

## 3.28 Hodgkin lymphoma

Table 3.28.1  
Overview of key epidemiological parameters for Germany, ICD-10 C81

Incidence	2015		2016		Prediction for 2020	
	Women	Men	Women	Men	Women	Men
Incident cases	1,070	1,360	1,060	1,430	1,100	1,500
Crude incidence rate <sup>1</sup>	2.6	3.4	2.5	3.5	2.7	3.7
Age-standardised incidence rate <sup>1,2</sup>	2.5	3.1	2.4	3.2	2.6	3.4
Median age at diagnosis	43	46	43	46		
Mortality	2015		2016		2017	
	Women	Men	Women	Men	Women	Men
Deaths	132	180	143	178	125	177
Crude mortality rate <sup>1</sup>	0.3	0.4	0.3	0.4	0.3	0.4
Age-standardised mortality rate <sup>1,2</sup>	0.2	0.3	0.2	0.3	0.2	0.3
Median age at death	76	70	79	75	76	73
Prevalence and survival rates	5 years		10 years			
	Women	Men	Women	Men		
Prevalence	4,400	5,800	8,200	10,600		
Absolute survival rate (2015–2016) <sup>3</sup>	81 (73–88)	82 (74–91)	78 (71–88)	74 (66–83)		
Relative survival rate (2015–2016) <sup>3</sup>	84 (75–92)	86 (78–94)	84 (75–96)	82 (73–93)		

<sup>1</sup> per 100,000 persons <sup>2</sup> age-standardised (old European Standard) <sup>3</sup> in percentages (lowest and highest value of the included German federal states)

► Additional information under [www.krebsdaten.de/cancer-sites](http://www.krebsdaten.de/cancer-sites)

### Epidemiology

Hodgkin lymphoma is characterised by Sternberg-Reed giant cells in bone marrow, which distinguishes it from non-Hodgkin lymphomas.

Hodgkin lymphoma is a rare disease that affected around 1,060 women and 1,430 men in Germany in 2016. Nevertheless, this disease is one of the five most frequently diagnosed cancers among people between 10 and 35 years old. Women have a 0.2% and men have a 0.3% risk of developing Hodgkin lymphoma.

Incidence rates and the numbers of new cases have increased slightly since the mid-2000s, although fewer people currently die from Hodgkin lymphoma. In 2016, just over 300 deaths were reported in Germany, which is almost 200 fewer than in the late 1990s. Hodgkin lymphoma has a favourable prognosis, with relative 5-year survival rates of around 84% in women and 86% in men. Due to the fact that the disease often recurs chronically, the long-term prognosis is also influenced by the side effects of therapy, including the risk of developing subsequent tumours.

### Risk factors

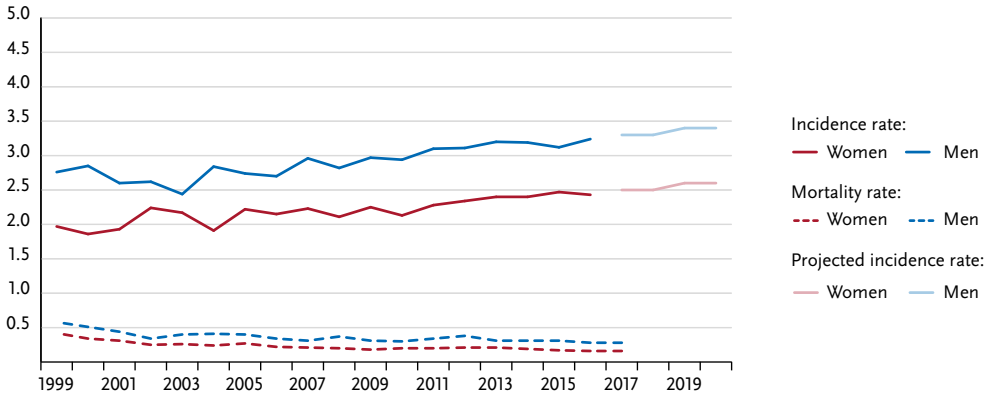
The risk factors associated with Hodgkin lymphoma are only partially understood. Congenital diseases of the immune system and acquired immune defects, because of an HIV infection for instance, can increase the risk of Hodgkin lymphoma.

Epstein-Barr viruses (EBV), which cause glandular fever (infectious mononucleosis), can also play a causal role in Hodgkin lymphoma. However, they are probably only relevant in a small number of cases. It is unclear whether lifestyle-related risk factors or environmental risks are responsible for the development of Hodgkin lymphoma. Prolonged cigarette smoking may increase risk.

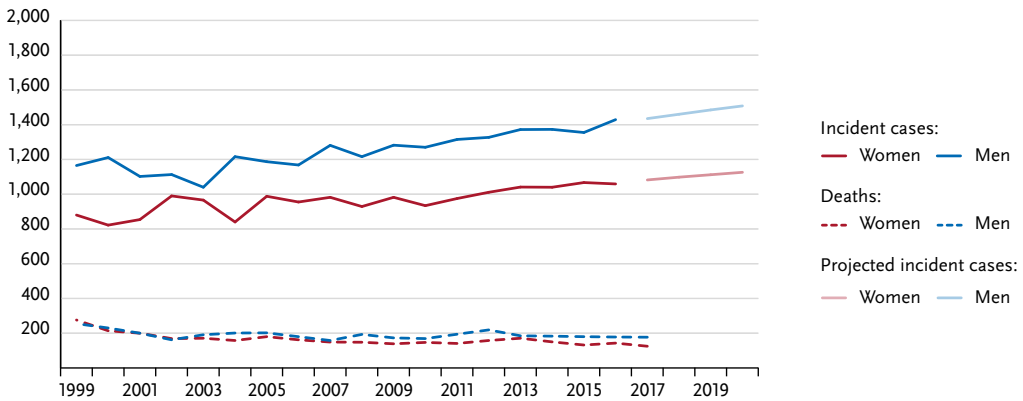
Children and siblings of persons with a history of Hodgkin lymphoma have a slightly higher risk of developing the condition themselves. The reasons behind this have yet to be understood and research is ongoing.

It is normally impossible to find a clear causal explanation for the development of Hodgkin lymphoma, and it is likely that the condition results from a combination of several factors.

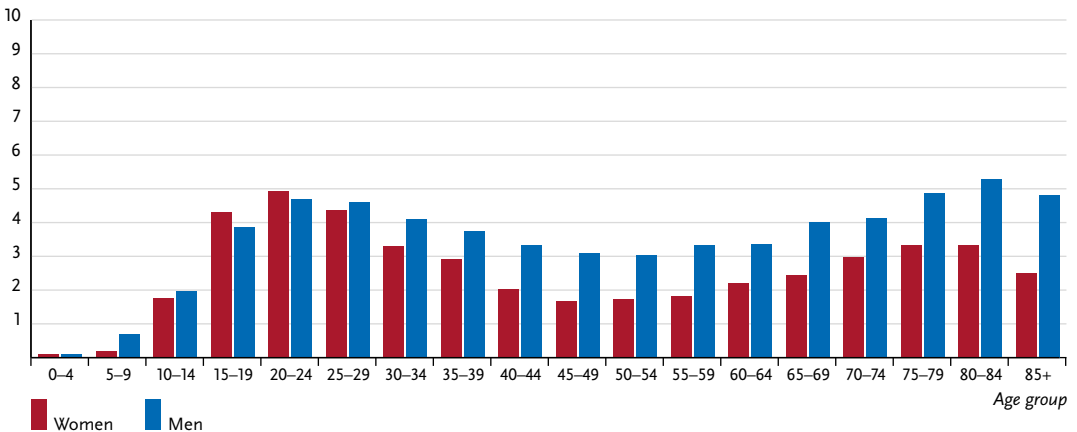
**Figure 3.28.1a**  
Age-standardised incidence and mortality rates by sex, ICD-10 C81, Germany 1999–2016/2017, projection (incidence) through 2020 per 100,000 (old European Standard)



**Figure 3.28.1b**  
Absolute numbers of incident cases and deaths by sex, ICD-10 C81, Germany 1999–2016/2017, projection (incidence) through 2020



**Figure 3.28.2**  
Age-specific incidence rates by sex, ICD-10 C81, Germany 2015–2016 per 100,000

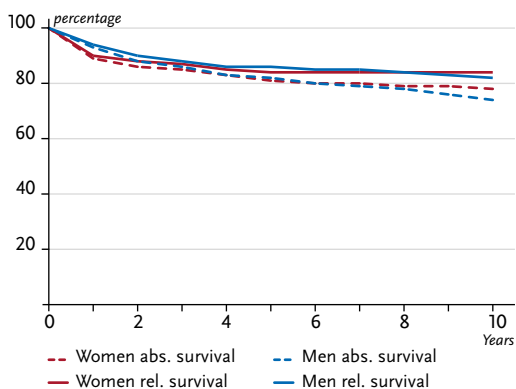


**Table 3.28.2**  
Cancer incidence and mortality risks in Germany by age and sex, ICD-10 C81, database 2016

Women aged	Risk of developing cancer				Mortality risk			
	in the next ten years		ever		in the next ten years		ever	
15 years	< 0.1%	(1 in 2,300)	0.2%	(1 in 500)	< 0.1%	(1 in 138,900)	< 0.1%	(1 in 3,400)
25 years	< 0.1%	(1 in 2,600)	0.2%	(1 in 650)	< 0.1%	(1 in 264,000)	< 0.1%	(1 in 3,500)
35 years	< 0.1%	(1 in 4,100)	0.1%	(1 in 860)	< 0.1%	(1 in 1,801,000)	< 0.1%	(1 in 3,500)
45 years	< 0.1%	(1 in 5,800)	0.1%	(1 in 1,100)	< 0.1%	(1 in 141,200)	< 0.1%	(1 in 3,500)
55 years	< 0.1%	(1 in 5,000)	0.1%	(1 in 1,300)	< 0.1%	(1 in 28,000)	< 0.1%	(1 in 3,500)
Lifetime risk			0.2%	(1 in 460)			< 0.1%	(1 in 3,400)
Men aged	in the next ten years		ever		in the next ten years		ever	
15 years	< 0.1%	(1 in 2,300)	0.3%	(1 in 400)	< 0.1%	(1 in 173,900)	< 0.1%	(1 in 2,700)
25 years	< 0.1%	(1 in 2,300)	0.2%	(1 in 480)	< 0.1%	(1 in 49,800)	< 0.1%	(1 in 2,700)
35 years	< 0.1%	(1 in 2,800)	0.2%	(1 in 600)	< 0.1%	(1 in 68,300)	< 0.1%	(1 in 2,900)
45 years	< 0.1%	(1 in 3,200)	0.1%	(1 in 750)	< 0.1%	(1 in 48,100)	< 0.1%	(1 in 2,900)
55 years	< 0.1%	(1 in 3,100)	0.1%	(1 in 950)	< 0.1%	(1 in 31,200)	< 0.1%	(1 in 3,000)
Lifetime risk			0.3%	(1 in 370)			< 0.1%	(1 in 2,700)

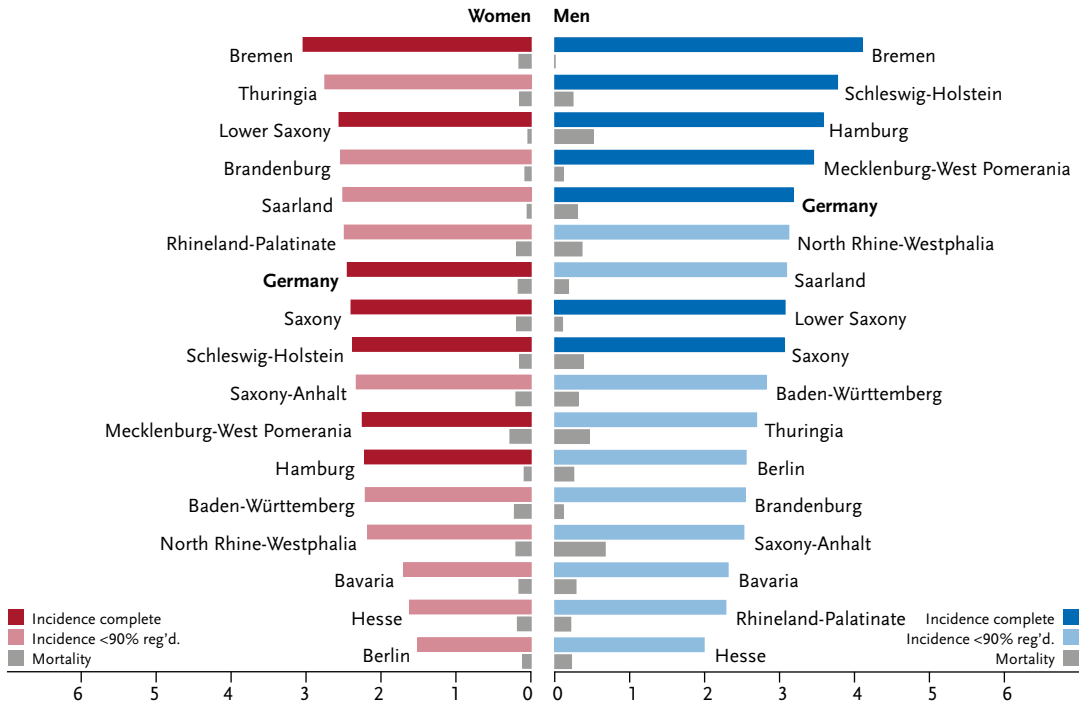
**Figure 3.28.3**  
Distribution of UICC-stages at first diagnosis by sex  
Not included because UICC-stages are not defined for Hodgkin lymphoma.

**Figure 3.28.4**  
Absolute and relative survival rates up to 10 years after first diagnosis, by sex, ICD-10 C81, Germany 2015–2016

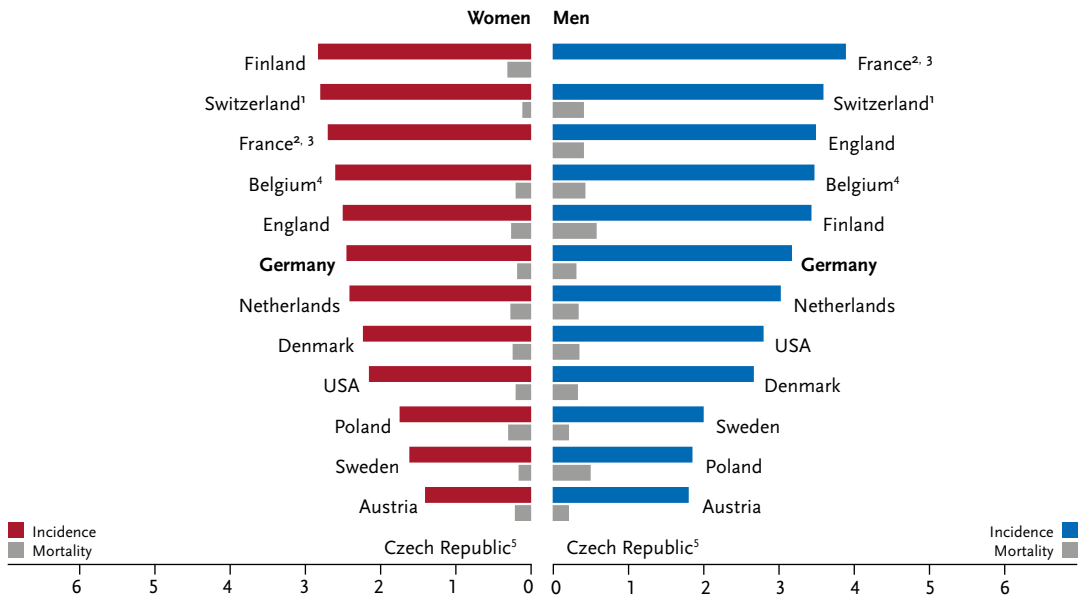


**Figure 3.28.5**  
Relative 5-year survival by UICC-stage  
Not included because UICC-stages are not defined for Hodgkin lymphoma.

**Figure 3.28.6**  
 Age-standardised incidence and mortality rates in German federal states by sex, ICD-10 C81, 2015–2016  
 (Incidence in Bremen for 2014 and 2016, incidence in eastern Germany for 2014 to 2015)  
 per 100,000 (old European Standard)



**Figure 3.28.7**  
 International comparison of age-standardised incidence and mortality rates by sex, ICD-10 C81,  
 2015–2016 or latest available year (details and sources, see appendix)  
 per 100,000 (old European Standard)



<sup>1</sup> Mortality only for 2015  
<sup>2</sup> Hodgkin lymphoma defined by ICD-O-3 morphologies 9650/3–9655/3, 9661/3–9667/3  
<sup>3</sup> No data for mortality  
<sup>4</sup> Mortality only for 2015 from WHO mortality database  
<sup>5</sup> No data available