

Are there disparities in childhood cancer?

Cancer occurs in children of all racial and ethnic groups. Although non-Hispanic White children are more likely to be diagnosed with cancer, children of other racial/ethnic groups are less likely to survive once diagnosed.

More research is needed to better understand and address differences in childhood cancer occurrence and survival between racial and ethnic groups.

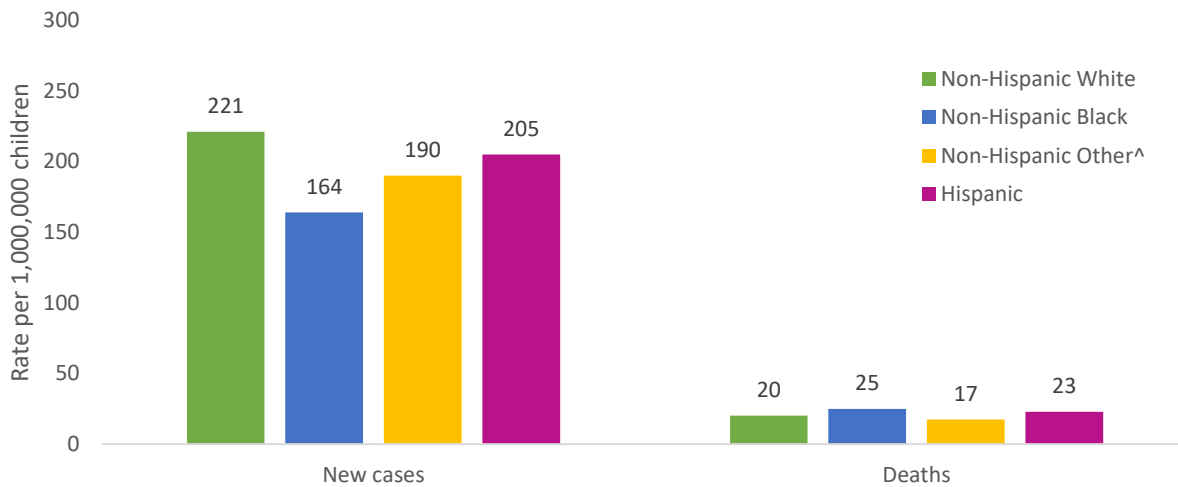
There are different ways to measure cancer in a group of people or in a community. Because groups or places with more people would be expected to have more people with cancer, researchers calculate cancer rates. Cancer rates show how many people in a group or a place would develop or die from cancer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

Average annual incidence rates of childhood cancer, all types combined, in different racial/ethnic groups*

- Cancer occurs in children of all racial and ethnic groups.
- Most children diagnosed with cancer survive the disease, and the cancer incidence rate is much greater than the rate of dying from cancer for children of all racial/ethnic groups.
- The incidence rate for all types of cancer combined is greatest in non-Hispanic White and Hispanic children.
- Non-Hispanic children of other races are 15% less likely to be diagnosed with cancer compared with non-Hispanic White children.
- Non-Hispanic Black children are about 25% less likely to be diagnosed with cancer than non-Hispanic White children.
- Mortality rates for the four racial/ethnic groups are similar. This means that although a non-Hispanic Black child is less likely to be diagnosed with cancer than a non-Hispanic White child, those who are diagnosed are less likely to survive.



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Average annual incidence rates of the most common childhood cancers in different racial/ethnic groups*

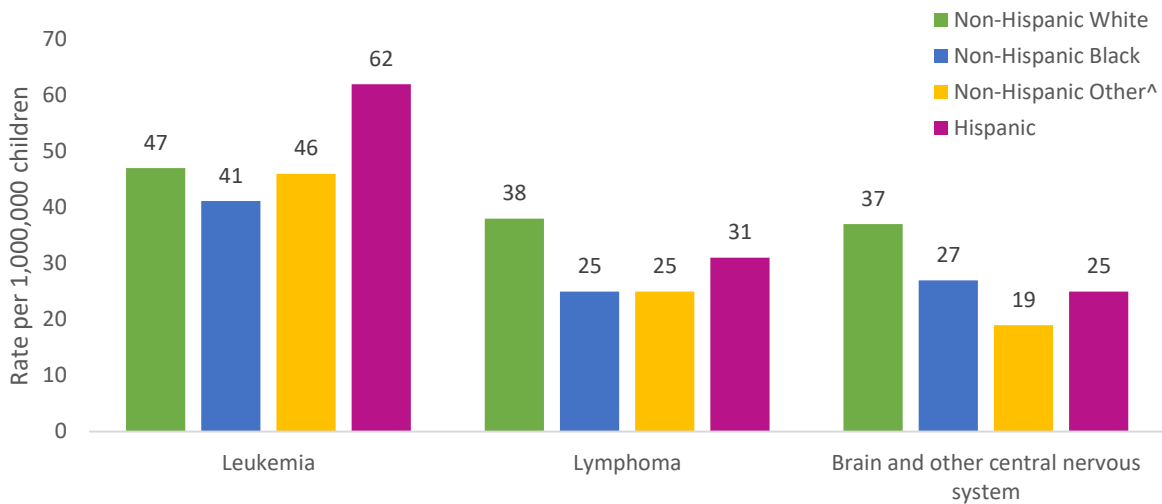
Cancer is not a single disease, but a collection of many different diseases. Each different type of cancer has its own occurrence pattern, outlook, effective treatments, and risk factors.

Children can develop many different types of cancer. Leukemia, lymphomas (including Hodgkin lymphoma and non-Hodgkin lymphomas), and tumors of the brain and other central nervous system are the cancers that children develop most often.

- The incidence rate for leukemia among non-Hispanic Black children and non-Hispanic children of other races is similar to that of non-Hispanic White children.
- The incidence rate for leukemia among Hispanic children is about one-third higher than non-Hispanic White children.
- The incidence rate of lymphomas is lower for non-Hispanic Black children and non-Hispanic children of other races than for non-Hispanic White children.
- The incidence rate of brain and other central nervous system cancers is greater among non-Hispanic White children than among each of the other race/ethnicity groups.
- Mortality rates for the three groups of cancer types are not shown by racial/ethnic groups due to low numbers.

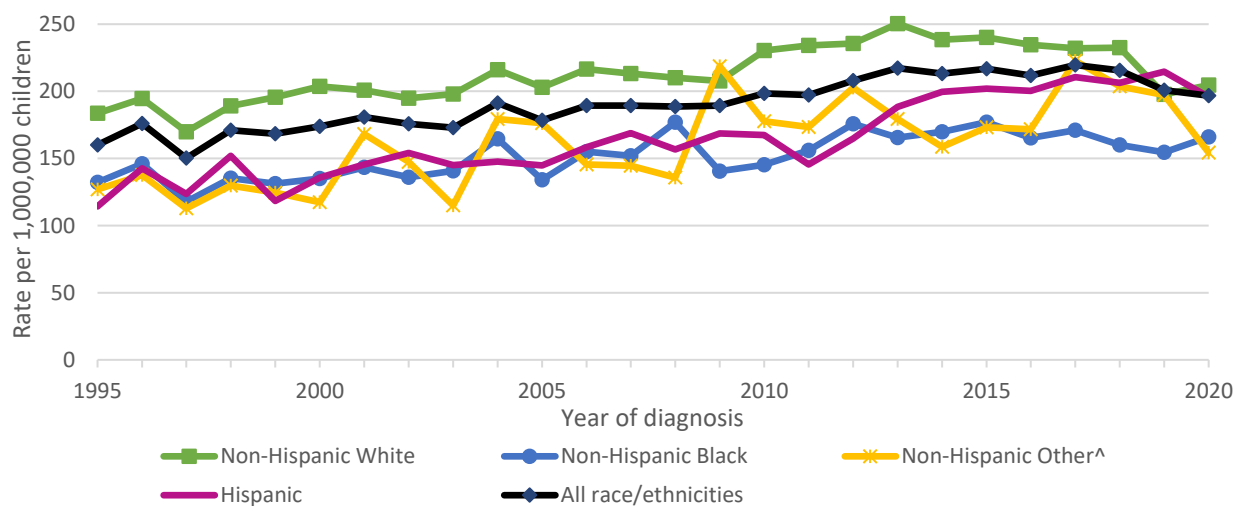


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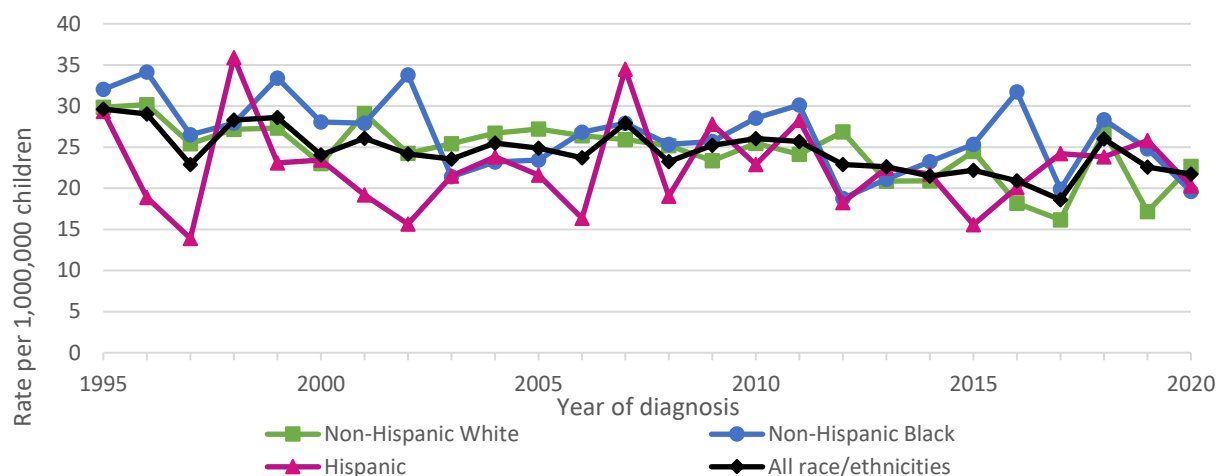
Trends in childhood cancer incidence rates, all types combined, by racial/ethnic group[§]

- Childhood cancer incidence rates for all children (black line) showed a steady increase from 1995 through around 2013. This increase amounted to an average of 1.4 percent per year. This increase was seen in all four racial/ethnic groups.
- Since 2013, cancer incidence rates for all children have been stable. However, when the different racial/ethnic groups were examined separately, rates for non-Hispanic White children decreased. There was no change in childhood cancer incidence rates for other races/ethnicities.



Trends in childhood cancer mortality rates, all cancers combined, by racial/ethnic group ^{§†}

- Despite increases in the incidence rates of childhood cancers, deaths from childhood cancers have declined.
- For all children, the rate of children dying from cancer declined by an average of 1 percent a year during this time period, so that by 2020 it was about 25% less than what it was in 1995.
- Deaths from childhood cancers declined in both non-Hispanic White children and non-Hispanic Black children.
- Rates in non-Hispanic children of other races and Hispanic children were more variable and did not change significantly over this period.
- Mortality rates for the three racial/ethnic groups were similar throughout this time.



A number of factors may contribute to childhood cancer disparities. Socioeconomic differences could influence the risk factors to which children are exposed as well as their access to and quality of medical care, including participation in clinical trials. Genetic differences may influence children’s responses to available treatments, or the likelihood of finding bone marrow donors for some cancers. Research on the causes and treatment of childhood cancers is needed to better understand the causes of these disparities and find ways to reduce and eliminate them.

Footnotes

* Children ages 0-19, New York State, 2016-2020. Data source: New York State Cancer Registry. Data provisional November 2022.

§ Children ages 0-19 years, New York State, 2016-2020.

Data source: New York State Cancer Registry. Data provisional November 2022. Rates age-adjusted to the 2000 US population standard.

^ “Non-Hispanic Other” refers to Asian, Pacific Islander, and American Indian/Alaskan Native persons

† Non-Hispanic Other not shown due to low numbers.