

2023-12-19 Art.nr: 2023-12-8902

Statistics on cancer incidence 2022

In 2022, 78 463 malignant tumours affecting 72 108 people were reported to the National Cancer Registry. The number of people that receive a cancer diagnosis is considerably higher than the number of deaths from cancer. The number of people in the population that live with a cancer diagnosis has increased over time, which can be attributed to increased detection and better survival. Cancer of the skin continues to rise. The rate of increase for the most serious form of skin cancer, malignant melanoma of the skin, is highest among the oldest part of the population.

Incidence and mortality over time

Figure 1 shows the incidence rates for all causes of cancer (per capita and per tumour) and cancer mortality for the years 1970–2022. The number of cancer cases have increased over time while there has been a decrease in mortality rates. In 2020, a decrease in the number of cancer cases was observed, which was likely an effect of the Covid-19 pandemic. However, it is unclear to what extent the pandemic continued to affect the number of tumours diagnosed in 2022. As can be seen below, the incidence and mortality rates are higher for men than for women.

Figure1. Incidence och mortality for cancer

The number of diagnosed tumours, individuals, and cancer deaths for women and men. Age standardised incidence per 100 000 population.



Source: The National Cancer Registry and the National Cause of Death Registry. The National Board of Health and Welfare

Cancer prevalence

Cancer prevalence is a measurement describing the number of individuals in a population that have been diagnosed with cancer and are still alive at a certain point in time. The prevalence is affected by the number of people that are diagnosed with cancer and how long they live following the diagnosis. Prevalence can complement other measurements as it describes the number of people that are affected by cancer during their lives. At the end of 2022, the complete cancer prevalence for all cancer groups was 312 271 women and 290 703 men. A five-year prevalence indicates the number of individuals that have been diagnosed with cancer within the last five years and are still alive, which approximately corresponds to the time during which cancer patients in Sweden stay in regular contact with the clinics. Figure 2 shows the five-year prevalence for the period 1963–2022 for all cancer sites. Prevalence numbers increased over the time period, and at the end of 2022, there were 99 203 women and 109 414 men in the fiveyear prevalence pool.

Figure 2. Five-year prevalence, all cancer-sites excluding nonmelanoma cancer of the skin



Number iof women and men living with cancer diagnosed no more than 5 years ago.

Source: The National Cancer Registry and the National Cause of Death Registry. The National Board of Health and Welfare

Highest prevalence for breast and prostate cancer

Figure 3 shows the five-year prevalence for the diagnoses with the highest prevalence for women and men, respectively. The prevalence is higher for cancer diagnoses with high incidence- and low mortality-rates, which particularly concerns breast cancer for women (five-year prevalence for 2022: 36 296) and prostate cancer for men (five-year prevalence for 2022: 44 637). The diagnosis of malignant melanoma of the skin had the second

highest five-year prevalence for both women and men at around 10 000 individuals per gender.

Figure 3. Five-year prevalence for the cancer-sites with the highest prevalence for women and men, respectively

Five-year prevalence per 2022-12-31.



Source: The National Cancer Registry and the National Cause of Death Registry. The National Board of Health and Welfare

Geographical differences in cancer prevalence

The prevalence rate, which corresponds to the fraction of the population diagnosed with cancer that is still alive at the end of a specified time period, differs depending on where the individual lives. Figure 4 shows the complete prevalence per 100 000 inhabitants per county. The lowest complete prevalence rate was observed in Stockholm followed by Uppsala and Södermanland as well as in Uppsala and Norrbotten for women and

men, respectively. The three counties with highest prevalence rates for women and men were Blekinge, Kalmar and Gotland. The difference in complete prevalence rates between the counties with the highest and lowest values was 1 872 for women and 2 196 for men per 100 000 inhabitants. The geographical differences can be linked to differences in the age structure of the population in the different counties. An older population will in general have a larger proportion of the population that has been diagnosed with cancer.

Figure 4. Complete prevalence per county for all cancer-sites excluding non-melanoma cancer of the skin

Complete prevalence for women and men per 2022-12-31.



Complete prevalence

Source: The National Cancer Registry and the National Cause of Death Registry. The National Board of Health and Welfare

Skin cancer incidence has increased over time

Changes to the incidence for skin cancer have been of interest for a long time due to the connection between sun exposure and skin cancer. Several communication efforts have been conducted over time, and the knowledge and effort among the population to protect, in particular, young children from sun exposure has increased. It is therefore of interest to follow the development and monitor skin cancer incidence both over time and in different age groups. A total of 7000 women and 8 569 men were diagnosed with skin cancer in 2022. Out of these, 2 448 women and 2 809 men were diagnosed with malignant melanoma of the skin. Figure 5 shows that the incidence for malignant melanoma of the skin has increased since the 1970s. When adjusted for age, 7.2 times more men and 5 times more women were diagnosed in 2022 compared with 1970. The age-adjusted mortality for malignant melanoma of the skin has not increased at the same rate as the incidence, as mortality was 1.5 and 1.7 times higher for women and men, respectively, in 2022 compared to 1970.

Figure 5. Malignant melanoma of the skin—incidence and mortality 1970–2022

The number of cancer cases and deaths per 100 000 inhabitants for women an men. Age standardised using the population for the year 2000.



Source: The National Cancer Registry and the National Cause of Death Registry. The National Board of Health and Welfare

Figure 6 shows that the incidence for other malignant neoplasms of the skin has also increased over time. Around 7.7 and 6.3 times more women and men, respectively, were diagnosed in 2022 compared to 1970 when adjusted for age. In comparison, the mortality rate for non-melanoma cancers of the skin is low despite the large number of individuals diagnosed each year. During the last 10-year period, an average of around 30 women and 50 men have passed away, with "other malignant neoplasms of the skin" as the underlying cause of death. Here the mortality has increased to a much lesser extent than the incidence. For women, the age-standardised mortality rates have increased by around 15 percent over the past 20 years while the corresponding increase for men was a little over 40 percent.

Figure 6. Other malignant neoplasms of skin—incidence and mortality 1970–2022

Number of cancer cases and deaths per 100 000 inhabitants for women and men. Age standardised using the population for the year 2000.



Source: The National Cancer Registry and the National Cause of Death Registry. The National Board of Health and Welfare

Malignant melanoma more common among the elderly

The incidence for malignant melanoma of the skin, which form of skin tumour that causes the highest number of deaths, around 500 each year, is higher in the older part of the population and has been so historically. Figure 7 shows the incidence for malignant melanoma of the skin per age group, time-period and gender. When the period between 2000–2009 is compared to the one between 2010–2022, the largest incidence increase can be observed for the oldest age groups for both women and men. In the age groups above 65, the incidence was between 1.5 and 2.1 times higher during the latter time period. Additionally, it is notable that the incidence has also increased between time periods for individuals in their forties and fifties, among both women and men.

Figure 7. Malignant melanoma of the skin—incidence for women and men per time-period and age group

Average incidence per year per 100 000 individuals.









Source: The National Cancer Registry at The National Board of Health and Welfare

Malignant melanoma increases most rapidly in the older population

The increase in incidence rates is not evenly distributed over the time period 1970–2022. In addition, it is not evenly distributed among men and women nor with respect to the patient's age at diagnosis. Figure 8 shows the number of individuals per 100 000 inhabitants per gender per year that are diagnosed with malignant melanoma of the skin. The rate of change for women over the entire time period 1970–2022 was highest in the oldest age groups (3.6–4.1 percent per year for women in the age groups from 50 and upwards).

When comparing the rate of change before and after the year 2000, a higher rate of change can be observed during the latter time period. The rate of change increases from 2.3 to 4.6 percent per year among individuals diagnosed after the age of 80, 3.4 to 5.3 for individuals diagnosed between the ages 65–79 and from 3.1 to 3.7 for the age group 50–64 years. The rate of change also increased from 1.5 to 3.7 percent per year for women in the age group 35–49 years, while it decreased from 1.8 to 0.6 percent per year in the youngest age category.

For men, the average rate of change was 3.2 percent per year between 1970–1999 for those diagnosed at the age of 80 or older, compared to 5.5 percent per year for the period 2000–2022. For men aged 65–79 and 50–64, the rate of change before and after the turn of the millennium was 5.8 and 5.0 as well as 3.4 and 4.4 percent per year, respectively. The yearly rate of change for the two youngest age groups was lower than for the oldest one, amounting to 1.9 percent for men aged 35–49 and 1.0 percent for men aged 20–34 during the time period 1970–2022. While there is no observable indication that the rate of change is decreasing for people over 50, there is an indication that the incidence rate of change has decreased among people aged 20–49 for both men and women since the mid-2010s.





Cases per 100 000 inhabitants.



Source: The National Cancer Registry at The National Board of Health and Welfare

About prevalence

Prevalence is a measurement describing the number or proportion of the population diagnosed with a certain disease that is still alive at a certain point in time; it is therefore a measurement that depends on both incidence and mortality. In the present document, five-year prevalence is discussed, which is the number of people diagnosed with a certain form of cancer no longer than five years ago that are still alive at a certain point in time. The complete prevalence is thus the number of people diagnosed with cancer that are still alive at a certain point in time. For the county-specific prevalence number, the patient's place of registration at the time of diagnosis has been used. The age-distribution within each county can affect the statistics. Nonmelanoma cancer cases have been exempted when calculating the prevalence.

Additional information

You can find more tables, graphs and information here (select Tillhörande dokument och bilagor): www.socialstyrelsen.se/statistikoch-data/statistik/alla-statistikamnen/cancer (in Swedish, but with English list of terms).

If you want to use our statistical database, please visit: www.socialstyrelsen.se/statistik-och-data/statistik/statistikdatabasen

Contact:

David Pettersson (questions regarding statistics) Phone: +46 (0)75-247 30 00 E-mail: david.pettersson@socialstyrelsen.se

Gustav Arvidsson (questions regarding statistics) Phone: +46 (0)75-247 30 00 E-mail: gustav.arvidsson@socialstyrelsen.se

Lars Holmberg (questions regarding the subject) E-post: lars.holmberg@kcl.ac.uk