

Childhood Cancer

Childhood cancers are rare. Although the incidence of childhood cancer has been slowly increasing since 1975, the death rate has significantly decreased in the same time period. However, childhood cancers remain the most common cause of disease-related deaths among children outside the newborn period. Common types of childhood cancer include leukemia, lymphoma, and solid tumors such as brain and central nervous system tumors, Wilms tumor, testicular and ovarian germ cell tumors, hepatoblastoma, neuroblastoma, rhabdomyosarcoma, retinoblastoma, soft tissue sarcoma, and bone cancer.

Statistics

- Approximately 9,910 U.S. children under age 15 are expected to be diagnosed with cancer in 2023. About 1,040 deaths of children under age 15 are anticipated.
- In Texas, more than 1,800 children under age 20 are diagnosed with cancer and almost 200 children die annually.
- Leukemias (28%) and brain/central nervous system cancers (26%) make up more than half of childhood cancers.
- The five-year survival rate now **exceeds 80%** and has increased significantly in the last few decades due to treatment advances. The survival rate for the most common childhood cancer, acute lymphoblastic leukemia, has improved dramatically to **92%**. Several other types of childhood cancer, including pediatric kidney tumors and most forms of lymphoma, now have five-year survival rates approaching or greater than 90%.

Symptoms and Signs

Cancers in children may be difficult to recognize, as symptoms are often similar to those caused by common illnesses or injuries. Parents should watch for unusual signs that persist and consult a physician with any concerns.

- An unusual lump or mass
- Unusual swelling
- Unexplained paleness
- Lack of energy
- Persistent pain in one area of the body
- Easy bruising
- Limping
- Unexplained fever

- A prolonged illness
- Persistent nausea
- Vomiting without nausea
- Frequent headaches, often with vomiting
- Sudden eye or vision changes, or white behind the pupil
- Unexplained weight loss
- Unexplained bleeding or rash
- Frequent infections

Prevention and Risk Factors

The origin of most childhood cancers is unknown and cannot be prevented. A small number of environmental factors, such as exposure to radiation, may increase childhood cancer risk. Children with genetic syndromes like Down syndrome face an increased risk for developing leukemia. In a small number of cases, inherited genes can be linked to an increased risk for some forms of cancer in children. Physicians may recommend close monitoring.

Treatment Options

Treating childhood cancer differs greatly from treating adults with cancer. For example, children can recover better from high doses of chemotherapy than adults. Treatment depends on the patient's overall health, age, cancer type, and stage of the cancer and may include surgery, chemotherapy, radiation therapy, proton therapy, immunotherapy, targeted therapy, stem cell transplants, and palliative medicine. A combination of treatments may be used.

Children diagnosed with cancer can benefit from being treated at centers specializing in pediatric oncology, which use protocols developed for children, have specialized pediatric equipment and pediatric and surgical sub-specialists, and have clinical trials specifically for children.

About Texas Oncology

With more than 530 physicians and 280 locations, Texas Oncology is an independent private practice that sees more than 71,000 new cancer patients each year. Founded in 1986, Texas Oncology provides comprehensive, multi-disciplinary care, and includes Texas Center for Proton Therapy, Texas Breast Specialists, Texas Colon & Rectal Specialists, Texas Oncology Surgical Specialists, Texas Urology Specialists, Texas Infusion and Imaging Center, and Texas Center for Interventional Surgery. Texas Oncology's robust community-based clinical trials and research program has contributed to the development of more than 100 FDA-approved cancer therapies. Learn more at TexasOncology.com.

Sources: American Cancer Society, American Society of Clinical Oncology, Children's Oncology Group, National Cancer Institute, and Texas Cancer Registry



