

3.18 Ovaries

Table 3.18.1
Overview of key epidemiological parameters for Germany, ICD-10 C56

	2011	2012	Prediction for 2016
	Women	Women	Women
Incident cases	7,750	7,380	7,200
Crude incidence rate ¹	18.9	18.0	17.3
Standardised incidence rate ^{1,2}	12.1	11.4	10.7
Median age at diagnosis	69	69	
Deaths	5,837	5,646	
Crude mortality rate ¹	14.2	13.7	
Standardised mortality rate ^{1,2}	7.9	7.5	
5-year prevalence	21,800	21,300	
	<i>after 5 years</i>	<i>after 10 years</i>	
Absolute survival rate (2011–2012) ³	38 (33–41)	27 (23–29)	
Relative survival rate (2011–2012) ³	41 (36–45)	32 (27–36)	

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

Epidemiology

Ovarian cancer accounts for 3.3 % of all malignant neoplasms among women and 5.6 % of all female deaths due to cancer. The incidence rates increase continually up to the age of 85 years, while the median age at diagnosis is 69 years. Histologically, malignant tumours of the ovaries are predominantly adenocarcinomas. The rare germ cell tumours of the ovaries occur in younger women. One in approximately 72 women develops ovarian cancer in the course of her lifetime.

Since the millennium, incidence and mortality rates in Germany have continued to fall significantly, also absolute numbers of incident cases decrease. Differences in the age-standardised incidence rates between German federal states exist, whereas regional mortality rates do not differ.

Since diagnosis often only occurs at a late tumour stage, the survival prospects for patients with ovarian cancer are relatively unfavourable. The relative 5-year survival rate is currently around 41 %.

Risk factors

The risk of developing ovarian cancer increases with age. Among the lifestyle-related risk factors, obesity (adipositas) plays a part. There are important associations with hormonal factors: childlessness and infertility increase the risk of developing ovarian cancer, while numerous births and longer periods of breast-feeding reduce the risk. It has not been conclusively proved whether early first menses (menarche) or late onset of menopause (climacterium) also lead to an increased risk. Hormonal factors probably also increase the risk for women with polycystic ovaries. Hormone replacement therapy (particularly with oestrogen monotherapy) for women after menopause is also a risk factor. In contrast, hormonal ovulation inhibitors (»the pill«) protect against ovarian cancer. Sterilisation by means of tubal ligation also reduces the risk of developing this cancer.

The risk of ovarian cancer is higher for women with first-degree relatives diagnosed with breast or ovarian cancer and for women who themselves have been diagnosed with breast, uterine or colorectal cancer. Underlying genetic mutations, above all of BRCA1 and BRCA2, considerably increase the risk, but they only play a part in one out of ten diseased women.

Figure 3.18.1a
Age-standardised incidence and mortality rates,
ICD-10 C56, Germany 1999–2012
per 100,000 (European standard)

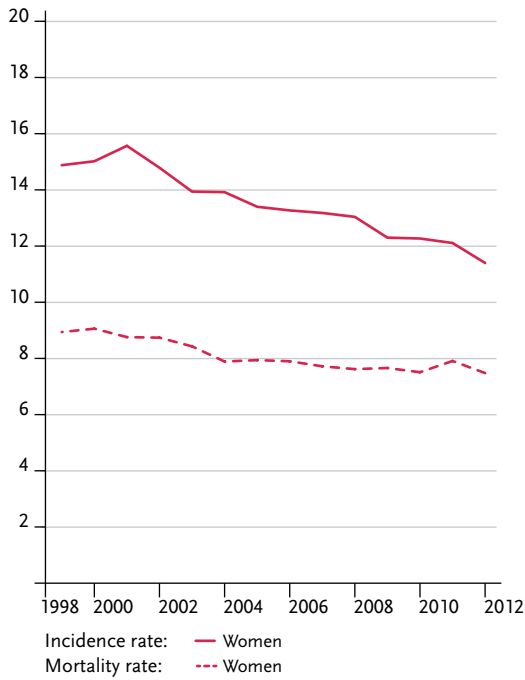


Figure 3.18.1b
Absolute numbers of incident cases and deaths,
ICD-10 C56, Germany 1999–2012

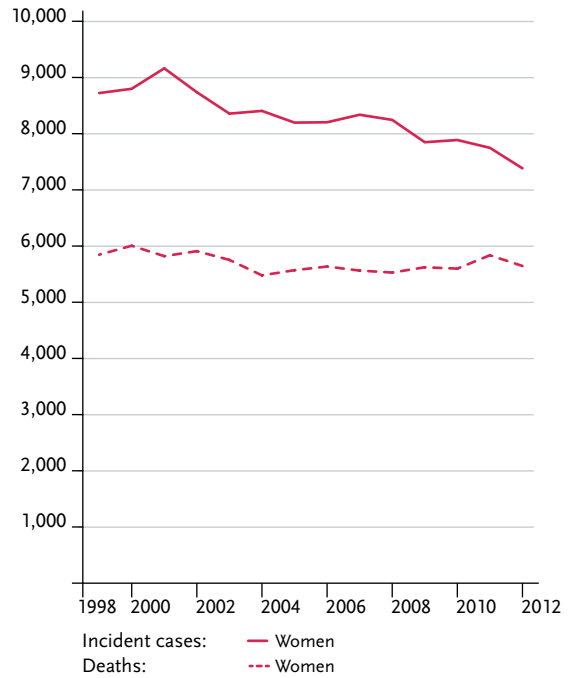


Figure 3.18.2
Age-specific incidence rates, ICD-10 C56, Germany 2011–2012
per 100,000

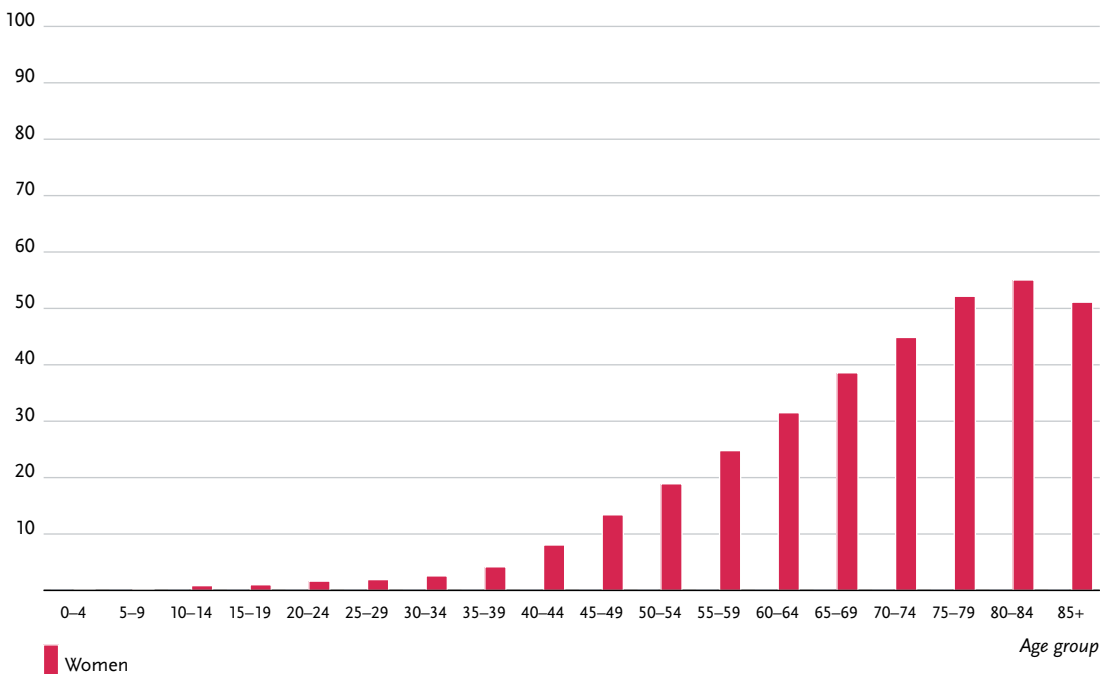


Table 3.18.2
Cancer incidence and mortality risks in Germany by age, ICD-10 C56, database 2012

Women 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 1,500)	1.4%	(1 in 73)	<0.1%	(1 in 5,300)	1.1%	(1 in 91)
45 years	0.2%	(1 in 660)	1.3%	(1 in 76)	0.1%	(1 in 1,400)	1.1%	(1 in 92)
55 years	0.3%	(1 in 380)	1.2%	(1 in 84)	0.2%	(1 in 630)	1.0%	(1 in 96)
65 years	0.4%	(1 in 260)	1.0%	(1 in 103)	0.3%	(1 in 320)	0.9%	(1 in 110)
75 years	0.4%	(1 in 230)	0.7%	(1 in 150)	0.4%	(1 in 220)	0.7%	(1 in 140)
Lifetime risk			1.4%	(1 in 72)			1.1%	(1 in 91)

Figure 3.18.3
Distribution of T-stages at first diagnosis (top: all cases; bottom: only valid reports)
ICD-10 C56, Germany 2011–2012

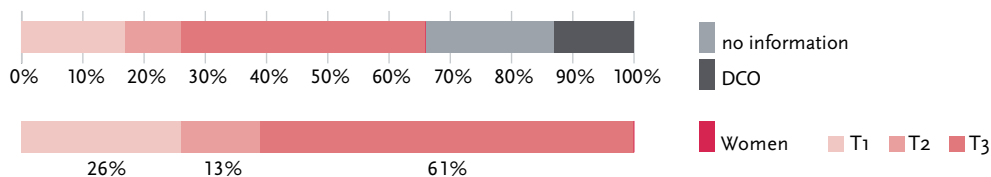


Figure 3.18.4a
Absolute survival rates up to 10 years after first diagnosis,
ICD-10 C56, Germany 2011–2012

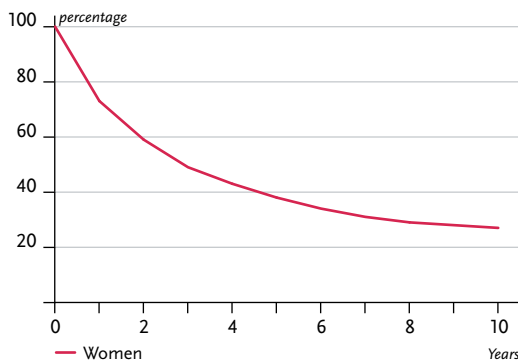


Figure 3.18.4b
Relative survival rates up to 10 years after first diagnosis,
ICD-10 C56, Germany 2011–2012

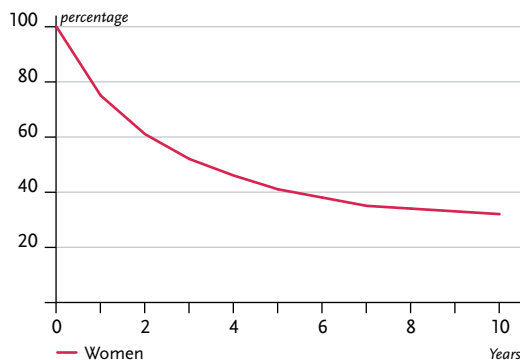


Figure 3.18.5
Registered age-standardised incidence and mortality rates in German federal states,
ICD-10 C56, 2011–2012
per 100,000 (European standard)

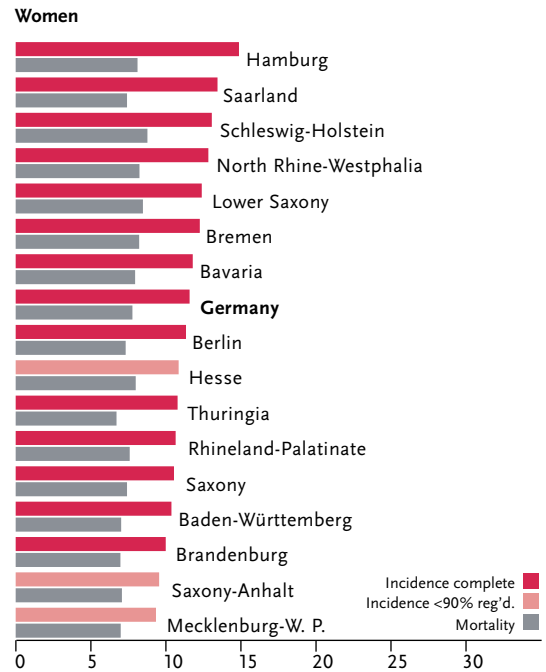
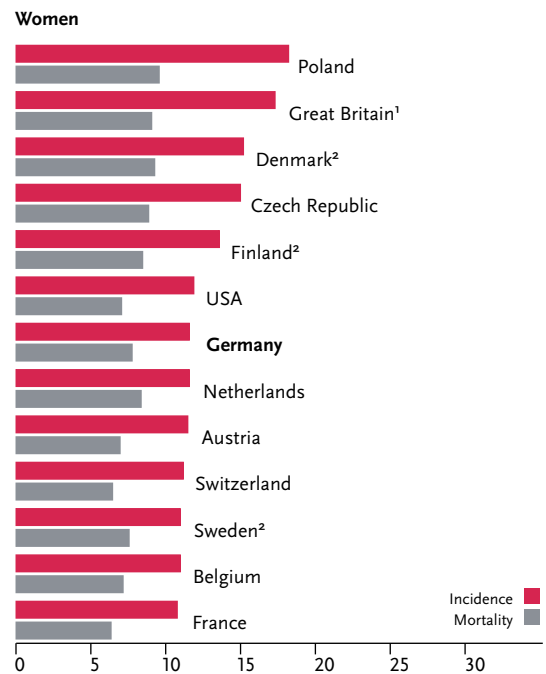


Figure 3.18.6
International comparison of age-standardised incidence and mortality rates,
ICD-10 C56, 2011–2012 or latest available year (details and sources, see appendix)
per 100,000 (European standard)



¹ incl. C57

² incl. C57.0 to C57.4