### 3.7 Anus

Table 3.7.1
Overview of key epidemiological parameters for Germany, ICD-10 C21

| Incidence | Women | 2017 <br> Men | Women | $2018$ <br> Men | Prediction for 2022 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Women | Men |
| Incident cases | 1,430 | 770 | 1,530 | 800 | 1,700 | 900 |
| Crude incidence rate ${ }^{1}$ | 3.4 | 1.9 | 3.6 | 1.9 | 4.0 , | 2.2 |
| Age-standardised incidence rate ${ }^{1,2}$ | 2.2 , | 1.3 | 2.4 , | 1.4 | 2.7 | 1.5 |
| Median age at diagnosis | 65 | 64 | 65 | 64 |  |  |
| Mortality |  | 2017 |  | 2018 |  | 2019 |
|  | Women | Men | Women | Men | Women | Men |
| Deaths | 336 | 229 | 336 | 221 | 340 | 208 |
| Crude mortality rate ${ }^{1}$ | 0.8 , | 0.6 | 0.8 , | 0.5 | 0.8 | 0.5 |
| Age-standardised mortality rate ${ }^{1,2}$ | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 , | 0.3 |
| Median age at death | 76 | 70 | 74 | 69 | 75 | 70 |
| Prevalence and survival rates |  | 5 years |  | years |  | years |
|  | Women | Men | Women , | Men | Women | Men |
| Prevalence | 5,500 | 2,800 | 8,600 | 4,500 | 12,400 | 6,400 |
| Absolute survival rate (2017-2018) ${ }^{3}$ | $68(66-72)$ | 60 | 57 | 45 | 1 |  |
| Relative survival rate (2017-2018) ${ }^{3}$ | 75 (73-77) | 68 | 71 | 60 |  |  |

${ }^{1}$ per 100,000 persons ${ }^{2}$ age-standardised (old European Standard) ${ }^{3}$ in percent (lowest and highest value of the included German federal states)

## Epidemiology and risk factors

Cancers of the anus are predominantly squamous cell carcinomas. In 2018, around 2,330 people were diagnosed with anal cancer, 1,530 of them were women. Contrary to the trend of declining incidence rates of colorectal cancer incidence and mortality rates of anal cancer have increased substantially over the last 15 years. An increase in incidence is also described internationally. The relative 5 -year survival rates of patients with the disease are around $75 \%$ for women and $68 \%$ for men.

In Germany, about $90 \%$ of anal carcinomas can be traced back to a persistent infection with human papillomaviruses (HPV). Related risk factors are certain sexual practices (frequently changing sexual partners, passive anal intercourse) and chronic immunosuppression (especially due to HIV infection or organ transplantation). HIV-positive men with same-sex partners have the highest risk of anal cancer.

The Standing Commission on Vaccination (STIKO) recommends vaccinating girls and boys against HPV, primarily between the ages of 9 and 14 .

Figure 3.7.1
International comparison of age-standardised incidence and mortality rates by sex, ICD-10 C21, 2017-2018 or latest available year (details and sources, see appendix) per 100,000 (old European Standard)


Figure 3.7.2
Age-standardised incidence and mortality rates by sex, ICD-10 C21, Germany 1999-2018/2019, projection (incidence) through 2022
per 100,000 (old European Standard)


Incidence rate:
— Women - Men
Mortality rate:
.-. Women -.- Men
Projected incidence rate:
— Women - Men

Figure 3.7.3
Absolute and relative survival rates up to 10 years after diagnosis by sex, ICD-10 C21, Germany 2017-2018


Figure 3.7.4
Relative 5 -year survival by UICC stage ( $7^{\text {th }}$ edition TNM) and sex, ICD-10 C21, Germany 2016-2018


Figure 3.7.5
Age-specific incidence rates by sex, ICD-10 C21, Germany 2017-2018 per 100,000


