
Stomach Cancer Early Detection, Diagnosis, and Staging

Know the signs and symptoms of stomach cancer. Find out how stomach cancer is tested for, diagnosed, and staged.

Detection and Diagnosis

Catching cancer early often allows for more treatment options. Some early cancers may have signs and symptoms that can be noticed, but that is not always the case.

- [Can Stomach Cancer Be Found Early?](#)
- [Signs and Symptoms of Stomach Cancer](#)
- [Tests for Stomach Cancer](#)

Stages and Outlook (Prognosis)

After a cancer diagnosis, staging provides important information about the extent of cancer in the body and anticipated response to treatment.

- [Stomach Cancer Stages](#)
- [Survival Rates for Stomach Cancer](#)

Questions to Ask About Stomach Cancer

Get some questions you can ask your cancer care team to help you better understand your cancer diagnosis and treatment options.

- [Questions to Ask About Stomach Cancer](#)

Can Stomach Cancer Be Found Early?

- [Stomach cancer screening in people at average risk](#)
- [Stomach cancer screening in people at increased risk](#)

Screening is testing for a disease, such as cancer, in people without symptoms.

Some of the tests that can be used to screen for stomach cancer (also known as gastric cancer), such as upper endoscopy, are described in [Tests for Stomach Cancer](#).

Stomach cancer screening in people at average risk

No major medical organizations in the United States recommend routine screening for stomach cancer in people at average risk. This is largely because this disease isn't common in the US, so the benefits of screening most likely would not outweigh the possible harms (such as needing additional tests or procedures, even in some people who might not end up having stomach cancer).

Because routine screening for stomach cancer is not done in the United States, most people are not diagnosed with stomach cancer until they have certain [signs and symptoms](#) that point to the need for medical tests.

In some countries in East Asia and South America, where stomach cancer is much more common, mass screening of the population has helped find many stomach cancers at an early, possibly more curable stage. However, it's not clear if this has led to a lower number of stomach cancer deaths.

Stomach cancer screening in people at increased risk

The benefits of screening might outweigh the risks in some people who are at increased risk for stomach cancer because they have certain risk factors (for example, certain potentially [pre-cancerous stomach conditions](#)¹ or [inherited conditions](#)² such as Lynch syndrome or familial adenomatous polyposis [FAP]). For example, [upper endoscopy](#) might be recommended at regular intervals in these people.

If you have risk factors that might increase your risk of stomach cancer, talk to your doctor about the possible pros and cons of stomach cancer screening for you.

Screening isn't usually recommended for people in families with hereditary diffuse gastric cancer (HDGC). Instead, doctors often recommend that people who have changes in the *CDH1* gene that causes this syndrome consider having their [stomach removed](#)³ (total gastrectomy), because their risk of stomach cancer is very high.

Hyperlinks

1. www.cancer.org/cancer/types/stomach-cancer/causes-risks-prevention/what-causes.html
2. www.cancer.org/cancer/types/stomach-cancer/causes-risks-prevention/risk-factors.html
3. www.cancer.org/cancer/types/stomach-cancer/causes-risks-prevention/prevention.html

References

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Signs and Symptoms of Stomach Cancer

Early-stage stomach cancer (gastric cancer) rarely causes symptoms. In countries where [screening for stomach cancer](#) is not routine, such as the United States, most stomach cancers aren't found until they've grown fairly large or have spread outside the stomach.

When stomach cancer does cause signs and symptoms, they can include:

- Poor appetite
- Weight loss (without trying)
- Abdominal (belly) pain
- Vague discomfort in the abdomen, usually above the navel
- Feeling full after eating only a small meal
- Heartburn or indigestion
- Nausea
- Vomiting, with or without blood
- Swelling or fluid build-up in the abdomen
- Blood in the stool
- Feeling tired or weak, as a result of having too few red blood cells (anemia)
- Yellowing of the skin and eyes (jaundice), if the cancer spreads to the liver

Most of these symptoms are more likely to be caused by things other than stomach cancer, such as a viral infection or an ulcer. Some of these symptoms may also be caused by other types of cancer. But people who have any of these problems, especially if they don't go away or get worse, should see a doctor so the cause can be found and treated, if needed.

References

Ku GY, Ilson DH. Chapter 72: Cancer of the Stomach. In: Niederhuber JE, Armitage JO, Doroshow JH, Kastan MB, Tepper JE, eds. *Abeloff's Clinical Oncology*. 6th ed. Philadelphia, Pa: Elsevier; 2020.

Mansfield PF. Clinical features, diagnosis, and staging of gastric cancer. UpToDate. 2020. Accessed at <https://www.uptodate.com/contents/clinical-features-diagnosis-and-staging-of-gastric-cancer> on June 29, 2020.

National Cancer Institute. Gastric Cancer Treatment (PDQ®). 2020. Accessed at <https://www.cancer.gov/types/stomach/patient/stomach-treatment-pdq> on June 29, 2020.

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Tests for Stomach Cancer

- [Medical history, physical exam, and tests to look for bleeding](#)
- [Upper endoscopy](#)
- [Biopsy](#)
- [Imaging tests](#)
- [Other tests](#)

Stomach cancer (also known as gastric cancer) is usually found when a person goes to the doctor because of [signs or symptoms](#) they are having. If stomach cancer is suspected, exams and tests will be needed to find out for sure. If cancer is found, other tests might then be needed to learn more about it.

Medical history, physical exam, and tests to look for bleeding

When taking your **medical history**, the doctor will ask about your symptoms (such as eating problems, pain, bloating, etc.) and possible [risk factors](#)¹ to see if they might suggest stomach cancer or another cause. The **physical exam** can give your doctor information about possible signs of stomach cancer or other health problems. In particular, the doctor will feel your belly for anything abnormal.

The doctor might order a blood test to look for anemia (a low red blood cell count), which could be caused by the cancer bleeding into the stomach. A test might also be done to look for blood in your stool (feces) that can't be seen by the naked eye, which could also be a sign of bleeding in the stomach.

If your doctor thinks you might have stomach cancer or another type of stomach problem, they will likely refer you to a **gastroenterologist** (a doctor who treats diseases of the digestive tract), who will examine you and might do further testing.

Upper endoscopy

[Upper endoscopy](#)² (also called **esophagogastroduodenoscopy** or **EGD**) is the test most often done if the doctor thinks you might have stomach cancer.

During this test, the doctor passes an endoscope, which is a thin, flexible, lighted tube with a small video camera on the end, down your throat. This lets the doctor see the inner lining of your esophagus, stomach, and first part of the small intestine. If abnormal areas are seen, biopsy samples can be removed using instruments passed through the

endoscope. The tissue samples are sent to a lab, where they are looked at with a microscope to see if they contain cancer.

Unfortunately, some types of stomach cancers can be hard to see during an endoscopy.

Endoscopy can also be used as part of a special imaging test known as **endoscopic ultrasound**, which is described below.

In some situations, endoscopy can be used to help remove very early stage cancers. It can also be used to help prevent or relieve symptoms or other complications from stomach cancer, without the need for more extensive surgery. (See [Surgery for Stomach Cancer](#)³.)

You will most likely be given medicine to make you sleepy (sedation) before the endoscopy.

Biopsy

Your doctor may suspect cancer if an abnormal-looking area is seen on endoscopy or an imaging test, but the only way to tell for sure if it's cancer is by doing a [biopsy](#)⁴. During a biopsy, the doctor removes small pieces (samples) of the abnormal area.

Biopsies to check for stomach cancer are most often done during an upper endoscopy. If the doctor sees any abnormal areas in the stomach lining during the endoscopy, instruments can be passed down the endoscope to biopsy them.

Some stomach cancers can start deep within the stomach wall, which can make them hard to biopsy with standard endoscopy. If the doctor suspects cancer might be deeper in the stomach wall, endoscopic ultrasound (described below) can be used to guide a thin, hollow needle into the wall of the stomach to get a biopsy sample.

Biopsies may also be taken from areas of possible cancer spread, such as nearby [lymph nodes](#)⁵ or suspicious areas in other parts of the body.

Testing biopsy samples

Biopsy samples are sent to a lab to be looked at under a microscope. The samples are checked to see if they contain cancer, and if they do, what [kind it is](#)⁶ (for example, intestinal or diffuse adenocarcinoma, carcinoid tumor, gastrointestinal stromal tumor [GIST], or lymphoma).

If stomach cancer is found, more lab tests may be done on the biopsy samples to learn more about the cancer cells. This might affect how the cancer is treated.

HER2 testing: The cancer cells may be tested to see if they have too much of a growth-promoting protein called HER2. Cancers with increased levels of HER2 are called **HER2-positive**. These cancers can be treated with [drugs that target the HER2 protein](#)⁷.

The biopsy sample is usually tested for HER2 using either immunohistochemistry (IHC) or fluorescent in situ hybridization (FISH). Often the IHC test is used first, which gives results on a scale from 0 to 3+.

- If the results are 0 or 1+, the cancer is HER2-negative, so drugs targeting HER2 aren't likely to be helpful.
- If the test comes back 3+, the cancer is HER2-positive, so treatment with drugs targeting HER2 could be an option.
- When the result is 2+, the HER2 status of the cancer is not clear, so it needs to be tested with FISH to clarify the result.

Testing for other gene or protein changes: The cancer cells may also be tested for other gene or protein changes that might affect treatment. For example:

- If the cells have a certain amount of an immune checkpoint protein called **PD-L1**, treatment with an [immune checkpoint inhibitor](#)⁸ such as pembrolizumab (Keytruda) might be an option.
- If the cells have **high levels of microsatellite instability (MSI-H)** or a **defect in a mismatch repair gene (dMMR)**, treatment with an immune checkpoint inhibitor might be an option.
- If the cells have a **high tumor mutational burden (TMB-H)**, meaning they have many gene mutations, treatment with an immune checkpoint inhibitor might be an option.
- If the cells have changes in one of the **NTRK genes**, certain [targeted drugs](#)⁹ might be an option for treatment.

See [Testing Biopsy and Cytology Specimens for Cancer](#)¹⁰ to learn more about different types of biopsies and tests, how they are used to diagnose cancer, and what the results can tell you.

Imaging tests

Imaging tests use x-rays, magnetic fields, sound waves, or radioactive substances to create pictures of the inside of your body. Imaging tests may be done for a number of reasons, including:

- To help find out if a suspicious area might be cancer
- To learn how far cancer may have spread
- To help determine if treatment has been effective

Upper gastrointestinal (GI) series

This is an [x-ray test](#)¹¹ to look at the inner lining of the esophagus, stomach, and first part of the small intestine. This test is used less often than upper endoscopy to look for stomach cancer or other stomach problems, as it can miss some abnormal areas, and it doesn't allow the doctor to take biopsy samples. But it is less invasive than endoscopy, and it might be useful in some situations.

For this test, you drink a white chalky solution containing a substance called **barium**. The barium coats the inner lining of the esophagus, stomach, and small intestine. (Air might be pumped into the stomach through a thin tube at this time as well.) Several x-ray pictures are then taken. Because x-rays can't pass through the coating of barium, this outlines any abnormal areas in the lining of these organs.

Computed tomography (CT or CAT) scan

A [CT scan](#)¹² uses x-rays to make detailed, cross-sectional images of the soft tissues in the body.

CT scans can show the stomach fairly clearly and often can confirm the location of a cancer. CT scans can also show other parts of the body to which stomach cancer might have spread, such as the liver and nearby lymph nodes. This can help determine the [extent \(stage\) of the cancer](#) and if [surgery](#)¹³ may be a good treatment option.

CT-guided needle biopsy: CT scans can also be used to guide a biopsy needle into a suspected area of cancer spread. For this test, you will lie on the CT scanning table while the doctor moves a biopsy needle through the skin toward the mass. CT scans are repeated until the needle is within the mass. A biopsy sample is then removed and sent to a lab for testing.

Endoscopic ultrasound

Endoscopic ultrasound (EUS) is often used to see how far a cancer might have spread into the wall of the stomach, or into nearby areas or nearby lymph nodes.

For this test, a small [ultrasound](#)¹⁴ probe is placed on the tip of an endoscope. While you are sedated, the endoscope is passed down your throat and into the stomach. The probe is put up against the wall of the stomach where the cancer is. It gives off sound waves and detects the echoes as they bounce back, which are then converted into images. Doctors can use these images to look at the layers of the stomach wall, as well as the nearby lymph nodes and other structures just outside the stomach.

EUS can also be used to help guide a needle into a suspicious area to get a biopsy sample (known as an **EUS-guided needle biopsy**).

Positron emission tomography (PET) scan

A [PET scan](#)¹⁵ can be useful to help determine the extent of the cancer in the body. For this test, you are injected with a slightly radioactive form of sugar, which collects mainly in cancer cells. A special camera is then used to create a picture of areas of radioactivity in the body. The picture is not detailed like a CT or MRI scan, but a PET scan can look for possible areas of cancer spread in all areas of the body at once.

Many newer machines can do both a PET and CT scan at the same time (PET/CT scan). This lets the doctor see areas that “light up” on the PET scan in more detail.

Although PET scans can be useful for finding areas of cancer spread, they aren’t always helpful in certain kinds of stomach cancer because some types don’t take up much of the radioactive sugar.

Magnetic resonance imaging (MRI)

Like a CT scan, an [MRI](#)¹⁶ can show detailed images of soft tissues in the body. But MRIs use radio waves and strong magnets instead of x-rays.

This test is not used as often as CT scans to look for stomach cancer, but it may be helpful in certain situations, such as when looking for tumors in the liver.

Chest x-ray

This test can help show if the cancer has spread to the lungs. It might also be used to help determine if a person has any serious lung or heart diseases, which might affect whether surgery would be a treatment option. A chest x-ray isn’t needed if a CT scan of

the chest has been done.

You can read more about imaging tests in [Imaging \(Radiology\) Tests for Cancer](#).¹⁷

Other tests

Laparoscopy

If stomach cancer has already been found, and imaging tests such as CT or PET scans have not shown it has spread to other parts of the body, doctors might do a laparoscopy before any other [surgery](#)¹⁸. This can help confirm the cancer is still only in the stomach, which means surgery to remove it might still be an option.

This procedure is done in an operating room while you are under general anesthesia (in a deep sleep). A laparoscope (a thin, flexible tube with a small video camera on the end) is inserted through a small cut in the belly. This lets the doctor look closely at the surfaces of the organs and nearby lymph nodes inside the abdomen, or even remove small samples of tissue, which can then be tested for cancer.

If it doesn't look like the cancer has spread, sometimes the doctor will "wash" the abdomen with saline (saltwater). This is called **peritoneal washing**. The fluid is then collected and checked for cancer cells.

Sometimes laparoscopy is combined with ultrasound to give a better picture of the cancer.

Tests of organ function

If cancer is found, the doctor might recommend certain lab tests, especially if surgery might be an option. For instance, blood tests will be done to make sure your liver and kidneys are working normally and that your blood clots normally.

If surgery is planned or you are going to get medicines that can affect the heart, you may also have an electrocardiogram (EKG) and/or an echocardiogram (an ultrasound of the heart) to make sure your heart is functioning well.

Hyperlinks

1. www.cancer.org/cancer/types/stomach-cancer/causes-risks-prevention/risk-factors.html
2. www.cancer.org/cancer/diagnosis-staging/tests/endoscopy/upper-endoscopy.html
3. www.cancer.org/cancer/types/stomach-cancer/treating/types-of-surgery.html
4. www.cancer.org/cancer/diagnosis-staging/tests/biopsy-and-cytology-tests.html
5. www.cancer.org/cancer/diagnosis-staging/lymph-nodes-and-cancer.html
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Stomach Cancer Stages

- [The AJCC TNM staging system](#)

After someone is diagnosed with stomach cancer (gastric cancer), doctors will do [exams and tests](#) to help determine if it has spread, and if so, how far. This process is called **staging**. The stage of a cancer describes the extent of the cancer in the body. It helps determine how serious the cancer is and how best to [treat](#)¹ it. Doctors also use a cancer's stage when talking about survival statistics.

Although each person's cancer experience is unique, cancers with similar stages tend to have a similar outlook and are often treated in much the same way.

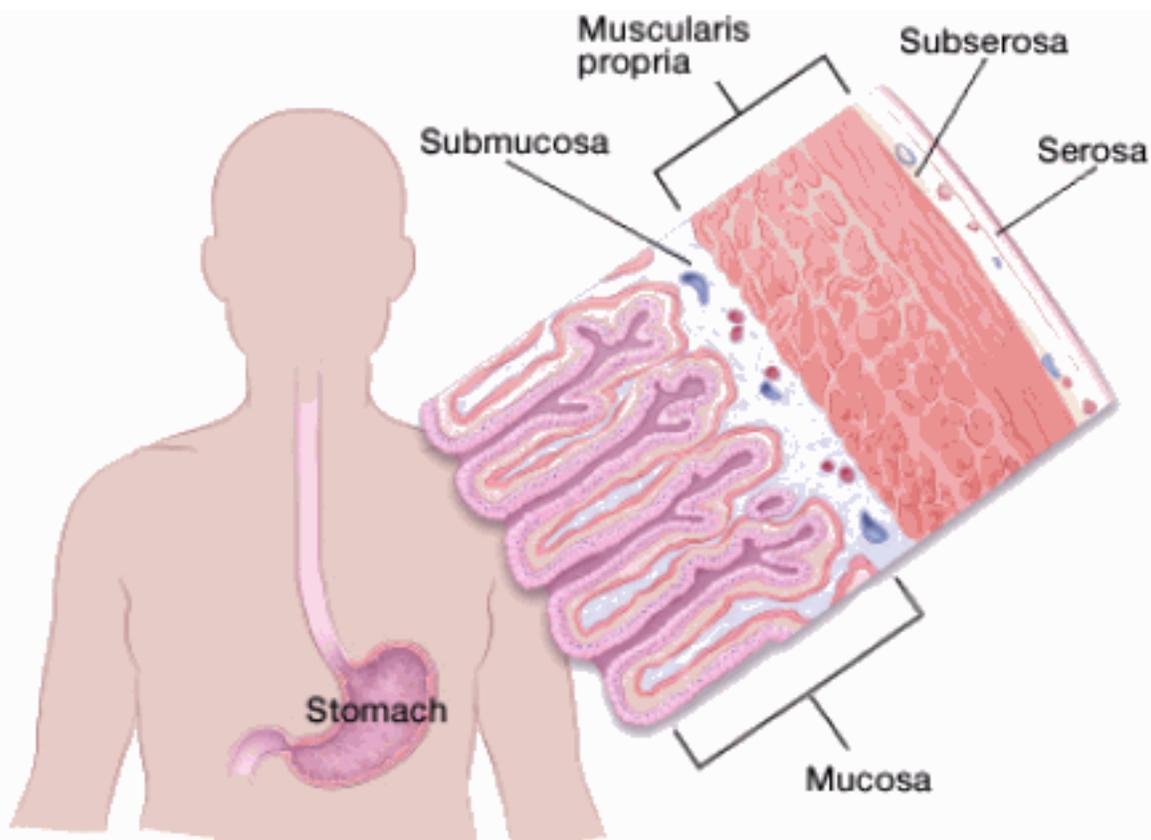
The AJCC TNM staging system

The staging system most often used for stomach cancer is the American Joint Committee on Cancer (AJCC) **TNM** system, which was last updated in 2018.

This system is used to stage all stomach cancers (carcinomas) except those starting in the gastroesophageal junction (where the stomach and the esophagus meet) or those that start in the cardia (the first part of the stomach) and are growing into the gastroesophageal junction. Those cancers are staged (and often treated) like [cancers of the esophagus](#)². Other types of cancer that can start in the stomach, such as [gastrointestinal stromal tumors \(GISTs\)](#)³ and [lymphomas](#)⁴, are staged differently as well.

The TNM system for stomach cancer is based on 3 key pieces of information:

The **T category** describes the extent of the main (primary) **tumor**, including how far it has grown into the layers of the stomach wall and if it has reached nearby structures or organs.



The 5 layers of the stomach wall include:

- **Mucosa:** the innermost layer, where nearly all stomach cancers start. The mucosa has 3 parts: epithelial cells, a layer of connective tissue (the **lamina propria**), and a thin layer of muscle (the **muscularis mucosa**).
- **Submucosa:** a supporting layer under the mucosa
- **Muscularis propria:** a thick layer of muscle that moves and mixes the stomach contents
- **Subserosa**
- **Serosa:** the outer, wrapping layer of the stomach

The **N category** describes any cancer spread to nearby lymph **nodes**.

The **M category** describes any spread (**metastasis**) to distant parts of the body, such as the liver or lungs.

Numbers or letters after T, N, and M provide more details about each of these factors. Higher numbers mean the cancer is more advanced.

Stage grouping

Once a person's T, N, and M categories have been determined, this information is combined in a process called **stage grouping** to assign an overall stage. The earliest stage stomach cancers are called stage 0 (carcinoma in situ), and then range from stages I (1) through IV (4). The lower the number, the less the cancer has spread. See the table below for more details about the stage grouping for stomach cancer.

Staging can be done at different times

Stomach cancer might be staged at different times during the course of a person's treatment.

Usually, the cancer is first given a **clinical stage**. This is based on the results of any physical exams, biopsies, imaging tests, and procedures (such as upper endoscopy or laparoscopy) that have been done. (These exams and tests are described in [Tests for Stomach Cancer](#).) The clinical stage can be used to help plan treatment.

If surgery is done to remove the cancer, the **pathological stage** (also called the **surgical stage**) can be determined. This is based on the results of any exams or tests that have been done, as well as the results from the surgery. Sometimes the pathological stage is different from the clinical stage—for example, if surgery finds the cancer has spread farther than could be seen on imaging tests.

Some people might get other treatments before surgery, such as chemotherapy or radiation, to try to shrink the cancer and make the surgery easier. This is known as **neoadjuvant treatment**. Staging might be done again after this treatment to assess how well it worked.

The table below, describing the TNM stage grouping in more detail, is based on the pathological stage of the cancer. If your cancer has been clinically staged or if you have had neoadjuvant therapy, it's best to talk to your doctor about the specific stage for your situation.

| AJCC Stage | Stage grouping | Stage description* |
|------------|----------------|---|
| 0 | | There is high grade dysplasia (very abnormal looking cells) in the stomach lining, OR there are cancer cells only in the top layer of |

| | | |
|------------|---|--|
| | <p>Tis</p> <p>N0</p> <p>M0</p> | <p>cells of the mucosa (innermost layer of the stomach) that have not grown into deeper layers of tissue such as the lamina propria (Tis).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or distant parts of the body (M0).</p> <p>This stage is also known as carcinoma in situ.</p> |
| IA | <p>T1</p> <p>N0</p> <p>M0</p> | <p>The main tumor has grown from the top layer of cells of the mucosa into the next layers below such as the lamina propria, the muscularis mucosa, or submucosa (T1).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p> |
| IB | <p>T1</p> <p>N1</p> <p>M0</p> | <p>The main tumor has grown from the top layer of cells of the mucosa into the next layers below such as the lamina propria, the muscularis mucosa, or submucosa (T1), AND the cancer has spread to 1 to 2 nearby lymph nodes (N1).</p> <p>The cancer has not spread to distant parts of the body (M0).</p> |
| | OR | |
| | <p>T2</p> <p>N0</p> <p>M0</p> | <p>The main tumor is growing into the muscularis propria layer (T2).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p> |
| IIA | <p>T1</p> <p>N2</p> <p>M0</p> | <p>The main tumor has grown from the top layer of cells of the mucosa into the next layers below such as the lamina propria, the muscularis mucosa, or submucosa (T1), AND the cancer has spread to 3 to 6 nearby lymph nodes (N2).</p> <p>The cancer has not spread to distant parts of the body (M0).</p> |
| | OR | |
| | <p>T2</p> <p>N1</p> <p>M0</p> | <p>The main tumor is growing into the muscularis propria layer (T2), AND the cancer has spread to 1 to 2 nearby lymph nodes (N1).</p> <p>The cancer has not spread to distant parts of the body (M0).</p> |

| | | |
|-------------|--------------------------------------|---|
| | | |
| | OR | |
| | T3 N0 M0 | The main tumor is growing into the subserosa layer (T3). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0). |
| IIIB | T1 N3a M0 | The main tumor has grown from the top layer of cells of the mucosa into the next layers below such as the lamina propria, the muscularis mucosa, or submucosa (T1), AND the cancer has spread to 7 to 15 nearby lymph nodes (N3a). The cancer has not spread to distant parts of the body (M0). |
| | OR | |
| | T2 N2 M0 | The main tumor is growing into the muscularis propria layer (T2), AND the cancer has spread to 3 to 6 nearby lymph nodes (N2). The cancer has not spread to distant parts of the body (M0). |
| | | |
| | T3 N1 M0 | The main tumor is growing into the subserosa layer (T3), AND the cancer has spread to 1 to 2 nearby lymph nodes (N1). The cancer has not spread to distant parts of the body (M0). |
| | OR | |
| | T4a N0 M0 | The main tumor has grown through the stomach wall into the serosa, but it hasn't grown into any of the nearby organs or structures (T4a). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0). |
| IIIA | T2 N3a | The main tumor is growing into the muscularis propria layer (T2), AND the cancer has spread to 7 to 15 nearby lymph nodes (N3a). |

| | | | |
|--|--------------------------------------|---|--|
| | M0 | The cancer has not spread to distant parts of the body (M0). | |
| | OR | | |
| | T3 N2 M0 | The main tumor is growing into the subserosa layer (T3), AND the cancer has spread to 3 to 6 nearby lymph nodes (N2). The cancer has not spread to distant parts of the body (M0). | |
| | OR | | |
| | T4a N1 M0 | The main tumor has grown through the stomach wall into the serosa, but it has not grown into any of the nearby organs or structures (T4a). The cancer has spread to 1 to 2 nearby lymph nodes (N1). The cancer has not spread to distant parts of the body (M0). | |
| | OR | | |
| | T4a N2 M0 | The main tumor has grown through the stomach wall into the serosa, but it has not grown into any of the nearby organs or structures (T4a). The cancer has spread to 3 to 6 nearby lymph nodes (N1). The cancer has not spread to distant parts of the body (M0). | |
| | OR | | |
| | T4b N0 M0 | The main tumor has grown through the stomach wall and into nearby organs or structures (T4b). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0). | |
| | IIIB | T1 N3b M0 | The main tumor has grown from the top layer of cells of the mucosa into the next layers below such as the lamina propria, the muscularis mucosa, or submucosa (T1), AND the cancer has spread to 16 or more nearby lymph nodes (N3b). The cancer has not spread to distant parts of the body (M0). |
| | | OR | |
| | | T2 | The main tumor is growing into the muscularis propria layer (T2), AND the cancer has spread to 16 or more nearby lymph nodes |

| | | |
|-------------|--|--|
| | N3b | (N3b). |
| | M0 | The cancer has not spread to distant parts of the body (M0). |
| | OR | |
| | T3 | The main tumor is growing into the subserosa layer (T3), AND the cancer has spread to 7 to 15 nearby lymph nodes (N3a). |
| | N3a | |
| | M0 | The cancer has not spread to distant parts of the body (M0). |
| | OR | |
| | T4a | The main tumor has grown through the stomach wall into the serosa, but it has not grown into any of the nearby organs or structures (T4a), AND the cancer has spread to 7 to 15 nearby lymph nodes (N3a). |
| | N3a | |
| | M0 | The cancer has not spread to distant parts of the body (M0). |
| OR | | |
| T4b | The main tumor has grown through the stomach wall and into nearby organs or structures (T4b). The cancer has spread to 1 to 2 nearby lymph nodes (N1). | |
| N1 | | |
| M0 | The cancer has not spread to distant parts of the body (M0). | |
| OR | | |
| T4b | The main tumor has grown through the stomach wall and into nearby organs or structures (T4b). The cancer has spread to 3 to 6 nearby lymph nodes (N1). | |
| N2 | | |
| M0 | The cancer has not spread to distant parts of the body (M0). | |
| IIIC | T3 | The main tumor is growing into the subserosa layer (T3), AND the cancer has spread to 16 or more nearby lymph nodes (N3b). |
| | N3b | |
| | M0 | The cancer has not spread to distant parts of the body (M0). |
| OR | | |
| T4a | The main tumor has grown through the stomach wall into the serosa, but it has not grown into any of the nearby organs or | |

| | | |
|-----------|--------------|--|
| | N3b | structures (T4a), AND the cancer has spread to 16 or more nearby lymph nodes (N3b). |
| | M0 | The cancer has not spread to distant parts of the body (M0). |
| | OR | |
| | T4b | The main tumor has grown through the stomach wall and into nearby organs or structures (T4b), AND the cancer has spread to 7 to 15 nearby lymph nodes (N3a). |
| | N3a | |
| | M0 | The cancer has not spread to distant parts of the body (M0). |
| OR | | |
| | T4b | The main tumor has grown through the stomach wall and into nearby organs or structures (T4b), AND the cancer has spread to 16 or more nearby lymph nodes (N3b). |
| | N3b | |
| | M0 | The cancer has not spread to distant parts of the body (M0). |
| IV | Any T | The cancer might or might not have grown into any of the layers of the stomach wall (Any T), and it might or might not have spread to nearby lymph nodes (Any N). |
| | Any N | |
| | M1 | The cancer has spread to distant organs such as the liver, lungs, brain, or the peritoneum (the lining of the space around the digestive organs) (M1). |

*The following additional categories are not listed in the table above:

- **TX:** Main tumor cannot be assessed due to lack of information.
- **T0:** No evidence of a primary tumor.
- **NX:** Regional lymph nodes cannot be assessed due to lack of information.

Stomach cancer staging can be complex, so ask your doctor to explain it to you in a way you understand.

For more general information on how cancer is staged, see [Cancer Staging](#)⁵.

Hyperlinks

1. www.cancer.org/cancer/types/stomach-cancer/treating.html
2. www.cancer.org/cancer/types/esophagus-cancer.html
3. www.cancer.org/cancer/types/gastrointestinal-stromal-tumor.html
4. www.cancer.org/cancer/types/non-hodgkin-lymphoma.html
5. www.cancer.org/cancer/diagnosis-staging/staging.html

References

American Joint Committee on Cancer. Stomach Cancer. In: *AJCC Cancer Staging Manual*. 8th ed. New York, NY: Springer; 2017: 203–220.

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Survival Rates for Stomach Cancer

- [What is a 5-year relative survival rate?](#)
- [Where do these numbers come from?](#)
- [5-year relative survival rates for stomach cancer](#)
- [Understanding the numbers](#)

Survival rates can give you an idea of what percentage of people with the same type and stage of cancer are still alive a certain amount of time (usually 5 years) after they were diagnosed. They can't tell you how long you will live, but they may help give you a better understanding of how likely it is that your treatment will be successful.

Keep in mind that survival rates are estimates and are often based on previous outcomes of large numbers of people who had a specific cancer, but they can't predict what will happen in any particular person's case. These statistics can be confusing and may lead you to have more questions. Ask your doctor how these numbers might apply to you.

What is a 5-year relative survival rate?

A **relative survival rate** compares people with the same type and stage of cancer to people in the overall population. For example, if the **5-year relative survival rate** for a specific stage of stomach cancer is 70%, it means that people who have that cancer are, on average, about 70% as likely as people who don't have that cancer to live for at least 5 years after being diagnosed.

Where do these numbers come from?

The American Cancer Society relies on information from the Surveillance, Epidemiology, and End Results (SEER) database, maintained by the National Cancer Institute (NCI), to provide survival statistics for different types of cancer.

The SEER database tracks 5-year relative survival rates for stomach cancer (also known as gastric cancer) in the United States, based on how far the cancer has spread. The SEER database, however, does not group cancers by [AJCC TNM stages](#) (stage 1, stage 2, stage 3, etc.). Instead, it groups cancers into localized, regional, and distant stages:

- **Localized:** There is no sign that the cancer has spread outside of the stomach.
- **Regional:** The cancer has spread outside the stomach to nearby structures or lymph nodes.
- **Distant:** The cancer has spread to distant parts of the body, such as the liver.

5-year relative survival rates for stomach cancer

These numbers are based on people diagnosed with cancers of the stomach between 2013 and 2019.

| SEER* stage | 5-year relative survival rate |
|--------------------------|-------------------------------|
| Localized | 75% |
| Regional | 35% |
| Distant | 7% |
| All SEER stages combined | 36% |

*SEER = Surveillance, Epidemiology, and End Results

Understanding the numbers

- **These numbers apply only to the stage of the cancer when it is first diagnosed.** They do not apply later on if the cancer grows, spreads, or comes back after treatment.
- **These numbers don't take everything into account.** Survival rates are grouped based on how far the cancer has spread, but your age and overall health, how well the cancer responds to treatment, and other factors can also affect your outlook.
- **People now being diagnosed with stomach cancer may have a better outlook than these numbers show.** Treatments improve over time, and these numbers are based on people who were diagnosed and treated at least five years earlier.

References

American Cancer Society. *Cancer Facts & Figures 2024*. Atlanta: American Cancer Society; 2024.

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Questions to Ask About Stomach Cancer

- [When you're told you have stomach cancer](#)
- [When deciding on a treatment plan](#)
- [During treatment](#)
- [After treatment](#)

It's important to have honest, open discussions with your cancer care team. Feel free to ask any question, no matter how small it might seem. Here are some questions you might want to ask.

When you're told you have stomach cancer

- What [kind of stomach cancer](#)¹ do I have?

- Where is the cancer in my stomach?
- What is the [stage of my cancer](#), and what does that mean in my case?
- Are there other [tests](#) that need to be done before we can decide on treatment?
- Will I need to see any other types of doctors?
- How much experience do you have treating this type of cancer?
- Based on what you've learned about my cancer, what is my prognosis (outlook)?

When deciding on a treatment plan

- What [treatment choices](#)² do I have?
- What do you recommend and why?
- What is the goal of treatment (to cure the cancer, slow its growth, ease symptoms, etc.)?
- Are there any [clinical trials](#)³ I should think about now?
- Should I get a [second opinion](#)⁴? How do I do that? Can you recommend a doctor or cancer center?
- How quickly do we need to decide on treatment?
- What should I do to be ready for treatment?
- How long will treatment last? What will it involve? Where will it be done?
- What risks or side effects are there to the treatments you suggest? How long are they likely to last?
- How will treatment affect my daily life? Will it affect the way I eat?

During treatment

Once treatment begins, you'll need to know what to expect and what to look for. Not all of these questions may apply to you, but getting answers to the ones that do may be helpful.

- How will we know if the treatment is working?
- Is there anything I can do to help manage side effects?
- What symptoms or side effects should I tell you about right away?
- How can I reach you or someone on your team on nights, weekends, or holidays?
- Do I need to change what I eat during treatment?
- Are there any limits on what I can do?
- Should I exercise? What should I do, and how often?

- Do you know of any local or online support groups where I can talk to others who have been through this?
- Can you suggest a mental health professional I can see if I start to feel overwhelmed, depressed, or distressed?

After treatment

- Are there any limits on what I can do?
- What symptoms should I watch for?
- Should I exercise or follow a special diet?
- What type of [follow-up](#)⁵ will I need after treatment?
- How will we know if the cancer has come back? What should I watch for?
- What will my options be if the treatment doesn't work or if the cancer comes back?
- Where can I find more information and support?

Along with these sample questions, be sure to write down some of your own.

Keep in mind that doctors aren't the only ones who can give you information. Other health care professionals, such as nurses and social workers, can answer some of your questions. To find more about speaking with your health care team, see [The Doctor-Patient Relationship](#)⁶.

Hyperlinks

1. www.cancer.org/cancer/types/stomach-cancer/about/what-is-stomach-cancer.html
2. www.cancer.org/cancer/types/stomach-cancer/treating.html
3. www.cancer.org/cancer/managing-cancer/making-treatment-decisions/clinical-trials.html
4. www.cancer.org/cancer/managing-cancer/finding-care/seeking-a-second-opinion.html
5. www.cancer.org/cancer/types/stomach-cancer/after-treatment/follow-up.html
6. www.cancer.org/cancer/managing-cancer/finding-care/the-doctor-patient-relationship.html

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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.

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