

THE KATY FAMILIES' GUIDE TO THE TOP FIVE MOST COMMON

# Cancers in Children

Although it's the leading cause of disease-related death among children, cancer is actually quite rare. Here's the scoop on what to watch for, typical treatments, cure rates, and more.

## Leukemia

It happens when bone marrow and other blood-forming organs produce increased numbers of immature or abnormal leukocytes that suppress the production of normal blood cells.

## Neuroblastoma

Occurs when the young nerve cells that control automatic functions never mature. Instead, they divide and grow into tumors. The disease usually develops before age 5.

## Brain Cancers

The tumors are formed by the abnormal growth of cells and may begin in different areas of the brain or spinal cord. Medulloblastomas are the most common and usually occur in children before age 10.

## Wilms Tumor

This occurs in only one kidney and can grow quite large before causing issues. The average age of children with Wilms tumor is 2 to 3.

## Lymphoma

These are cancers of the lymphatic system, a series of olive-sized nodes that produce lymph, a fluid that carries disease-fighting white blood cells (lymphocytes) throughout the body.

*Written by Tonya Ellis*

**D**uring a playful wrestling match with his 6-year-old son, Clayton Gring noticed a rather large lump on his son George's abdomen. The happy, healthy kindergartner was diagnosed with lymphoma, a form of cancer, which turned his parent's lives upside down in one moment. "We went from worrying about Christmas parties and babysitters, to 'Is our child okay, and what is in store for us in the future,'" shares Katherine Gring.

Last year, approximately 11,600 other kids were also diagnosed with cancer, according to the National Cancer Institute. Unlike cancers seen in adults, sometimes affected by lifestyle choices like diet, lack of exercise, drinking, and smoking, most childhood cancers appear without known cause.

## 1. Leukemia

Leukemia is the most common cancer in children, found in 4,900 annually. It develops when abnormal cells grow in bone marrow. Chemotherapy is the recommended treatment. Eighty to 95% of children are cured, says Dr. ZoAnn Dreyer, a pediatric oncologist and director of the long-term survivor program at Texas Children's Cancer Center. "Most survivors have very normal lives, including careers, marriage, and children."

**SYMPTOMS** Children with leukemia limp from bone pain, have unexplained bruises, long-lasting fever, or swelling lymph nodes, especially in the neck.

## 2. Brain Cancers

The second most common cancer kids develop are brain tumors, with about 3,500 diagnosed each year. Doctors remove tumors with surgery, and patients also need radiation, and possibly chemotherapy treatment. About 75% are cured. Kids who have had brain tumors may see drops in their IQ and long-term difficulty in reading, spelling, and math. "Survivors of brain tumors may also require life-long hormone replacement therapy and physical and social rehabilitation," says Murali Chintagumpala, a pediatric oncologist in Texas Children's Cancer Center.

**SYMPTOMS** Severe headaches that cause vomiting, personality changes, seizures, and weakness of the arms and legs on one side of the body.

## 3. Neuroblastoma

Infants to children age 5 are most often affected with neuroblastoma. About 800 kids a year are diagnosed with this tumor, which usually starts in the stomach. Treatment includes surgery, chemotherapy, and radiation. Caught early, the disease has an 80% to 95% cure rate. Only about half of kids with advanced neuroblastoma survive.

**SYMPTOMS** A lump in the abdomen, neck, or chest; bulging eyes; dark circles around the eyes; bone pain; weakness or paralysis of a body part; and in infants, swollen stomach and bluish lumps under the skin.

## 4. Wilms Tumor

Roughly 500 kids get this tumor of the kidneys each year. These tumors are uncommon in kids older than age 6. Like other cancers, treatment involves chemotherapy and radiation. Experts also recommend that parents be honest when sharing the diagnosis with their children. Ernest Frugé, Ph.D., director of the psychosocial program at the Texas Children's Cancer and Hematology Center says, "Dishonesty can cause a child to lose trust in their parents at a time when their love and support is crucial."

**SYMPTOMS** A swelling or lump in the belly could be a sign of Wilms tumor, but often there are no noticeable signs. May also have nausea, stomach pain, loss of appetite, and fever.

## 5. Lymphoma

There are two main types of lymphoma, Hodgkin's (HL), seen more often in teens, and non-Hodgkin's (NHL). There are about 900 cases per year in each group. Cure rates for lymphoma are in the 80%-plus range. "Most remain fertile, grow up, and do well," says Dreyer.

**SYMPTOMS** Lumps in the stomach, neck, groin, or chest. Some kids get fever, have night sweats, or lose weight. **KM**



### Cure Rates on the Rise

In 1975, just over 50% of children diagnosed with cancer survived at least five years. From 2004 to 2010, more than 80% of children diagnosed with cancer survived at least five years.

Improved treatments introduced in the 1970s raised the five-year survival rate for childhood acute lymphoblastic leukemia from less than 10% to about 90% from 2003 to 2009. Survival rates for childhood non-Hodgkin's lymphoma have jumped from 50% to 85%.



### New Treatments Badly Needed

Many parents believe that not enough advances have been made in new drugs for pediatric cancers since most chemotherapy drugs are over 25 years old.

More bad news: Most of the cure rates reported are based on a five-year survival time, which is hardly long enough in the life of a child.

A recent study shows an increase in cancers among African-American children and teens. Researchers noted an increase in thyroid cancer, especially among teens and those living in the South. Renal carcinomas also increased significantly.

— Source: American Academy of Pediatrics, September 2014

**EDITOR'S NOTE:** George finished his chemotherapy in April, and his cancer is in remission. Throughout the ordeal, his parents drew support from family, friends, and others they met who had kids with cancer. "Once we hit the ground running, we really didn't look back and mourn the situation," Katherine says. "We felt like, 'We can do this. We're going to beat this thing.'"

**TONYA ELLIS** enjoys feature writing and spending time with her family.