



Understanding Childhood Cancer

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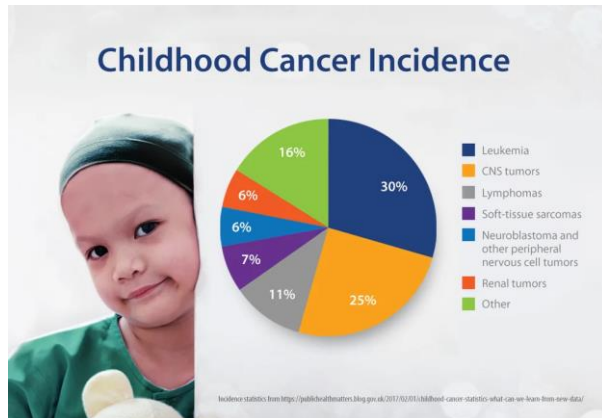
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What is Childhood Cancer?



- Childhood (otherwise known as pediatric) cancer refers to cancers that occur in children and adolescents (ages 0–19).
- Unlike adult cancers, they are not strongly linked to lifestyle or environmental factors.
- Develops due to genetic mutations or unknown causes.

Common Types of Childhood Cancer



- Leukemia – Cancer of the blood and bone marrow (e.g., ALL, AML).
- Brain and Central Nervous System Tumors – Affect the brain or spinal cord.
- Neuroblastoma – Cancer that develops in nerve tissues, often in infants.
- Wilms Tumor – A kidney cancer primarily affecting young children.
- Lymphomas – Affect the immune system (e.g., Hodgkin’s and Non-Hodgkin’s).
- Bone Cancers – Osteosarcoma and Ewing sarcoma, common in teens.

Causes and Risk Factors



- Most pediatric cancers are caused by random genetic mutations rather than lifestyle choices.
- Some risk factors include:
 - Genetic syndromes (e.g., Li-Fraumeni, Down syndrome).
 - Family history of cancer.
 - Exposure to radiation or certain chemicals (though rare).

Symptoms of Childhood Cancer

- Persistent fever, fatigue, or unexplained weight loss.
- Frequent infections or bruising (common in leukemia).
- Persistent headaches, vomiting, or vision problems (brain tumors).
- Lumps or swelling in the abdomen, neck, or other areas.
- Bone pain or fractures without injury.



Diagnosis and Screening



- Physical Exam & Medical History
- Blood Tests (to check for abnormalities).
- Imaging Tests (X-ray, MRI, CT scans).
- Biopsy (to confirm cancer type).
- Lumbar Puncture (for brain/spinal cord cancers).

Treatment Options

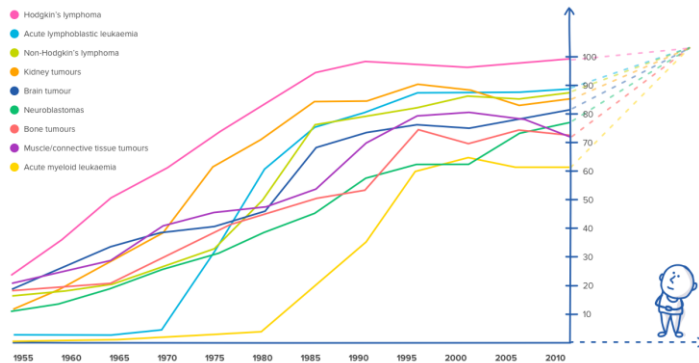


- Chemotherapy – Uses drugs to kill cancer cells.
- Radiation Therapy – High-energy rays to shrink tumors.
- Surgery – Removes solid tumors when possible.
- Stem Cell Transplant – Replaces damaged bone marrow.
- Immunotherapy & Targeted Therapy – Helps the immune system fight cancer.

Prognosis and Survival Rates

Survival in per cent

— our goal is for every child to survive and receive support



- Survival rates have improved significantly with modern medicine.

- Overall 5-year survival rate: 80–85% (varies by cancer type).

- Early detection and advances in treatment improve outcomes.

Impact on Families



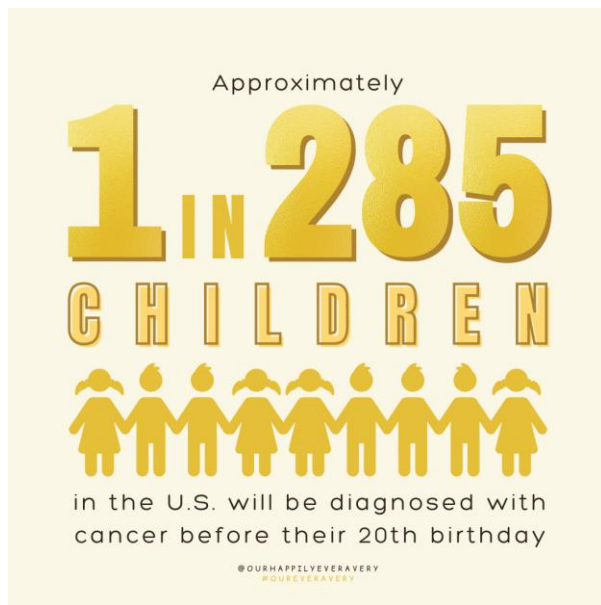
- Emotional & financial challenges.
- Importance of support systems (family, community, organizations).
- Psychological effects on young patients (coping strategies, therapy).

Supporting Childhood Cancer Awareness



- Participate in childhood cancer awareness campaigns (September is Childhood Cancer Awareness Month).
- Support organizations like St. Jude, Make-A-Wish, Fairy Godmother Project, JustRyanIt, and Alex's Lemonade Stand.
- Advocate for more funding and research for childhood cancer treatments.

Conclusion



- Pediatric cancer remains a major health challenge, but advancements in research and treatment offer hope.
- Early detection, proper treatment, and support are key to improving survival and quality of life.
- Everyone can help by raising awareness, supporting affected families, and advocating for research funding.