What types of cancer do children get?

Children can develop many different types of cancer. The types of cancer that children get most often are leukemia, lymphomas and brain (and central nervous system) tumors. Children of different ages tend to develop different types of cancer.

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. Because children are growing, the types of cancer that occur most often in children are different from the types most often found in adults. Childhood cancers are usually grouped by the type of cell that turns cancerous, rather than the organ or location in the body where the tumor starts.

- Leukemia, lymphomas (including Hodgkin lymphoma and the non-Hodgkin lymphomas) and tumors of the brain and central nervous system are the cancers that develop most often in children. Together, these three types make up almost 60% of childhood cancers.
- Some childhood cancers are rarely or never seen in adults, including neuroblastoma (a cancer of a part of the nervous system that unconsciously controls body functions), retinoblastoma (a malignant tumor of the eye), bone cancer, and soft-tissue cancers.

The chart below shows the different types of cancer that occur in children.
Average annual cancer cases grouped according to the International Classification of Childhood Cancer, children ages 0-19, New York State, 2012-2016.
Source of data: New York State Cancer Registry. Data provisional November 2018.
*Includes cancers of other, unspecified and unknown types not shown on chart.
Do children of different ages get different types of cancer?

Different types of cancer are more likely to occur at different ages. Infants and young children are more likely to get cancers involving immature or developing cells or tissues. Older teenagers develop some types of cancer that are mostly seen in adults.

Under 5 years

- Leukemia is the most important cancer type by far in children under 5 years, accounting for about one third of cases.
- Neuroblastoma (a cancer of a part of the nervous system that unconsciously controls body functions), retinoblastoma (a malignant tumor of the eye), and certain types of kidney and liver cancers are mostly found in young children. Together these four types account for over a quarter of cancers in children under age 5.

Ages 5-9 years

- The number of cancers occurring in children between the ages of 5 and 9 is the smallest of any childhood age group.

Ages 10-14 years

- Bone cancer becomes more important during the teenage growth spurt.
- Cancers of early childhood, including neuroblastoma, retinoblastoma, and kidney and liver cancers, become less common.

Ages 15-19 years

- Lymphomas, including Hodgkin lymphoma and the non-Hodgkin lymphomas, are the most frequently occurring type of cancer in children between the ages of 15 and 19, accounting for almost one quarter of all cases.
- Some cancers that are found mostly in adults, including cancers of the gonads (testes and ovaries) and carcinomas such as thyroid cancer and melanoma, begin to occur in larger numbers in the late teenage years.

The charts below show the types of childhood cancer that occur at different ages.
Average annual cancer cases by age group, children ages 0-19, New York State, 2012-2016. Cancers are grouped according to the International Classification of Childhood Cancer.
Source of data: New York State Cancer Registry. Data provisional, November 2018.
*Includes cases of other, unspecified and unknown types not shown on chart.
†Includes neuroblastoma, retinoblastoma, kidney cancer and liver cancer.

The types of cancer that children develop most often are not the same as the types adults get most often. Knowing the types of cancer that affect children can help direct efforts to control it.