

What Is Cancer?

Cancer is a scary word. Almost everyone knows someone who got very sick or died from cancer. Most of the time, cancer affects older people. Not many kids get cancer, but when they do, very often it can be treated and cured.

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Cancer is actually a group of many related diseases that all have to do with cells. Cells are the very small units that make up all living things, including the human body. There are billions of cells in each person's body.

Cancer happens when cells that are not normal grow and spread very fast. Normal body cells grow and divide and know to stop growing. Over time, they also die. Unlike these normal cells, cancer cells just continue to grow and divide out of control and don't die when they're supposed to.

Cancer cells usually group or clump together to form tumors (say: TOO-mers). A growing tumor becomes a lump of cancer cells that can destroy the normal cells around the tumor and damage the body's healthy tissues. This can make someone very sick.

Sometimes cancer cells break away from the original tumor and travel to other areas of the body, where they keep growing and can go on to form new tumors. This is how cancer spreads. The spread of a tumor to a new place in the body is called metastasis (say: meh-TASS-tuh-sis).

Causes of Cancer

You probably know a kid who had chickenpox — maybe even you. But you probably don't know any kids who've had cancer. If you packed a large football stadium with kids, probably only one child in that stadium would have cancer.

Doctors aren't sure why some people get cancer and others don't. They do know that cancer is not contagious. You can't catch it from someone else who has it — cancer isn't caused by germs, like colds or the flu are. So don't be afraid of other kids — or anyone else — with cancer. You can talk to, play with, and hug someone with cancer.

Kids can't get cancer from anything they do either. Some kids think that a bump on the head causes brain cancer or that bad people get cancer. This isn't true! Kids don't do anything wrong to get cancer. But some unhealthy habits, especially cigarette smoking or drinking too much alcohol every day, can make you a lot more likely to get cancer when you become an adult.

Finding Out About Cancer

It can take a while for a doctor to figure out a kid has cancer. That's because the symptoms cancer can cause — weight loss, fevers, swollen glands, or feeling overly tired or sick for a while — usually are not caused by cancer. When a kid has these problems, it's often caused by something less serious, like an infection. With medical testing, the doctor can figure out what's causing the trouble.

If the doctor suspects cancer, he or she can do tests to figure out if that's the problem. A doctor might order X-rays and blood tests and recommend the person go to see an oncologist (say: on-KAH-luh-jist). An oncologist is a doctor who takes care of and treats cancer patients. The oncologist will likely run other tests to find out if someone really has cancer. If so, tests can determine what kind of cancer it is and if it has spread to other parts of the body. Based on the results, the doctor will decide the best way to treat it.

One test that an oncologist (or a surgeon) may perform is a biopsy (say: BY-op-see). During a biopsy, a piece of tissue is removed from a tumor or a place in the body where cancer is suspected, like the bone marrow. Don't worry — someone getting this test will get special medicine to keep him or her comfortable during the biopsy. The sample that's collected will be examined under a microscope for cancer cells.

The sooner cancer is found and treatment begins, the better someone's chances are for a full recovery and cure.



Treating Cancer Carefully

Cancer is treated with surgery, chemotherapy, or radiation — or sometimes a combination of these treatments. The choice of treatment depends on:

- the type of cancer someone has (the kind of abnormal cells causing the cancer)
- the stage of the tumor (meaning how much the cancer has spread within the body, if at all)

Surgery is the oldest form of treatment for cancer — 3 out of every 5 people with cancer will have an operation to remove it. During surgery, the doctor tries to take out as many cancer cells as possible. Some healthy cells or tissue may also be removed to make sure that all the cancer is gone.

Chemotherapy (say: kee-mo-THER-uh-pee) is the use of anti-cancer medicines (drugs) to treat cancer. These medicines are sometimes taken as a pill, but usually are given through a special intravenous (say: in-truh-VEE-nus) line, also called an IV. An IV is a tiny plastic catheter (straw-like tube) that is put into a vein through someone's skin, usually on the arm. The catheter is attached to a bag that holds the medicine. The medicine flows from the bag into a vein, which puts the medicine into the blood, where it can travel throughout the body and attack cancer cells.

Chemotherapy is usually given over a number of weeks to months. Often, a permanent catheter is placed under the skin into a larger blood vessel of the upper chest. This way, a person can easily get several courses of chemotherapy and other medicines through this catheter without having a new IV needle put in. The catheter remains under the skin until all the cancer treatment is completed.

Radiation (say: ray-dee-AY-shun) therapy uses high-energy waves, such as X-rays (invisible waves that can pass through most parts of the body), to damage and destroy cancer cells. It can cause tumors to shrink and even go away completely. Radiation therapy is one of the most common treatments for cancer. Many people with cancer find it goes away after receiving radiation treatments.

With both chemotherapy and radiation, kids may experience side effects. A side effect is an extra problem that's caused by the treatment. Radiation and anti-cancer drugs are very good at destroying cancer cells but, unfortunately, they also destroy healthy cells. This can cause problems such as loss of appetite, tiredness, vomiting, or hair loss. With radiation, a person might have red or irritated skin in the area that's being treated. But all these problems go away and hair grows back after the treatment is over. During the treatment, certain medicines can help a kid feel better.

While treatment is still going on, a kid might not be able to attend school or be around crowds of people — the kid needs to rest and avoid getting infections, such as the flu, when he or she already isn't feeling well. The body may have more trouble fighting off infections because of the cancer or side effects of the treatment.

Getting Better

Remission (say: ree-MIH-shun) is a great word for anyone who has cancer. It means all signs of cancer are gone from the body. After surgery or treatment with radiation or chemotherapy, a doctor will then do tests to see if the cancer is still there. If there are no signs of cancer, then the kid is in remission.

Remission is the goal when any kid with cancer goes to the hospital for treatment. Sometimes, this means additional chemotherapy or radiation might be needed for a while to keep cancer cells from coming back.

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