## 3.18 Vulva

**Table 3.18.1**
**Overview of key epidemiological parameters for Germany, ICD-10 C51**

| Incidence | 2017 | 2018 | Prediction for 2022 |
|---|---|---|---|
| | Women | Women | Women |
| Incident cases | 3,430 | 3,270 | 3,700 |
| Crude incidence rate [1] | 8.2 | 7.8 | 8.7 |
| Age-standardised incidence rate [1, 2] | 4.8 | 4.4 | 4.9 |
| Median age at diagnosis | 72 | 73 | |
| **Mortality** | **2017** | **2018** | **2019** |
| | Women | Women | Women |
| Deaths | 943 | 957 | 1,016 |
| Crude mortality rate [1] | 2.3 | 2.3 | 2.4 |
| Age-standardised mortality rate [1, 2] | 1.0 | 1.0 | 1.0 |
| Median age at death | 80 | 80 | 81 |
| **Prevalence and survival rates** | **5 years** | **10 years** | **25 years** |
| | Women | Women | Women |
| Prevalence | 11,800 | 20,000 | 26,900 |
| Absolute survival rate (2017–2018) [3] | 63 (58–68) | 49 (44–52) | |
| Relative survival rate (2017–2018) [3] | 73 (66–78) | 68 (60–72) | |

[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

Until the beginning of the decade, a significant increase in new cases and a slight increase in mortality rates from malignant tumours of the vulva were observed in Germany; since then, the rates have stabilised at a high level. In 2018, approximately 3,270 women were diagnosed with a malignant neoplasm of the vulva, and 1,016 women died of this disease in 2019. The largest increase in incidence rates was seen in women below 70 years of age, however since 2010, this trend has plateaued. The greatest burden of disease continues to be in women above 70 years of age, with a median age at diagnosis of 73 years. The relative 5-year survival rate after diagnosis of vulvar cancer is 73%. Among tumours with valid stage information, tumours of small extent (stage I, limited to vulva/perineum) are most common (about 65% to 67%). However, for a large proportion of cases (41%), no stage could be assigned.

The highest rates of malignant neoplasms of the vulva are found in Schleswig-Holstein, Hamburg, North Rhine-Westphalia and Saarland. Mortality and incidence rates in Germany are higher than in neighbouring countries (comparative figures are not available from all countries).

### Risk factors, early detection and prevention

Vulvar carcinomas are mostly squamous cell carcinomas (about 90%) that can be divided into non-keratinising and keratinising forms. The latter account for 50 to 80% of squamous cell carcinomas of the vulva. Non-keratinising carcinomas and their precursors often arise in conjunction with a chronic human papillomavirus infection (especially HPV 16). These cases mostly affect younger women. In contrast, keratinising vulvar carcinomas and their precursors particularly occur in older women, independent of a concurrent HPV infection. The main risk factors are autoimmune processes, such as lichen sclerosus. Smoking and long-term immunosuppression such as after an organ transplant or due to HIV, also increase the risk of vulvar cancer. HIV also promotes an HPV infection and thus increases the risk of developing vulvar cancer. Further risk factors include HPV-induced cancers of the genitals and anus, such as cervical and anal carcinomas, their associated precursors, and Paget's disease of the vulva.

No targeted screening programme is currently in place in Germany for cancer of the vulva or its precursors. As such, the vulva should be completely examined during gynaecological cancer screening. HPV vaccination is viewed as a possible means of preventing vulvar cancer.

▶ *Additional information: www.krebsdaten.de/vulva*

**Figure 3.18.1a**
**Age-standardised incidence and mortality rates, ICD-10 C51, Germany 1999–2018/2019, projection (incidence) through 2022**
*per 100,000 (old European Standard)*

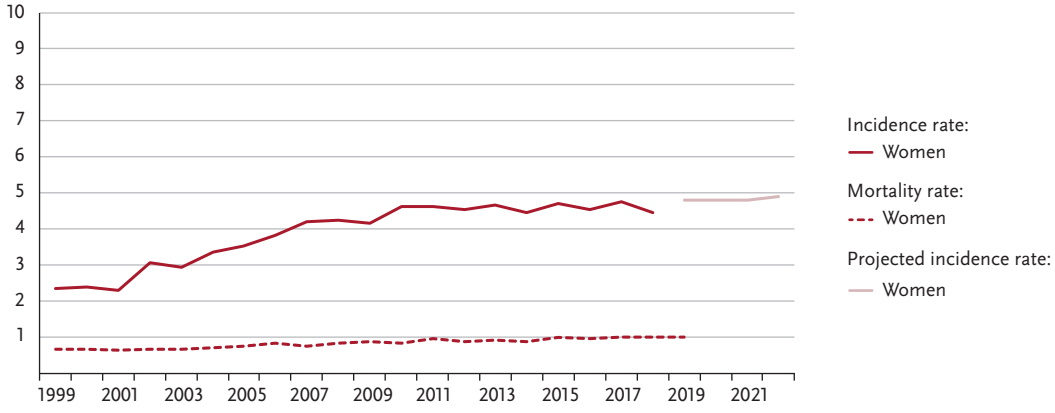



**Figure 3.18.1b**
**Absolute numbers of incident cases and deaths, ICD-10 C51, Germany 1999–2018/2019, projection (incidence) through 2022**

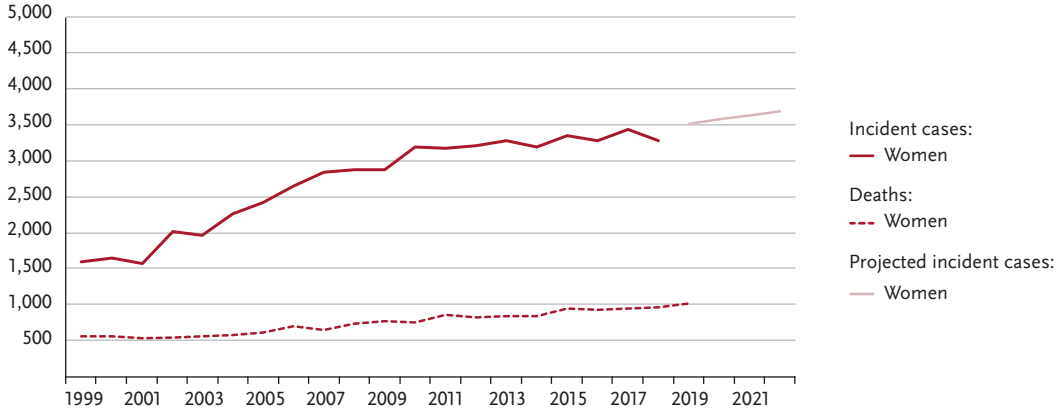



**Figure 3.18.2**
**Age-specific incidence rates, ICD-10 C51, Germany 2017–2018**
*per 100,000*

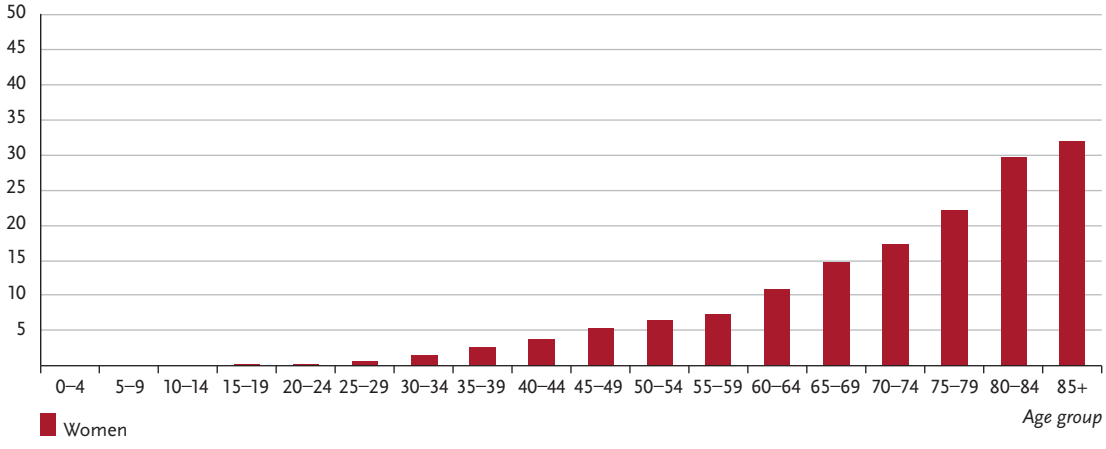


**Table 3.18.2**
**Cancer incidence and mortality risks in Germany by age, ICD-10 C51, database 2018**

| | Risk of developing cancer | | | | Mortality risk | | | |
|---|---|---|---|---|---|---|---|---|
| **Women aged** | **in the next 10 years** | | **ever** | | **in the next 10 years** | | **ever** | |
| 35 years | < 0.1 % | (1 in 3,200) | 0.6 % | (1 in 170) | < 0.1 % | (1 in 45,800) | 0.2 % | (1 in 530) |
| 45 years | 0.1 % | (1 in 1,700) | 0.6 % | (1 in 180) | < 0.1 % | (1 in 19,200) | 0.2 % | (1 in 540) |
| 55 years | 0.1 % | (1 in 1,200) | 0.5 % | (1 in 190) | < 0.1 % | (1 in 7,100) | 0.2 % | (1 in 540) |
| 65 years | 0.1 % | (1 in 680) | 0.5 % | (1 in 220) | < 0.1 % | (1 in 2,600) | 0.2 % | (1 in 560) |
| 75 years | 0.2 % | (1 in 460) | 0.4 % | (1 in 280) | 0.1 % | (1 in 1,200) | 0.2 % | (1 in 620) |
| Lifetime risk | | | 0.6 % | (1 in 170) | | | 0.2 % | (1 in 540) |

**Figure 3.18.3**
**Distribution of UICC stages at diagnosis, ICD-10 C51, Germany 2017–2018**
*top: according to 7th edition TNM; bottom: according to 8th edition TNM.*
*The DCO proportion was 3%. For 41% of the remaining cases, no UICC stage could be assigned.*

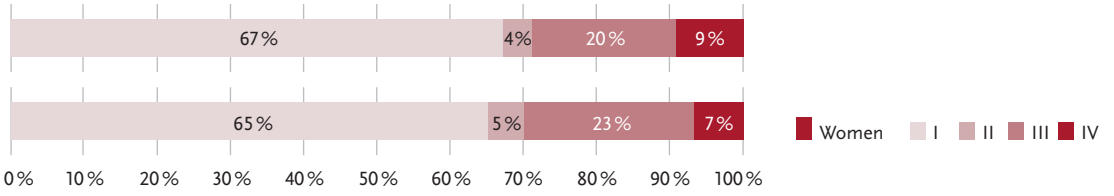



**Figure 3.18.4**
**Absolute and relative survival rates up to 10 years after diagnosis, ICD-10 C51, Germany 2017–2018**

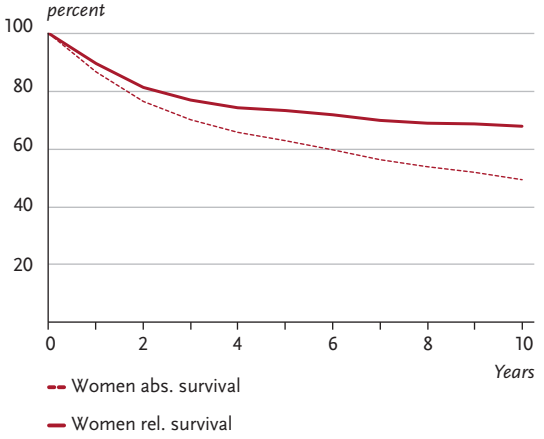



**Figure 3.18.5**
**Relative 5-year survival by UICC stage (7th edition TNM), ICD-10 C51, Germany 2016–2018**

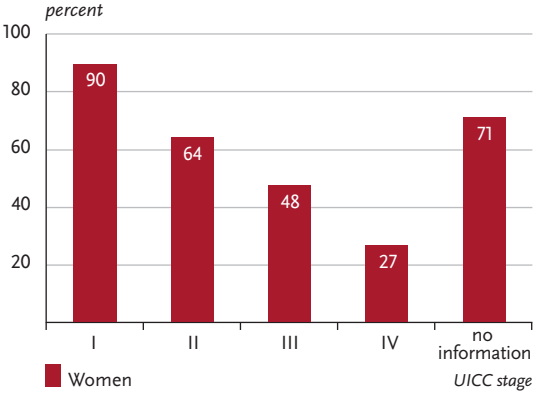
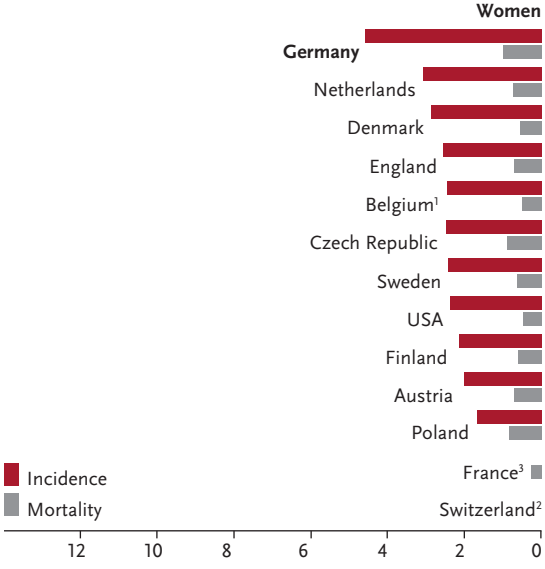


**Figure 3.18.6**
**Age-standardised incidence and mortality rates in German federal states, ICD-10 C51, 2017–2018**
*per 100,000 (old European Standard)*


**Figure 3.18.7**
**International comparison of age-standardised incidence and mortality rates, ICD-10 C51, 2017–2018 or latest available year (details and sources, see appendix)**
*per 100,000 (old European Standard)*




[1] Mortality for 2016
[2] No data available
[3] No incidence data available