diagnosis, ICD-10 C56, Germany 2019 – 2020
(top: incl. missing data and DCO cases; bottom: valid values only)

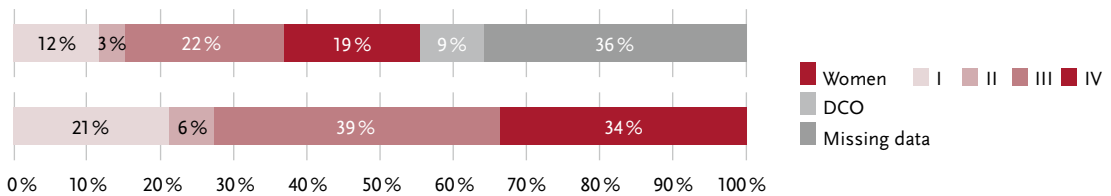


Figure 3.21.4
Absolute and relative survival rates up to 10 years after diagnosis, ICD-10 C56, Germany 2019 – 2020

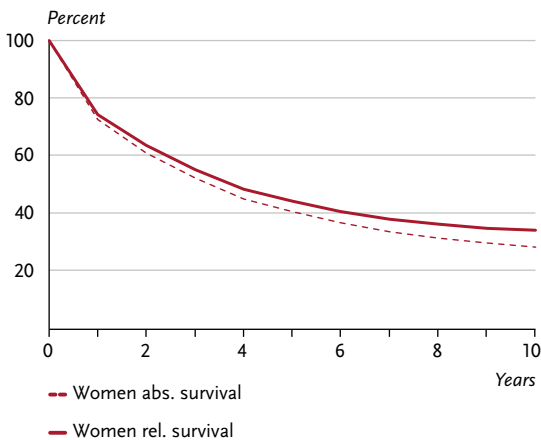


Figure 3.21.5
Relative 5-year survival by UICC stage (7th and 8th edition TNM), ICD-10 C56, Germany 2019 – 2020

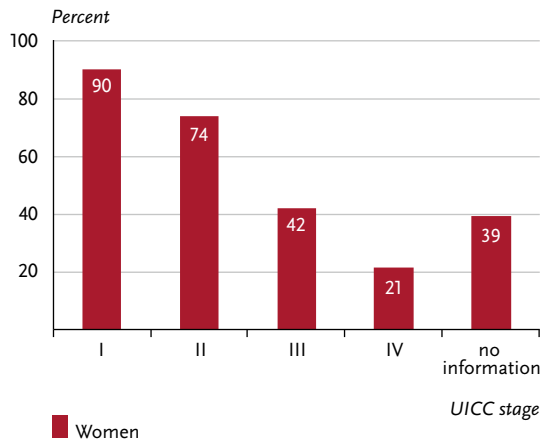


Figure 3.21.6
Age-standardised incidence and mortality rates in German federal states, ICD-10 C56, 2019 – 2020
per 100,000 (old European Standard)

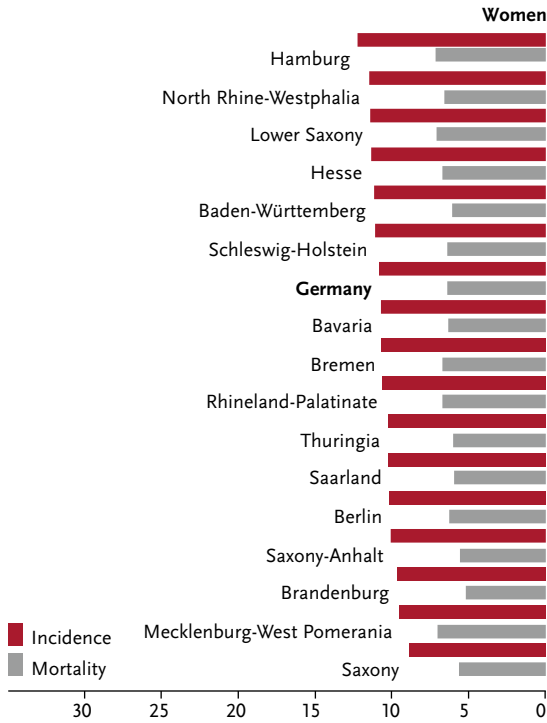
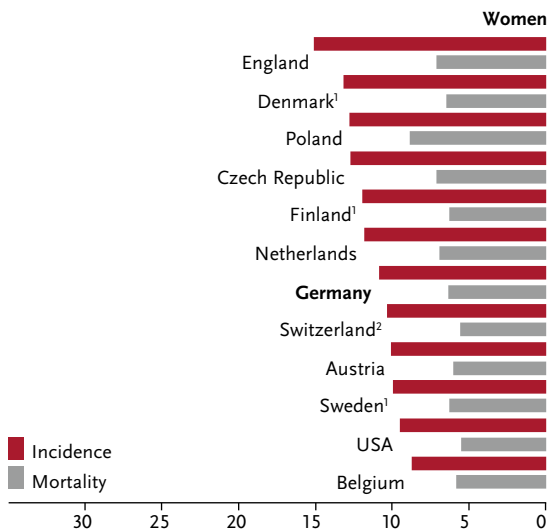


Figure 3.21.7
International comparison of age-standardised incidence and mortality rates, ICD-10 C56, 2019 – 2020 or latest available year (details and sources, see appendix)
per 100,000 (old European Standard)



¹ Denmark, Sweden, Finland: data incl. C57.0-4
² Switzerland: incidence data for 2015 – 2019