

### 3.15 Vulva

**Table 3.15.1**  
Overview of key epidemiological parameters for Germany, ICD-10 C51

<b>Incidence</b>	<b>2013</b>	<b>2014</b>	<b>Prediction for 2018</b>
	<b>Women</b>	<b>Women</b>	<b>Women</b>
Incident cases	3,240	3,130	3,500
Crude incidence rate <sup>1</sup>	7.9	7.6	8.3
Standardised incidence rate <sup>1,2</sup>	4.6	4.4	4.9
Median age at diagnosis	72	72	
<b>Mortality</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>
	<b>Women</b>	<b>Women</b>	<b>Women</b>
Deaths	833	849	940
Crude mortality rate <sup>1</sup>	2.0	2.1	2.3
Standardised mortality rate <sup>1,2</sup>	0.9	0.9	1.0
Median age at death	79	80	80
<sup>1</sup> per 100,000 persons <sup>2</sup> age-standardised (old European Standard)			
<b>Prevalence and survival rates</b>	<b>after 5 years</b>	<b>after 10 years</b>	
	<b>Women</b>	<b>Women</b>	
Prevalence	11,300	17,700	
Absolute survival rate (2013–2014) <sup>3</sup>	57 (52–68)	43 (39–49)	
Relative survival rate (2013–2014) <sup>3</sup>	68 (60–80)	62 (53–68)	

<sup>3</sup> in percentages (lowest and highest value of the included German federal states)

#### Epidemiology

Over the last decade, Germany has registered a significant increase in the number of malignant vulvar cancers. In 2014, around 3,130 women were diagnosed with this cancer. In the early 2000s, there were fewer than half as many cases. In contrast to the mortality rates for most other gynaecological tumours, mortality rates too have increased slightly in recent years. In 2015, 940 women died from a vulvar cancer.

Women in the age-group under 70 years experienced the greatest increase in incidence rates, yet these figures have stabilised since 2010. Women over 70 years still bear the majority of the disease burden and the median age at diagnosis is 72 years. Patients diagnosed with a malignant vulvar cancer have a 5-year relative survival rate of 68 %. The vast majority of invasive carcinomas are diagnosed at an early tumour stage (T<sub>1</sub>), although the lymph nodes are already affected in one of every four women diagnosed.

Incidence and mortality rates in Germany are highest in the Saarland. While data was not available for all neighbouring countries, incidence rates in Germany appear to be generally higher, whereas mortality rates are similar.

#### Risk factors, early detection and prevention

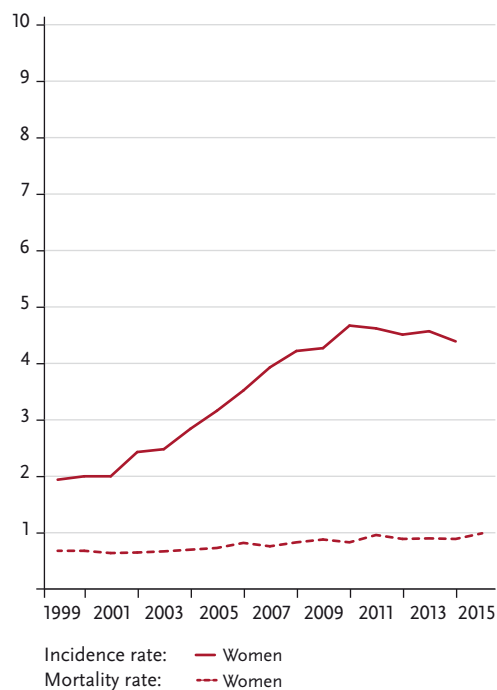
Vulvar cancers are mostly (95 %) squamous cell carcinomas and occur as either non-keratinising or keratinising carcinomas. The latter account for 65–80 % of all vulva squamous cell carcinomas.

Non-keratinising vulvar cancers and their pre-cancerous stages often correlate with a chronic infection with human papilloma virus (HPV) and occur predominantly in younger women.

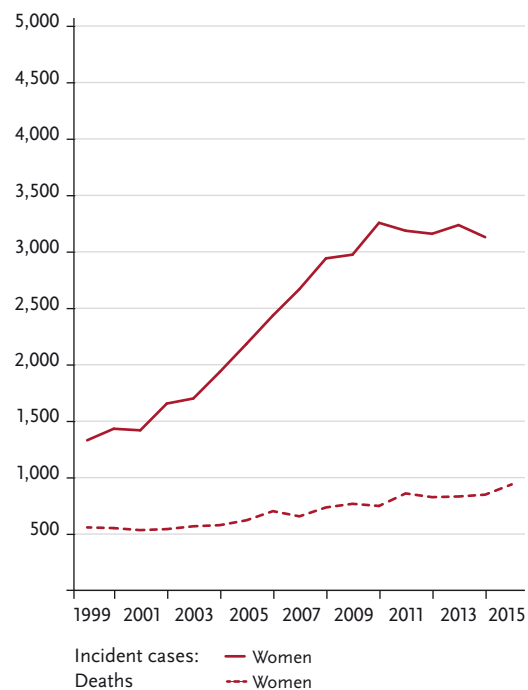
Keratinising vulvar cancers and their pre-cancerous stages are not associated with HPV and occur mainly in elderly women. Degenerative and chronic inflammatory skin diseases such as Lichen sclerosus belong to the most important risk factors. Smoking and long-term immunosuppression (for example in organ transplant or HIV-patients), also increase the risk of developing vulvar cancer. HIV facilitates an HPV infection and thus increases the risk of developing vulvar cancer. The presence of other genital cancers or their precursors, for example cervical cancer or Paget's disease of the vulva, are further risk factors.

Targeted early detection for vulvar cancer and its precancerous conditions is not available. Gynaecological cancer early detection examinations should however cover the entire vulva. HPV vaccination is a possible means of prevention.

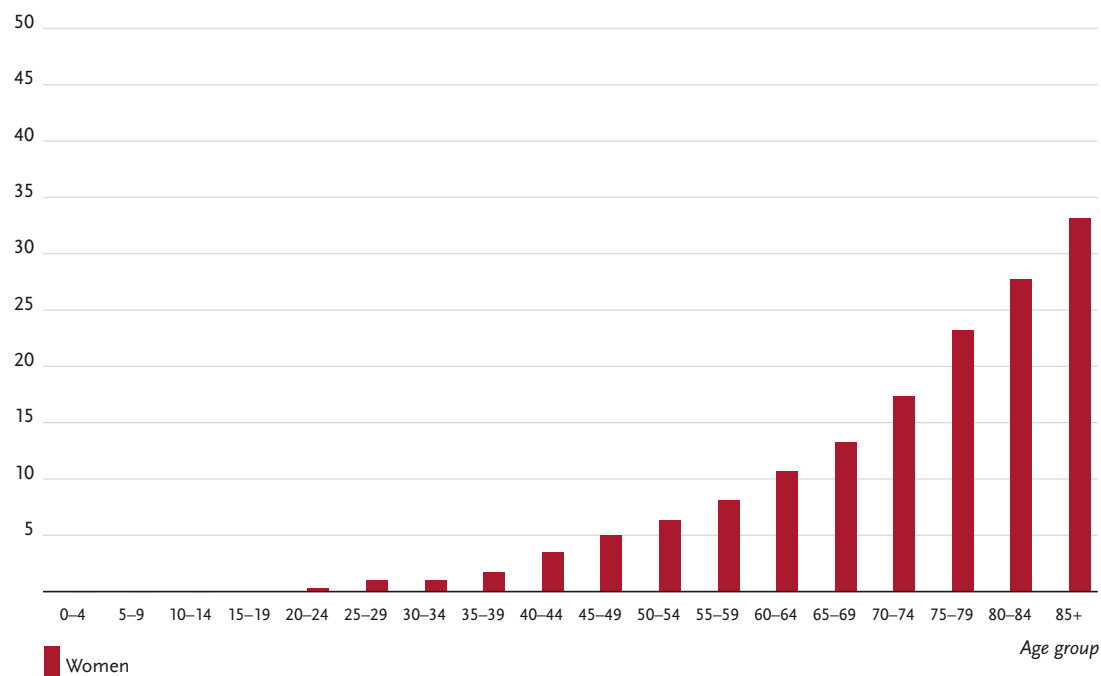
**Figure 3.15.1a**  
Age-standardised incidence and mortality rates,  
ICD-10 C51, Germany 1999–2014/2015  
per 100,000 (old European Standard)



**Figure 3.15.1b**  
Absolute numbers of incident cases and deaths,  
ICD-10 C51, Germany 1999–2014/2015



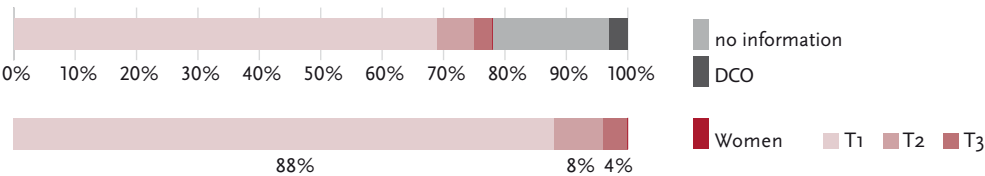
**Figure 3.15.2**  
Age-specific incidence rates, ICD-10 C51, Germany 2013–2014  
per 100,000



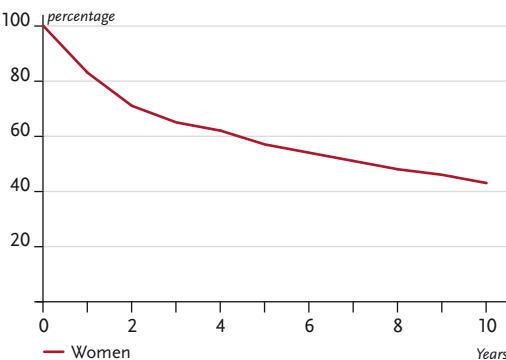
**Table 3.15.2**  
**Cancer incidence and mortality risks in Germany by age, ICD-10 C51, database 2014**

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 3,600)	0.6%	(1 in 160)	<0.1%	(1 in 81,800)	0.2%	(1 in 590)
45 years	0.1%	(1 in 1,800)	0.6%	(1 in 170)	<0.1%	(1 in 23,800)	0.2%	(1 in 590)
55 years	0.1%	(1 in 1,100)	0.5%	(1 in 180)	<0.1%	(1 in 6,900)	0.2%	(1 in 590)
65 years	0.2%	(1 in 650)	0.5%	(1 in 210)	<0.1%	(1 in 3,100)	0.2%	(1 in 610)
75 years	0.2%	(1 in 470)	0.4%	(1 in 280)	0.1%	(1 in 1,400)	0.1%	(1 in 670)
Lifetime risk			0.6%	(1 in 160)			0.2%	(1 in 590)

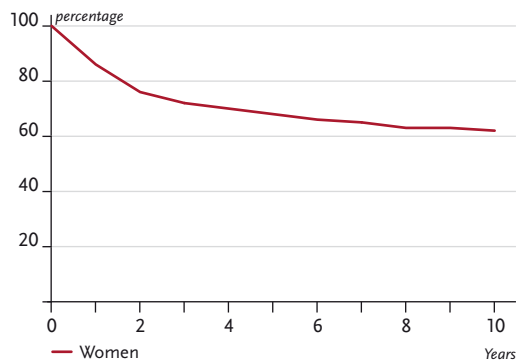
**Figure 3.15.3**  
**Distribution of T-stages at first diagnosis (top: all cases; bottom: only valid reports)**  
**ICD-10 C51, Germany 2013–2014**



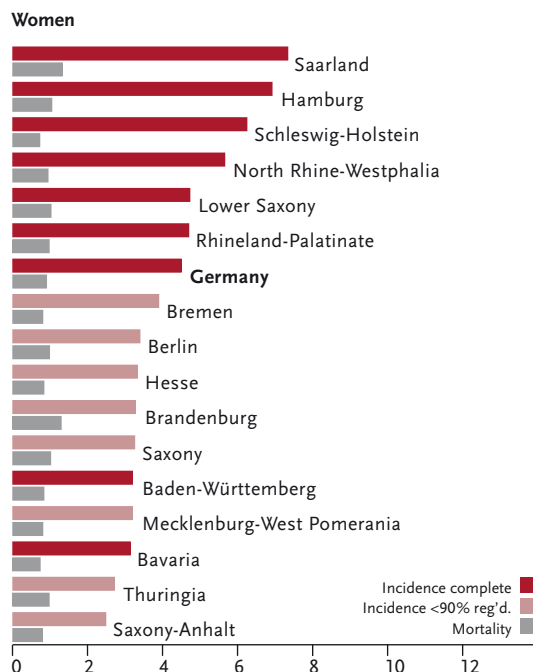
**Figure 3.15.4a**  
**Absolute survival rates up to 10 years after first diagnosis,**  
**ICD-10 C51, Germany 2013–2014**



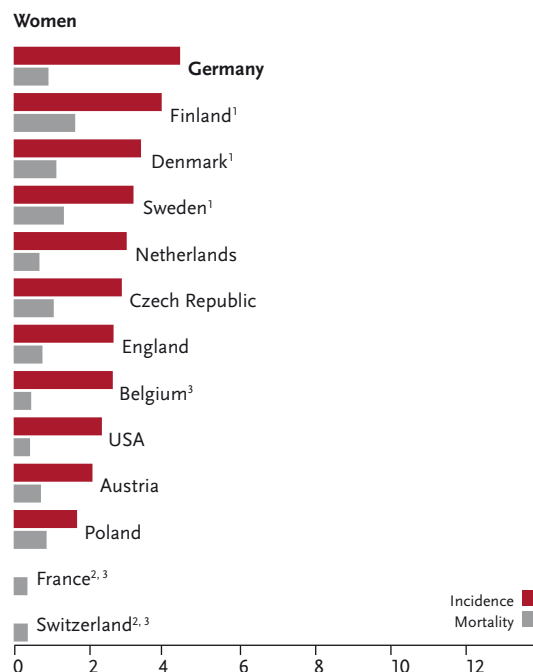
**Figure 3.15.4b**  
**Relative survival rates up to 10 years after first diagnosis,**  
**ICD-10 C51, Germany 2013–2014**



**Figure 3.15.5**  
Registered age-standardised incidence and mortality rates in German federal states,  
ICD-10 C51, 2013–2014  
per 100,000 (old European Standard)



**Figure 3.15.6**  
International comparison of age-standardised incidence and mortality rates,  
ICD-10 C51, 2013–2014 or latest available year (details and sources, see appendix)  
per 100,000 (old European Standard)



<sup>1</sup> data incl. C52, C57.7, C57.8 and C57.9

<sup>2</sup> no data for incidence

<sup>3</sup> mortality only 2013