
What Is Cancer?

Cancer affects 1 in 3 people in the United States. Chances are that you or someone you know has been affected by cancer. Here is some information to help you better understand what cancer is.

- [Cancer is more than just one disease](#)
- [What is a tumor?](#)
- [What is the difference between a benign and a malignant tumor?](#)
- [What causes cancer?](#)
- [What is the cancer stage?](#)
- [How does cancer spread?](#)

You are made up of trillions of cells that over your lifetime normally grow and divide as needed. When cells are abnormal or get old, they usually die. Cancer starts when something goes wrong in this process and your cells keep making new cells and the old or abnormal ones don't die when they should. As the cancer cells grow out of control, they can crowd out normal cells. This makes it hard for your body to work the way it should.

For many people, cancer can be treated successfully. In fact, more people than ever before are leading full lives after cancer treatment.

Cancer is more than just one disease

There are many types of cancer. Cancer can develop anywhere in the body and is named for the part of the body where it started. For instance, breast cancer that starts in the breast is still called breast cancer even if it spreads (metastasizes) to other parts of the body.

There are two main categories of cancer:

- **Hematologic (blood) cancers** are cancers of the blood cells, including leukemia, lymphoma, and multiple myeloma.
- **Solid tumor cancers** are cancers of any of the other body organs or tissues. The most common solid tumors are breast, prostate, lung, and colorectal cancers.

These cancers are alike in some ways, but can be different in the ways they grow, spread, and respond to treatment. Some cancers grow and spread fast. Others grow more slowly. Some are more likely to spread to other parts of the body. Others tend to stay where they started.

Some types of cancer are best treated with surgery; others respond better to drugs such as chemotherapy. Often 2 or more treatments are used to get the best results.

What is a tumor?

A tumor is a lump or growth that can be **benign** or **malignant** (cancer).

What is the difference between a benign and a malignant tumor?

Benign tumors usually grow slowly, don't grow into tissues around them, and don't grow into other parts of the body. They also don't often cause symptoms unless they grow large enough to push on other structures. If they need treatment, it is usually surgery although radiation and medications can also be used. Benign tumors are not cancer.

Malignant tumors (cancer) can grow quickly and uncontrollably. These tumors can grow and spread into areas close by. Cells from these tumors can break away, travel through blood or lymph system, and begin to grow in other parts of the body. When this happens it is called metastasis. Symptoms from malignant tumors usually vary depending on where the tumor is located. Malignant tumors are treated with surgery, radiation, and drugs such as chemotherapy.

What causes cancer?

Cancer cells develop because of multiple changes in their genes. These changes can have many possible [causes](#)¹. Lifestyle habits, genes you get from your parents, and being exposed to cancer-causing agents in the environment can all play a role. Many

times, there is no obvious cause.

What is the cancer stage?

When a cancer is found, tests are done to see how big the cancer is and whether it has spread from where it started. This is called the [cancer's stage](#)².

A lower stage (such as a stage 1 or 2) means that the cancer has not spread very much. A higher number (such as a stage 3 or 4) means it has spread more. Stage 4 is the highest stage.

The stage of the cancer is very important in choosing the best treatment for a person. Ask your doctor about your cancer's stage and what it means for you.

How does cancer spread?

Cancer can spread from where it started (the primary site) to other parts of the body.

When cancer cells break away from a tumor, they can travel to other areas of the body through either the bloodstream or the lymph system. Cancer cells that travel through the bloodstream may reach distant organs. If they travel through the lymph system, the cancer cells may end up in lymph nodes. Either way, most of the escaped cancer cells die or are killed before they can start growing somewhere else. But one or two might settle in a new area, begin to grow, and form new tumors. This spread of cancer to a new part of the body is called **metastasis**.

Cells that make up a metastasis are the same type of cells as in the primary cancer. They are not a new type of cancer. For instance, breast cancer cells that spread to the lungs are still breast cancer and NOT lung cancer. And colon cancer cells that spread to the liver are still colon cancer.

In order for cancer cells to spread to new parts of the body, they have to go through several changes. They first have to become able to break away from the original tumor and then attach to the outside wall of a lymph vessel or blood vessel. Then they must move through the vessel wall to flow with the blood or lymph to a new organ or lymph node.

Hyperlinks

1. www.cancer.org/cancer/risk-prevention.html
2. www.cancer.org/cancer/diagnosis-staging/staging.html

References

Eggert J. (Ed). Cancer Basics. (2nd ed.). Pittsburgh, PA: Oncology Nursing Society; 2017.

National Cancer Institute. Cancer staging. Cancer.gov. <https://www.cancer.gov/about-cancer/understanding/what-is-cancer>. Updated March 9, 2015. Accessed November 6, 2020.

National Cancer Institute. What is cancer? Cancer.gov. <https://www.cancer.gov/about-cancer/understanding/what-is-cancer>. Updated February 9, 2015. Accessed November 6, 2020.

Last Revised: February 14, 2022

Written by

The American Cancer Society medical and editorial content team
(<https://www.cancer.org/cancer/acs-medical-content-and-news-staff.html>)

Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as journalists, editors, and translators with extensive experience in medical writing.

American Cancer Society medical information is copyrighted material. For reprint requests, please see our Content Usage Policy (www.cancer.org/about-us/policies/content-usage.html).

cancer.org | 1.800.227.2345