

# Is childhood cancer increasing?

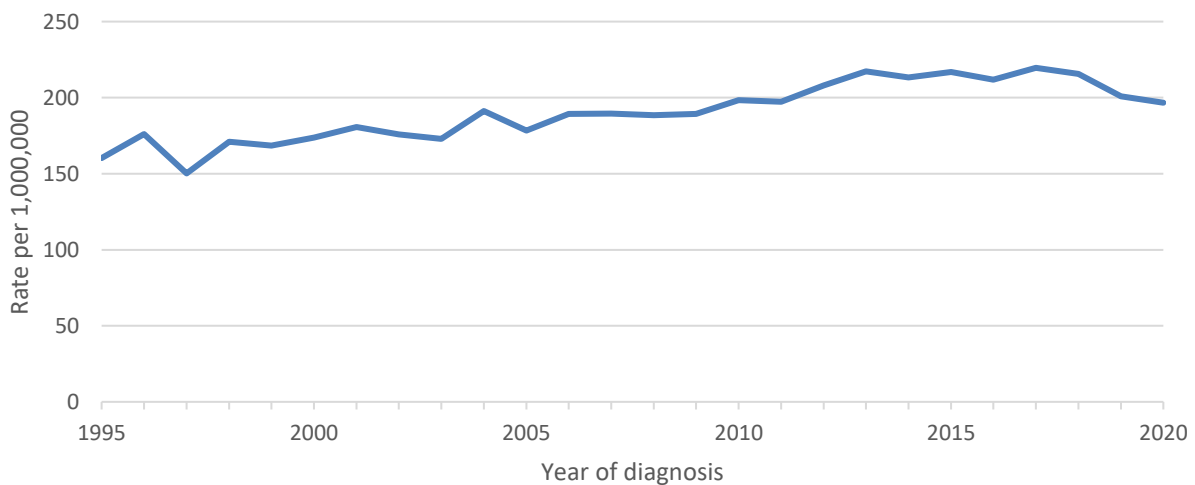
Rates of newly diagnosed cases of cancer in children increased slowly from 1995 through 2013 but have now leveled off.

Death rates declined for all types of childhood cancer. The decrease was greatest for childhood leukemia. The decline in childhood cancer death rates is believed to be due to advances in treatment.

There are different ways to measure cancer in a community. Because places with more people would be expected to have more people with cancer, researchers calculate cancer rates. Cancer rates show how many people in a place would develop or die from cancer if the place had a set number of people (usually 1 million for childhood cancers) and estimate a person's risk of developing or dying from cancer. The cancer **incidence** rate is the number of people living in a community who were **newly diagnosed** with cancer divided by the total number of people living there. The cancer **mortality** rate is the number of people in a community who **died** from cancer divided by the total number of people living there.

## Trend in childhood cancer incidence rates, all types combined\*

- Childhood cancer incidence rates showed a steady 35 percent increase from 1995 to 2013. This increase amounted to an average of 1.4 percent per year.
- Childhood cancer incidence rates have been stable since 2013.



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## Trends in childhood cancer incidence rates, most common cancer groups\*

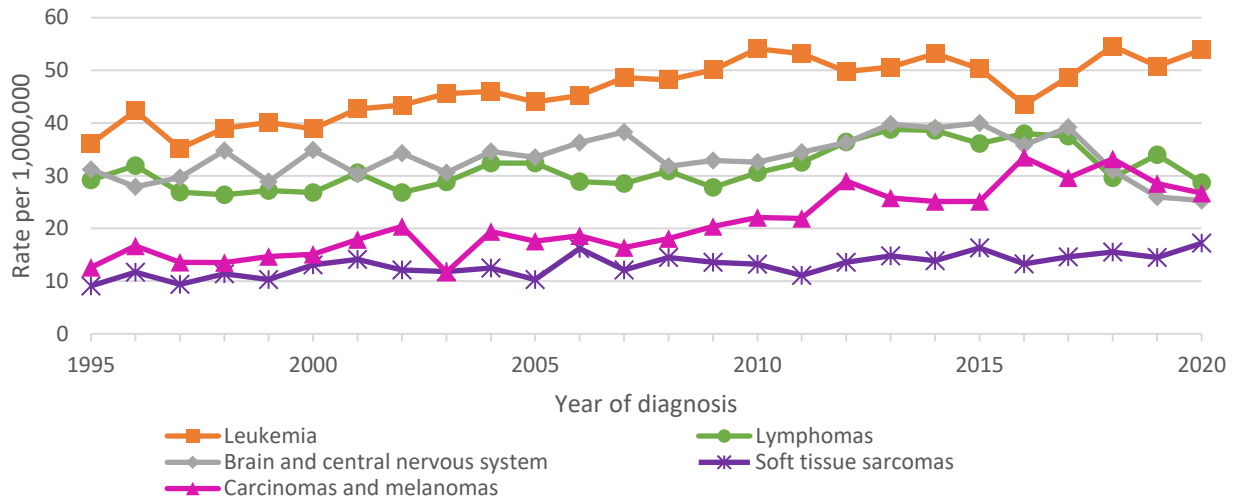
Cancer is not a single disease, but a collection of many different diseases. Each different type of cancer has its own pattern of occurrence, outlook, effective treatments, and risk factors. Changes in rates for all types of childhood cancer combined reflect changes in the rates for the different individual types.

Newly diagnosed cancers in children are usually grouped by the type of cell that turns cancerous, rather than the organ or location in the body where the tumor starts. The chart below shows incidence rates over time for the three most frequently diagnosed groups of childhood cancers: leukemia, lymphomas (including Hodgkin lymphoma and the non-Hodgkin lymphomas), and brain and other central nervous system cancers.

- Trends in the most frequently diagnosed cancers (leukemia, lymphomas, and brain and other central nervous system) as well as other childhood cancers (gonadal and other germ cell cancers (not shown), carcinomas and melanomas, liver cancer (not shown), and soft tissue sarcoma) for the most part parallel the trend in all childhood cancers combined, increasing through around 2013.
- Rates for most of these cancer types have been fairly stable since 2013.
- Rates of brain and other central nervous system cancers and lymphomas, however, have declined since 2013.
- Rates of soft tissue sarcomas have increased over the entire 1995 to 2020 period.
- Carcinomas and melanoma, which includes thyroid cancer, increased starting in the early 1990s in both older children and adults (not shown) until around 2013. While thyroid cancer rates in adolescents ages 10 to 14 have continued to increase, rates in older teens ages 15 to 19 have stopped increasing, and rates in adults have decreased since 2013.
- Rates of some less common childhood cancers, including neuroblastoma, retinoblastoma, and bone (not shown), did not change during this time.

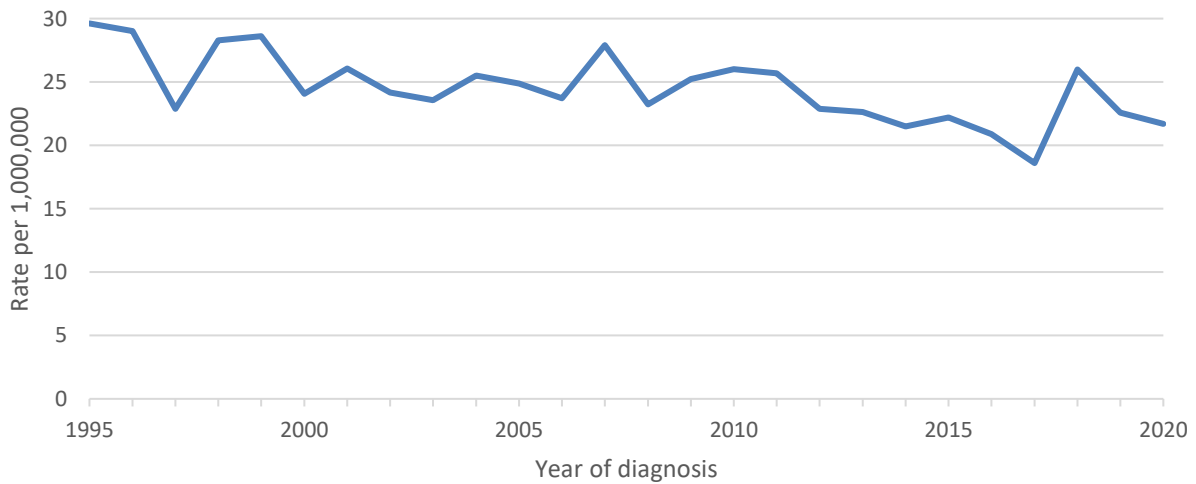


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### Trend in childhood cancer mortality rates, all cancers combined\*

- In contrast to the incidence of childhood cancers, mortality rates for all types of childhood cancers have decreased.
- The rate of children dying from cancer declined by an average of about 1 percent a year during this period.

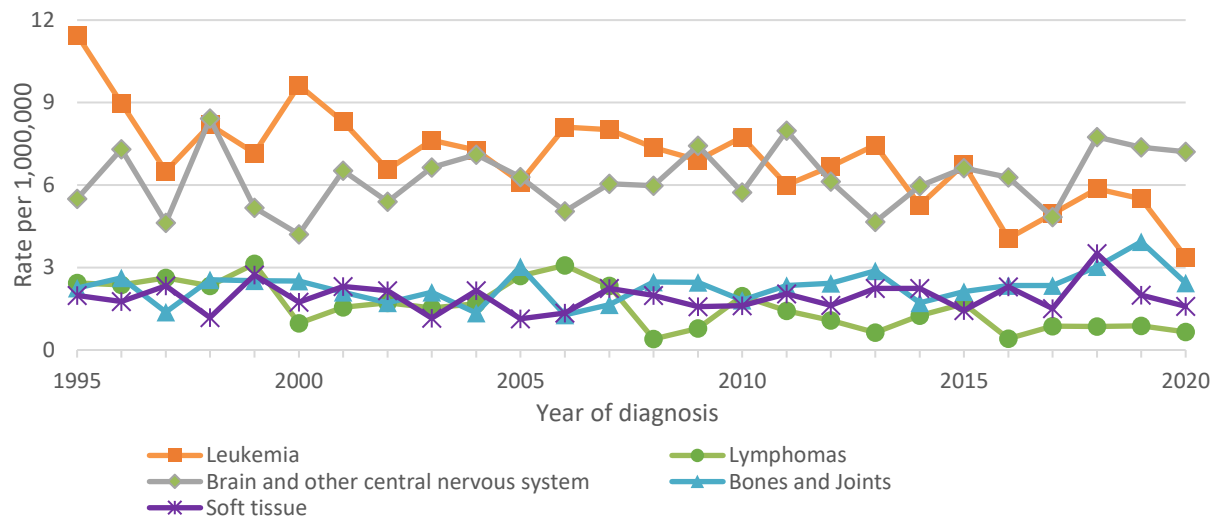


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## Trends in childhood cancer mortality rates most common types of cancer\*

As with incidence, changes in the rates of total deaths from childhood cancers reflect changes in deaths from different types of cancer. When tabulating cancer deaths, cancers in children are grouped by the organ or location in the body where the cancer starts. Other cancers not shown in the figure below include kidney cancer; cancers of the gonads; carcinomas and melanomas, which includes thyroid cancer and malignant melanoma; and rarer cancers of early childhood, including neuroblastoma, retinoblastoma, and liver tumors.

- Much of the decrease in total childhood cancer mortality is due to the marked decline in deaths from leukemia, which once accounted for the largest number of cases and deaths in children.
- The decrease in childhood cancer death rates is believed to be due to advances in cancer treatment.
- Other cancers not shown account for almost one quarter of childhood cancer mortality.



### Footnotes

- \* New York State, 1995-2020. Children ages 0-19 years  
 Data source: New York State Cancer Registry. Data provisional, November 2022  
 Rates age-adjusted to the 2000 US population standard