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About Esophagus Cancer

Overview and Types

If you have been diagnosed with esophagus cancer or are worried about it, you likely have a lot of questions. Learning some basics is a good place to start.

- [What Is Cancer of the Esophagus?](#)

Research and Statistics

See the latest estimates for new cases of esophagus cancer and deaths in the US and what research is currently being done.

- [Key Statistics for Esophageal Cancer](#)
 - [What's New in Esophageal Cancer Research?](#)
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What Is Cancer of the Esophagus?

Cancer starts when cells in the body begin to grow out of control. Cells in nearly any part of the body can become cancer, and can spread to other areas of the body. To learn more about how cancers start and spread, see [What Is Cancer?](#)¹

How the esophagus works

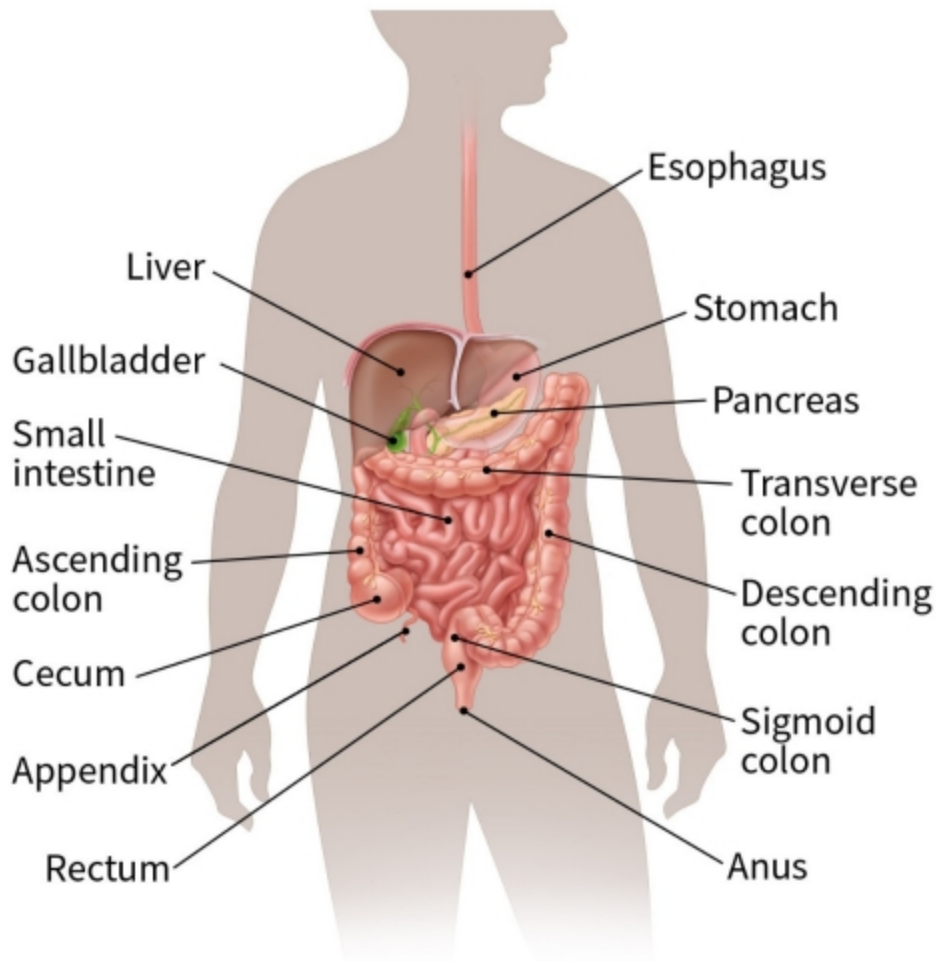
To understand esophagus cancer, it helps to know about the normal structure and function of the esophagus.

The esophagus is a hollow, muscular tube that connects the throat to the stomach. It lies behind the trachea (windpipe) and in front of the spine.

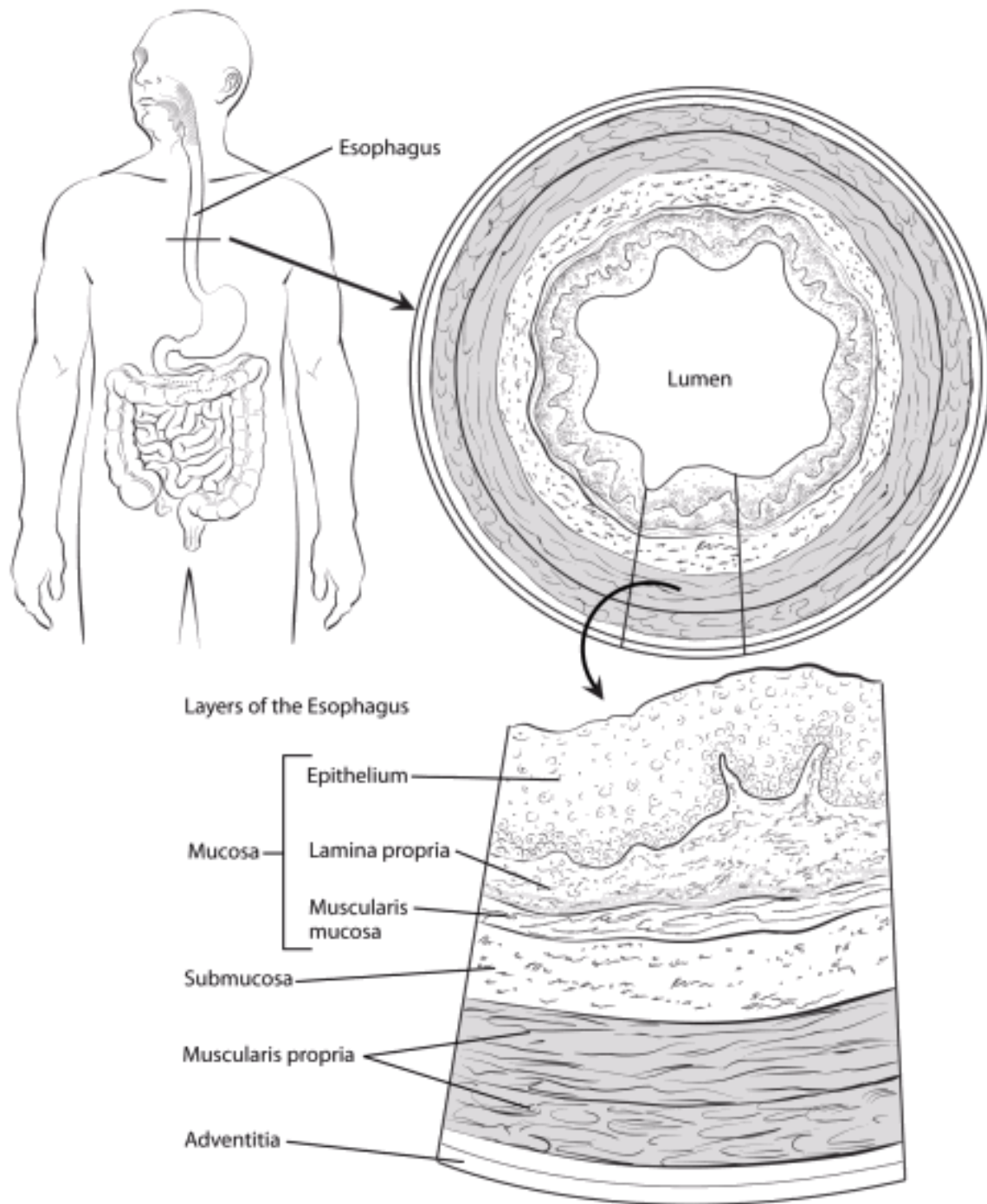
Food and liquids that are swallowed travel through the inside of the esophagus (called the *lumen*) to reach the stomach. In adults, the esophagus is usually between 10 and 13 inches (25 to 33 centimeters [cm]) long and is about $\frac{3}{4}$ of an inch (2cm) across at its smallest point.

The upper part of the esophagus has a special ring of muscle at its beginning that relaxes to open the esophagus when it senses food or liquid coming toward it. This muscle is called the *upper esophageal sphincter*.

The lower part of the esophagus that connects to the stomach is called the *gastroesophageal (GE) junction*. A special ring of muscle near the GE junction, called the *lower esophageal sphincter*, controls the movement of food from the esophagus into the stomach. Between meals, it closes to keep the stomach's acid and digestive juices out of the esophagus.



The wall of the esophagus has several layers. These layers are important for understanding where cancers in the esophagus usually start and how they can grow.



Mucosa: This layer lines the inside of the esophagus. The mucosa has 3 parts:

- The *epithelium* is the innermost lining of the esophagus and is normally made up of flat, thin cells called *squamous cells*. This is where most cancers of the esophagus start.
- The *lamina propria* is a thin layer of connective tissue right under the epithelium.
- The *muscularis mucosa* is a very thin layer of muscle under the lamina propria.

Submucosa: This is a layer of connective tissue just below the mucosa that contains blood vessels and nerves. In some parts of the esophagus, this layer also includes glands that secrete mucus.

Muscularis propria: This is a thick layer of muscle under the submucosa. It contracts in a coordinated way to push food down the esophagus from the throat to the stomach.

Adventitia: This is the outermost layer of the esophagus, and is formed by connective tissue.

Esophageal cancer

Cancer of the esophagus (also called *esophageal cancer*) starts in the inner layer (the mucosa) and grows outward (through the submucosa and the muscle layer). Since 2 types of cells can line the esophagus, there are 2 main types of esophageal cancer:

Squamous cell carcinoma

The esophagus is normally lined with squamous cells. Cancer starting in these cells is called *squamous cell carcinoma*. This type of cancer can occur anywhere along the esophagus, but is most common in the portion of the esophagus located in the neck region and in the upper two-thirds of the chest cavity. Squamous cell carcinoma used to be the most common type of esophageal cancer in the United States. This has changed over time, and now it makes up less than half of esophageal cancers in this country.

Adenocarcinoma

Cancers that start in gland cells (cells that make mucus) are called *adenocarcinomas*. This type of cancer usually occurs in the distal (lower third) part of the esophagus. Before an adenocarcinoma can develop, gland cells must replace an area of squamous cells, which is what happens in Barrett's esophagus. This occurs mainly in the lower esophagus, which is where most adenocarcinomas start.

Adenocarcinomas that start at the area where the esophagus joins the stomach (the GE junction, which includes about the first 2 inches (5 cm) of the stomach called the *cardia*), tend to behave like cancers in the esophagus (and are treated like them, as well), so they are grouped with esophagus cancers.

Rare cancers

Other types of cancer can also start in the esophagus, including lymphomas, melanomas, and sarcomas. But these cancers are rare and are not discussed further here.

Hyperlinks

1. www.cancer.org/cancer/cancer-basics/what-is-cancer.html

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Key Statistics for Esophageal Cancer

The American Cancer Society's estimates for esophageal cancer in the United States for 2019 are:

- About 17,650 new esophageal cancer cases diagnosed (13,750 in men and 3,900 in women)
- About 16,080 deaths from esophageal cancer (13,020 in men and 3,060 in women)

Esophageal cancer is more common among men than among women. The lifetime risk of esophageal cancer in the United States is about 1 in 132 in men and about 1 in 455 in women. (See the next section for [risk factors](#)¹ that can affect these chances.)

Overall, the rates of esophageal cancer in the United States have been fairly stable for many years, but over the past decade they have been decreasing slightly. It is most common in whites, but is now almost equally as common in African Americans. Adenocarcinoma is the most common type of cancer of the esophagus among whites, while squamous cell carcinoma is more common in African Americans. American Indian/Alaska Natives and Hispanics have lower rates of esophageal cancer, followed by Asians/Pacific Islanders.

Esophageal cancer makes up about 1% of all cancers diagnosed in the United States, but it is much more common in some other parts of the world, such as Iran, northern China, India, and southern Africa.

Although many people with esophageal cancer will go on to die from this disease, treatment has improved and survival rates are getting better. During the 1960s and 1970s, only about 5% of patients survived at least 5 years after being diagnosed. Now, about 20% of patients survive at least 5 years after diagnosis. This number includes patients with all [stages](#)² of esophageal cancer. Survival rates for people with early stage cancer are higher. For more information on survival, see [Survival Rates for Cancer of the Esophagus by Stage](#)³.

Visit the [American Cancer Society's Cancer Statistics Center](#)⁴ for more key statistics.

Hyperlinks

1. www.cancer.org/cancer/esophagus-cancer/causes-risks-prevention/risk-factors.html
2. www.cancer.org/cancer/esophagus-cancer/detection-diagnosis-

- [staging/staging.html](#)
3. www.cancer.org/cancer/esophagus-cancer/detection-diagnosis-staging/survival-rates.html
 4. <https://cancerstatisticscenter.cancer.org/>

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What's New in Esophageal Cancer Research?

Research into the causes, prevention, and treatment of esophageal cancer is now being done at many medical centers, university hospitals, and other institutions around the

world.

Genetics

Researchers have found that certain gene variants are more common in people with Barrett's esophagus. This may lead to new tests for finding the people who are likely to get Barrett's esophagus and esophageal cancer earlier, so that these problems can be prevented. Understanding these changes may also lead to new [targeted therapies](#)¹ that overcome the effects of these abnormal genes.

Screening and prevention

The rate of adenocarcinoma of the esophagus has risen sharply in recent decades. Efforts are now being made to reduce obesity, a major risk factor for this form of cancer (and several other types as well).

In people with Barrett's esophagus, researchers are trying to determine if newer tests can tell which patients are likely to go on to develop cancer. This may help doctors determine which patients need intense follow-up and which ones can be examined less frequently.

Researchers are also looking for ways to help stop Barrett's cells from turning into pre-cancer or cancer. Drugs such as proton pump inhibitors and aspirin are now being studied for this purpose.

Treatment

Surgery

Doctors are using newer imaging tests and other tests to better determine which people are more likely to be helped by esophagectomy, and which people are less likely to benefit from this major operation.

Doctors are also constantly improving the surgery techniques used to treat esophageal cancer, aiming to make these operations safer and help patients recover from surgery more quickly.

Chemotherapy

Many studies are testing new ways to combine chemotherapy (chemo) drugs already

known to be active against esophageal cancer to try to improve their effectiveness. Other studies are testing the best ways to combine chemotherapy with radiation therapy.

Researchers are also looking to see if they can examine the proteins inside esophageal cancer cells to tell whether the cancer is likely to respond to chemotherapy. This is important because many people get [chemo](#)² and [radiation](#)³ as part of their initial treatment, often before [surgery](#)⁴. Knowing if a person's cancer is likely to respond to chemo might help doctors choose the best treatment option for the person.

Immunotherapy

An important part of the immune system is its ability to keep itself from attacking normal cells in the body. To do this, it uses “checkpoints” – molecules on immune cells that need to be turned on (or off) to start an immune response. Cancer cells sometimes use these checkpoints to avoid being attacked by the immune system.

[Immunotherapy](#)⁵ drugs known as **checkpoint inhibitors** are useful in some other cancers and are now being tested in esophageal cancer. For example, the drug pembrolizumab (Keytruda) targets PD-1, a protein on immune system T cells, that normally helps keep these cells from attacking other cells in the body. Targeting this protein can help the immune system recognize and attack cancer cells. Pembrolizumab is now approved to treat some advanced cancers of the gastroesophageal junction. It is also being studied in advanced esophageal cancer that has not responded to treatment and cannot be removed by surgery. Nivolumab (Opdivo), which also targets PD-1, and many other immunotherapy drugs are also being studied for use against esophageal cancer.

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/targeted-therapy.html
2. www.cancer.org/cancer/esophagus-cancer/treating/chemotherapy.html
3. www.cancer.org/cancer/esophagus-cancer/treating/radiation.html
4. www.cancer.org/cancer/esophagus-cancer/treating/surgery.html
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Esophagus Cancer Causes, Risk Factors, and Prevention

Risk Factors

A risk factor is anything that affects your chance of getting a disease such as cancer. Learn more about the risk factors for esophageal cancer.

- [Esophageal Cancer Risk Factors](#)
- [What Causes Esophageal Cancer?](#)

Prevention

There is no way to completely prevent cancer. But there are things you can do that might lower your risk. Learn more.

- [Can Esophageal Cancer Be Prevented?](#)

Esophageal Cancer Risk Factors

A risk factor is anything that changes your chance of getting a disease such as cancer. Different cancers have different risk factors. Some risk factors, like smoking, can be changed. Others, like a person's age or family history, can't be changed.

Scientists have found several factors that can affect your risk of esophageal cancer.

Some are more likely to increase the risk for adenocarcinoma of the esophagus and others for squamous cell carcinoma of the esophagus.

But having a risk factor, or even many, does not mean that you will get esophageal cancer. And some people who get the disease may not have any known risk factors.

Age

The chance of getting esophageal cancer increases with age. Less than 15% of cases are found in people younger than age 55.

Gender

Men are more likely than women to get esophageal cancer.

Gastroesophageal reflux disease

The stomach normally makes strong acid and enzymes to help digest food. In some people, acid can escape from the stomach up into the lower part of the esophagus. The medical term for this is *gastroesophageal reflux disease* (GERD), or just *reflux*. In many people, reflux causes symptoms such as heartburn or pain that seem to come from the middle of the chest. In some, though, reflux doesn't cause any symptoms at all.

People with GERD have a slightly higher risk of getting adenocarcinoma of the esophagus. This risk seems to be higher in people who have more frequent symptoms. But GERD is very common, and most of the people who have it *do not* go on to develop esophageal cancer. GERD can also cause Barrett's esophagus (discussed below), which is linked to an even higher risk.

Barrett's esophagus

If reflux of stomach acid into the lower esophagus goes on for a long time, it can damage the inner lining of the esophagus. This causes the squamous cells that normally line the esophagus to be replaced with gland cells. These gland cells usually look like the cells that line the stomach and the small intestine, and are more resistant to stomach acid. This condition is known as Barrett's (or Barrett) esophagus.

The longer someone has reflux, the more likely it is that they will develop Barrett's esophagus. Most people with Barrett's esophagus have had symptoms of heartburn, but

many have no symptoms at all. People with Barrett's esophagus are at a much higher risk than people without this condition to develop adenocarcinoma of the esophagus. Still, most people with Barrett's esophagus do not get esophageal cancer.

The gland cells in Barrett's esophagus can become more abnormal over time. This can result in *dysplasia*, a pre-cancerous condition. Dysplasia is graded by how abnormal the cells look under the microscope. Low-grade dysplasia looks more like normal cells, while high-grade dysplasia is more abnormal. High-grade dysplasia is linked to the highest risk of cancer.

Tobacco and alcohol

The use of [tobacco products](#)¹, including cigarettes, cigars, pipes, and chewing tobacco, is a major risk factor for esophageal cancer. The more a person uses tobacco and the longer it is used, the higher the cancer risk. Someone who smokes a pack of cigarettes a day or more has at least twice the chance of getting adenocarcinoma of the esophagus than a nonsmoker, and the risk does not go away if tobacco use stops. The link to squamous cell esophageal cancer is even stronger, but this risk does go down for people who quit tobacco. .

Drinking [alcohol](#)² also increases the risk of esophageal cancer. The more alcohol someone drinks, the higher their chance of getting esophageal cancer. Alcohol affects the risk of the squamous cell type more than the risk of adenocarcinoma.

Combining smoking and drinking alcohol raises the risk of esophageal cancer much more than using either alone.

Obesity

People who are [overweight or obese](#)³ (very overweight) have a higher chance of getting adenocarcinoma of the esophagus. This is in part explained by the fact that people who are obese are more likely to have gastroesophageal reflux.

Diet

Certain substances in the diet may increase esophageal cancer risk. For example, there have been suggestions, as yet not well proven, that a diet high in processed meat may increase the chance of developing esophageal cancer. This may help explain the high rate of this cancer in certain parts of the world.

On the other hand, a diet high in fruits and vegetables is linked to a lower risk of esophageal cancer. The exact reasons for this are not clear, but fruits and vegetables have a number of vitamins and minerals that may help prevent cancer.

Frequently drinking very hot liquids (temperatures of 149° F or 65° C - much hotter than a typical cup of coffee) may increase the risk for the squamous cell type of esophageal cancer. This might be the result of long-term damage to the cells lining the esophagus from the hot liquids.

Achalasia

In this condition, the muscle at the lower end of the esophagus (the lower esophageal sphincter) does not relax properly. Food and liquid that are swallowed have trouble passing into the stomach and tend to collect in the lower esophagus, which becomes stretched out (dilated) over time. The cells lining the esophagus in that area can become irritated from being exposed to foods for longer than normal amounts of time.

People with achalasia have a risk of esophageal cancer that is many times normal. On average, the cancers are found about 15 to 20 years after the achalasia began.

Tylosis

This is a rare, inherited disease that causes excess growth of the top layer of skin on the palms of the hands and soles of the feet. People with this condition also develop small growths (papillomas) in the esophagus and have a very high risk of getting squamous cell cancer of the esophagus.

People with tylosis need to be watched closely to try to find esophageal cancer early. Often this requires regular monitoring with an upper endoscopy (described in [Tests for Esophagus cancer](#)⁴).

Plummer-Vinson syndrome

People with this rare syndrome (also called *Paterson-Kelly syndrome*) have webs in the upper part of the esophagus, typically along with anemia (low red blood cell counts) due to low iron levels, tongue irritation (glossitis), brittle fingernails, and sometimes a large thyroid gland or spleen.

A web is a thin membrane extending out from the inner lining of the esophagus that causes an area of narrowing. Most esophageal webs do not cause any problems, but

larger ones can cause food to get stuck in the esophagus, which can lead to problems swallowing and chronic irritation in that area from the trapped food.

About 1 in 10 people with this syndrome eventually develop squamous cell cancer of the esophagus or cancer in the lower part of the throat (hypopharynx).

Workplace exposures

Exposure to chemical fumes in certain workplaces may lead to an increased risk of esophageal cancer. For example, exposure to some of the solvents used for dry cleaning might lead to a greater risk of esophageal cancer. Some studies have found that dry cleaning workers may have a higher rate of esophageal cancer, but not all studies have found this link.

Injury to the esophagus

Lye is a chemical found in strong industrial and household cleaners such as drain cleaners. Lye is a corrosive agent that can burn and destroy cells. Accidentally drinking from a lye-based cleaner bottle can cause a severe chemical burn in the esophagus. As the injury heals, the scar tissue can cause an area of the esophagus to become very narrow (called a *stricture*). People with these strictures have an increased risk of squamous cell esophageal cancer, which often occurs many years (even decades) later.

History of certain other cancers

People who have had certain other cancers, such as lung cancer, mouth cancer, and throat cancer have a high risk of getting squamous cell carcinoma of the esophagus as well. This may be because these cancers can also be caused by smoking.

Human papilloma virus (HPV) infection

[HPV](#)⁵ is a group of more than 100 related viruses. They are called papilloma viruses because some of them cause a type of growth called a papilloma (or wart). Infection with certain types of HPV is linked to a number of cancers, including throat cancer, anal cancer, and cervical cancer.

Signs of HPV infection have been found in up to one-third of esophagus cancers from patients in parts of Asia and South Africa. But signs of HPV infection have not been

found in esophagus cancers from patients in the other areas, including the US.

Hyperlinks

1. www.cancer.org/cancer/cancer-causes/tobacco-and-cancer.html
2. www.cancer.org/cancer/cancer-causes/diet-physical-activity/alcohol-use-and-cancer.html
3. www.cancer.org/cancer/cancer-causes/diet-physical-activity/body-weight-and-cancer-risk.html
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What Causes Esophageal Cancer?

We do not yet know exactly what causes most esophageal cancers. However, there are certain risk factors that make getting esophageal cancer more likely. (See [Esophageal Cancer Risk Factors](#))

Scientists believe that some risk factors, such as the use of [tobacco](#)¹ or [alcohol](#)², may cause esophageal cancer by damaging the DNA in cells that line the inside of the esophagus. Long-term irritation of the lining of the esophagus, as happens with reflux, Barrett's esophagus, achalasia, Plummer-Vinson syndrome, or scarring from swallowing lye, may also lead to DNA damage.

DNA is the chemical in each of our cells that makes up our *genes* – the instructions for how our cells function. We usually look like our parents because they are the source of our DNA. However, DNA affects more than how we look. Some genes control when cells grow, divide into new cells, and die. Genes that help cells grow, divide, and stay alive are called *oncogenes*. Genes that slow down cell division or make cells die at the

right time are called *tumor suppressor genes*. Cancers can be caused by DNA changes that turn on oncogenes or turn off tumor suppressor genes.

The DNA of esophageal cancer cells often shows changes in many different genes. However, it's not clear if there are specific gene changes that can be found in all (or most) esophageal cancers.

Some people inherit DNA changes (mutations) from their parents that increase their risk for developing certain cancers. But esophageal cancer does not seem to run in families, and inherited gene mutations are not thought to be a major cause of this disease.

Hyperlinks

1. www.cancer.org/cancer/cancer-causes/tobacco-and-cancer.html
2. www.cancer.org/cancer/cancer-causes/diet-physical-activity/alcohol-use-and-cancer.html

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Can Esophageal Cancer Be Prevented?

Not all esophageal cancers can be prevented, but the risk of developing this disease can be greatly reduced by avoiding certain [risk factors](#).

Avoiding tobacco and alcohol

In the United States, the most important lifestyle risk factors for cancer of the esophagus are the use of [tobacco](#)¹ and [alcohol](#)². Each of these factors alone increases the risk of esophageal cancer many times, and the risk is even greater if they are combined. Avoiding tobacco and alcohol is one of the best ways of limiting your risk of esophageal cancer. If you or someone you know would like to quit tobacco, call us at 1-800-227-2345 or see [Stay Away from Tobacco](#)³.

Watching your diet and body weight

Eating a healthy diet and staying at a healthy weight are also important. A diet rich in fruits and vegetables may help protect against esophageal cancer. [Obesity](#)⁴ has been linked with esophageal cancer, particularly the adenocarcinoma type, so staying at a healthy weight may also help limit the risk of this disease. For more on this, read our [American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention](#)⁵.

Getting treated for reflux or Barrett's esophagus

Treating people with reflux may help prevent Barrett's esophagus and esophageal cancer. Often, reflux is treated using drugs called proton pump inhibitors (PPIs), such as omeprazole (Prilosec[®]), lansoprazole (Prevacid[®]), or esomeprazole (Nexium[®]). Surgery might also be an option for treating reflux if the reflux is not controlled with medical therapy alone.

People at a higher risk for esophageal cancer, such as those with Barrett's esophagus, are often watched closely by their doctors to look for signs that the cells lining the esophagus have become more abnormal. (See [Can Esophageal Cancer Be Found Early?](#)⁶) If dysplasia (a pre-cancerous condition) is found, the doctor may recommend treatments to keep it from developing into esophageal cancer.

For those who have Barrett's esophagus, daily treatment with a PPI might lower the risk of developing cell changes (dysplasia) that can turn into cancer. If you have chronic heartburn (or reflux), tell your doctor. Treatment can often improve symptoms and might prevent future problems.

Some studies have found that the risk of cancer of the esophagus is lower in people with Barrett's esophagus who take aspirin or other non-steroidal anti-inflammatory drugs (NSAIDs), such as ibuprofen. However, taking these drugs every day can lead to problems, such as kidney damage and bleeding in the stomach. For this reason, most

doctors don't advise that people take NSAIDs to try to prevent cancer. If you are thinking of taking an NSAID regularly, discuss the potential benefits and risks with your doctor first.

Some studies have also found a lower risk of esophageal cancer in people with Barrett's esophagus who take drugs called *statins*, which are used to treat high cholesterol. Examples include atorvastatin (Lipitor[®]) and rosuvastatin (Crestor[®]). While taking one of these drugs might help some patients lower esophageal cancer risk, doctors don't advise taking them just to prevent cancer because they can have serious side effects.

Hyperlinks

1. www.cancer.org/cancer/cancer-causes/tobacco-and-cancer.html
2. www.cancer.org/cancer/cancer-causes/diet-physical-activity/alcohol-use-and-cancer.html
3. www.cancer.org/healthy/stay-away-from-tobacco.html
4. www.cancer.org/cancer/cancer-causes/diet-physical-activity/body-weight-and-cancer-risk.html
5. www.cancer.org/healthy/eat-healthy-get-active/acs-guidelines-nutrition-physical-activity-cancer-prevention.html
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Esophagus Cancer Early Detection, Diagnosis, and Staging

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 Esophageal Cancer Be Found Early?](#)
- [Signs and Symptoms of Esophageal Cancer](#)
- [Tests for Esophageal Cancer](#)
- [Understanding Your Pathology Report¹](#)

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.

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

Questions to Ask About Esophagus Cancer

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

- [What Should You Ask Your Doctor About Esophageal Cancer?](#)
-

Can Esophageal Cancer Be Found Early?

Screening is the process of looking for cancer or pre-cancer in people who have no symptoms of the disease. In the United States, screening the general public for esophageal cancer is not recommended by any professional organization at this time. This is because no screening test has been shown to lower the risk of dying from esophageal cancer in people who are at average risk.

However, people who have a high [risk of esophageal cancer](#)¹, such as those with Barrett's esophagus, are often followed closely to look for early cancers and pre-cancers.

Testing people at high risk

Many experts recommend that people with a high risk of esophageal cancer, such as those with Barrett's esophagus, have upper endoscopy regularly. For this test, the doctor looks at the inside of the esophagus through a flexible lighted tube called an *endoscope*. (see [Tests for Esophageal Cancer](#).) The doctor may remove small samples of tissue (biopsies) from the area with Barrett's so that they can be checked for dysplasia (pre-cancer cells) or cancer cells.

Doctors aren't certain how often the test should be repeated, but most recommend testing more often if areas of dysplasia are found. This testing is repeated even more often if there is high-grade dysplasia (the cells appear very abnormal).

If the area of Barrett's is large and/or there is high-grade dysplasia, treatment of the abnormal area might be advised because of the high risk that an adenocarcinoma is either already present (but was not found) or will develop within a few years. Treatment options for high-grade dysplasia might include [surgery](#)² to remove part of the esophagus with the abnormal area, endoscopic mucosal resection (EMR), photodynamic therapy (PDT), or radiofrequency ablation (RFA). See [Endoscopic Treatments for Esophageal Cancer](#)³. The outlook for these patients is relatively good after treatment.

Careful monitoring and treatment (if needed) may help prevent some esophageal cancers from developing. It may also detect some cancers early, when they are more likely to be treated successfully.

Hyperlinks

1. www.cancer.org/cancer/esophagus-cancer/causes-risks-prevention/risk-factors.html
2. www.cancer.org/cancer/esophagus-cancer/treating/surgery.html
3. www.cancer.org/cancer/esophagus-cancer/treating/endoscopic-treatments.html

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Signs and Symptoms of Esophageal Cancer

Cancers of the esophagus are usually found because of the symptoms they cause. Diagnosis in people without symptoms is rare and usually accidental (because of tests done for other medical problems). Unfortunately, most esophageal cancers do not cause symptoms until they have reached an advanced stage, when they are harder to treat.

Trouble swallowing

The most common symptom of esophageal cancer is a problem swallowing, with a feeling like the food is stuck in the throat or chest, or even choking on food. The medical term for trouble swallowing is *dysphagia*. This is often mild when it starts, and then gets worse over time as the opening inside the esophagus gets smaller.

When swallowing becomes harder, people often change their diet and eating habits without realizing it. They take smaller bites and chew their food more carefully and slowly. As the cancer grows larger, the problem can get worse. People then might start eating softer foods that can pass through the esophagus more easily. They might avoid bread and meat, since these foods typically get stuck. The swallowing problem may even get bad enough that some people stop eating solid food completely and switch to a liquid diet. If the cancer keeps growing, at some point even liquids might be hard to swallow.

To help pass food through the esophagus, the body makes more saliva. This causes some people to complain of bringing up lots of thick mucus or saliva.

Chest pain

Sometimes, people have pain or discomfort in the middle part of their chest. Some people get a feeling of pressure or burning in the chest. These symptoms are more often caused by problems other than cancer, such as heartburn, so they are rarely seen as a signal that a person might have cancer.

Swallowing may become painful if the cancer is large enough to limit the passage of food through the esophagus. Pain may be felt a few seconds after swallowing, as food or liquid reaches the tumor and has trouble getting past it.

Weight loss

About half of people with esophageal cancer lose weight (without trying to). This happens because their swallowing problems keep them from eating enough to maintain their weight. Other factors include a decreased appetite and an increase in metabolism from the cancer.

Other symptoms

Other possible symptoms of cancer of the esophagus can include:

- Hoarseness
- Chronic cough

- Vomiting
- Hiccups
- Bone pain
- Bleeding into the esophagus. This blood then passes through the digestive tract, which may turn the stool black. Over time, this blood loss can lead to anemia (low red blood cell levels), which can make a person feel tired.

Having one or more of the symptoms above does not mean you have esophageal cancer. In fact, many of these symptoms are more likely to be caused by other conditions. Still, if you have any of these symptoms, especially trouble swallowing, it's important to have them checked by a doctor so that the cause can be found and treated, if needed.

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Tests for Esophageal Cancer

Esophagus cancers are usually found because of [signs or symptoms](#) a person is having. If esophagus cancer is suspected, exams and tests will be needed to confirm the diagnosis. If cancer is found, further tests will be done to help determine the extent ([stage](#)) of the cancer.

Medical history and physical exam

If you have symptoms that might be caused by esophageal cancer, the doctor will ask about your medical history to check for possible [risk factors](#)¹ and to learn more about your symptoms.

Your doctor will also examine you to look for possible signs of esophageal cancer and other health problems. He or she will probably pay special attention to your neck and chest areas.

If the results of the exam are abnormal, your doctor will probably order tests to help find the problem. You may also be referred to a gastroenterologist (a doctor specializing in digestive system diseases) for further tests and treatment.

Imaging tests to look for esophagus cancer

[Imaging tests](#)² use x-rays, magnetic fields, sound waves, or radioactive substances to create pictures of the inside of your body. Imaging tests might be done for many reasons, such as:

- To help find a suspicious area that might be cancer
- To learn if and how far cancer has spread
- To help determine if the treatment is working
- To look for possible signs of cancer coming back after treatment

Barium swallow

In this test, a thick, chalky liquid called *barium* is swallowed to coat the walls of the esophagus. When x-rays are then taken, the barium clearly outlines the esophagus. This test can be done by itself, or as a part of a series of x-rays that includes the stomach and part of the intestine, called an *upper gastrointestinal (GI) series*. A barium swallow test can show any abnormal areas in the normally smooth surface of the inner lining of the esophagus, but it can't be used to determine how far a cancer may have spread outside of the esophagus.

This is sometimes the first test done to see what is causing a problem with swallowing. Even small, early cancers can often be seen using this test. Early cancers can look like small round bumps or flat, raised areas (called *plaques*), while advanced cancers look like large irregular areas and can cause narrowing of the inside of the esophagus.

This test can also be used to diagnose one of the more serious complications of esophageal cancer called a *tracheo-esophageal fistula*. This occurs when the tumor

destroys the tissue between the esophagus and the trachea(windpipe) and creates a hole connecting them. Anything that is swallowed can then pass from the esophagus into the windpipe and lungs. This can lead to frequent coughing, gagging, or even pneumonia. This problem can be helped with surgery or an endoscopy procedure.

Computed tomography (CT or CAT) scan

A [CT scan](#)³ uses x-rays to produce detailed cross-sectional images of your body. This test can help tell if esophageal cancer has spread to nearby organs and lymph nodes (bean-sized collections of immune cells to which cancers often spread first) or to distant parts of the body.

Before the test, you may be asked to drink 1 to 2 pints of a liquid called *oral contrast*. This helps outline the esophagus and intestines. If you are having any trouble swallowing, you need to tell your doctor before the scan.

Magnetic resonance imaging (MRI) scan

Like CT scans, [MRI scans](#)⁴ provide detailed images of soft tissues in the body. But MRI scans use radio waves and strong magnets instead of x-rays. A contrast material called *gadolinium* may be injected into a vein before the scan to see details better. MRI can be used to look at abnormal areas in the brain and spinal cord that might be due to cancer spread.

Positron emission tomography (PET) scan

[PET scans](#)⁵ usually use a form of radioactive sugar (known as *fluorodeoxyglucose* or *FDG*) that is injected into the blood. Normal cells use different amounts of the sugar, depending on how fast they are growing. Cancer cells, which grow quickly, are more likely to absorb larger amounts of the radioactive sugar than normal cells. These areas of radioactivity can be seen on a PET scan using a special camera.

The picture from a PET scan is not as detailed as a CT or MRI scan, but it provides helpful information about whether abnormal areas seen on these other tests are likely to be cancer or not.

If you have already been diagnosed with cancer, your doctor may use this test to see if the cancer has spread to lymph nodes or other parts of the body. A PET scan can also be useful if your doctor thinks the cancer may have spread but doesn't know where.

PET/CT scan: Some machines can do both a PET and CT scan at the same time. This

lets the doctor compare areas of higher radioactivity on the PET scan with the more detailed picture of that area on the CT scan.

Endoscopy

An endoscope is a flexible, narrow tube with a tiny video camera and light on the end that is used to look inside the body. Tests that use endoscopes can help diagnose esophageal cancer or determine the extent of its spread.

Upper endoscopy

This is an important test for diagnosing esophageal cancer. During an [upper endoscopy](#)⁶, you are sedated (made sleepy) and then the doctor passes an endoscope down your throat and into the esophagus and stomach. The camera is connected to a monitor, which lets the doctor see any abnormal areas in the wall of the esophagus clearly.

The doctor can use special instruments through the scope to remove (biopsy) samples from any abnormal areas. These samples are sent to the lab to see if they contain cancer.

If the esophageal cancer is blocking the opening (called the *lumen*) of the esophagus, certain instruments can be used to help enlarge the opening to help food and liquid pass.

Upper endoscopy can give the doctor important information about the size and spread of the tumor, which can be used to help determine if the tumor can be removed with [surgery](#)⁷.

Endoscopic ultrasound

This test is usually done at the same time as the upper endoscopy. For an endoscopic ultrasound, a probe that gives off sound waves is at the end of an endoscope. This allows the probe to get very close to tumors in the esophagus. This test is very useful in determining the size of an esophageal cancer and how far it has grown into nearby areas. It can also help show if nearby lymph nodes might be affected by the cancer. If enlarged lymph nodes are seen on the ultrasound, the doctor can pass a thin, hollow needle through the endoscope to get biopsy samples of them. This helps the doctor decide if the tumor can be removed with surgery.

Bronchoscopy

This exam may be done for cancer in the upper part of the esophagus to see if it has spread to the windpipe (trachea) or the tubes leading from the windpipe into the lungs (bronchi).

Thoracoscopy and laparoscopy

These exams let the doctor see lymph nodes and other organs near the esophagus inside the chest (by thoracoscopy) or the abdomen (by laparoscopy) through a hollow lighted tube.

These procedures are done in an operating room while you are under general anesthesia (in a deep sleep). A small incision (cut) is made in the side of the chest wall (for thoracoscopy) or the abdomen (for laparoscopy). Sometimes more than one cut is made. The doctor then inserts a thin, lighted tube with a small video camera on the end through the incision to view the space around the esophagus. The surgeon can pass thin tools into the space to remove lymph nodes and biopsy samples to see if the cancer has spread. This information is often important in deciding whether a person is likely to benefit from surgery.

Lab tests of biopsy samples

Usually if a suspected esophageal cancer is found on endoscopy or an imaging test, it is biopsied. In a biopsy, the doctor removes a small piece of tissue with a special instrument passed through the scope. See [Testing Biopsy and Cytology Specimens for Cancer](#)⁸ to learn more about the types of biopsies, how the tissue is used in the lab to diagnose cancer, and what the results may show.

HER2 testing: If esophageal cancer is found but is too advanced for surgery, your biopsy samples may be tested for the HER2 gene or protein. Some people with esophageal cancer have too much of the HER2 protein on the surface of their cancer cells, which helps the cells grow. A drug that targets the HER2 protein called trastuzumab (Herceptin[®]) may help treat these cancers when used along with [chemotherapy](#)⁹. Only cancers that have too much of the HER2 gene or protein are likely to be affected by this drug, which is why doctors may test tumor samples for it. (See [Targeted Therapy for Esophageal Cancer](#)¹⁰.)

Blood tests

Your doctor might order certain blood tests to help determine if you have esophageal cancer.

Complete blood count (CBC): This test measures the different types of cells in your blood. It can show if you have anemia (too few red blood cells). Some people with esophageal cancer become anemic because the tumor has been bleeding.

Liver enzymes: You may also have a blood test to check your liver function, because esophageal cancer can spread to the liver.

Hyperlinks

1. www.cancer.org/cancer/esophagus-cancer/causes-risks-prevention/risk-factors.html
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Esophageal Cancer Stages

After someone is diagnosed with esophageal cancer, doctors will try to figure out if it has spread, and if so, how far. This process is called **staging**. The stage of a cancer describes how much cancer is 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.

The earliest stage esophageal cancers are called stage 0 (high grade dysplasia). It then ranges from stage I (1) through IV (4). As a rule, the lower the number, the less the cancer has spread. A higher number, such as stage IV, means cancer has spread more. And within a stage, an earlier letter means a lower stage. 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.

Most esophageal cancers start in the innermost lining of the esophagus (the epithelium) and then grow into deeper layers over time.

How is the stage determined?

The staging system most often used for esophageal cancer is the American Joint Committee on Cancer (AJCC) TNM system, which is based on 3 key pieces of information:

- The extent (size) of the **tumor (T)**: How far has the cancer grown into the wall of the esophagus? Has the cancer reached nearby structures or organs? (See [What Is Cancer of the Esophagus?](#)² to learn about the layers of the esophagus wall.)
- The spread to nearby lymph **nodes (N)**: Has the cancer spread to nearby lymph

nodes?

- The spread (**metastasis**) to distant sites (**M**): Has the cancer spread to distant lymph nodes or distant organs such as the lungs or liver?

Numbers or letters after T, N, and M provide more details about each of these factors. Higher numbers mean the cancer is more advanced. 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. For more information see [Cancer Staging](#)³.

Staging systems for esophageal cancer

Since esophageal cancer can be treated in different ways, different staging systems have been created for each situation:

- **Pathological stage** (also called the *surgical stage*): If surgery is done first, the pathological stage is determined by examining tissue removed during an operation. This is the most common system used.
- **Clinical stage**: If surgery might not be possible or will be done after other treatment is given, then the clinical stage is determined based on the results of a physical exam, biopsy, and imaging tests. The clinical stage will be used to help plan treatment, but it might not predict outlook as accurately as the pathologic stage. This is because sometimes the cancer has spread further than the clinical stage estimates.
- **Postneoadjuvant stage**: If surgery is done after other treatments such as chemotherapy or radiation have been given (this is called *neoadjuvant therapy*), then a separate postneoadjuvant stage will be determined after surgery.

Since most cancers are staged with the pathological stage, we have included that staging system in the tables below. If your cancer has been clinically staged or if you have had neoadjuvant therapy, it is best to talk to your doctor about your specific stage for those situations.

Grade

Another factor that can affect your treatment and your outlook is the grade of your cancer. The grade describes how closely the cancer looks like normal tissue when seen under a microscope.

The scale used for grading esophagus cancers is from 1 to 3.

- **GX:** The grade cannot be assessed.(The grade is unknown).
- **Grade 1 (G1: well differentiated)** means the cancer cells look more like normal esophagus tissue.
- **Grade 3 (G3: poorly differentiated, undifferentiated)** means the cancer cells look very abnormal.
- **Grades 2 (G2: moderately differentiated)** falls somewhere in between G1 and G3.

The grade is often simplified as either low grade (G1) or high grade (G3).

Low-grade cancers tend to grow and spread more slowly than high-grade cancers. Most of the time, the outlook is better for low-grade cancers than it is for high-grade cancers of the same stage.

Location

Some stages of early squamous cell carcinoma also take into account where the tumor is in the esophagus. The location is assigned as either *upper*, *middle*, or *lower* based on where the middle of the tumor is.

Esophageal cancer stage descriptions

The tables below are simplified versions of the TNM system, based on the most recent AJCC systems effective January 2018. They include staging systems for *squamous cell carcinoma* and *adenocarcinoma*. It's important to know that esophageal cancer staging can be complex. If you have any questions about the stage of your cancer or what it means, please ask your doctor to explain it to you in a way you understand.

Squamous Cell Carcinoma Stages

AJCC Stage	Stage description
	SQUAMOUS CELL CARCINOMA
0	The cancer is only in the epithelium (the top layer of cells lining the inside of the esophagus). It has not started growing into the deeper layers. This stage is also known as high-grade dysplasia. It has not spread to any lymph nodes or distant organs.

	The cancer grade does not apply. The cancer can be located anywhere in the esophagus.
IA	<p>The cancer is growing into the lamina propria or muscularis mucosa (the tissue under the epithelium). It has not spread to any lymph nodes or distant organs.</p> <p>The cancer is grade 1 or an unknown grade and located anywhere in the esophagus.</p>
IB	<p>The cancer is growing into the lamina propria, muscularis mucosa (the tissue under the epithelium), submucosa or the thick muscle layer (muscularis propria). It has not spread to nearby lymph nodes or to distant organs.</p> <p>The cancer can be any grade or an unknown grade and located anywhere in the esophagus.</p>
IIA	<p>The cancer is growing into the thick muscle layer (muscularis propria). It has not spread to nearby lymph nodes or to distant organs.</p> <p>The cancer can be grade 2 or 3 or an unknown grade and located anywhere in the esophagus.</p>
	OR
	<p>The cancer is growing into the outer layer of the esophagus (the adventitia). It has not spread to nearby lymph nodes or to distant organs.</p> <p>The cancer can be any of the following:</p> <ul style="list-style-type: none"> • Any grade and located in the lower esophagus OR • Grade 1 and located in the upper or middle esophagus.
IIB	<p>The cancer is growing into the outer layer of the esophagus (the adventitia). It has not spread to nearby lymph nodes or to distant organs.</p> <p>The cancer can be any of the following:</p> <ul style="list-style-type: none"> • Grade 2 or 3 and located in the upper or middle of the esophagus OR • An unknown grade and located anywhere in the

	<p>esophagus OR</p> <ul style="list-style-type: none"> Any grade and have an unknown location in the esophagus.
	<p>OR</p> <p>The cancer is growing into the lamina propria, muscularis mucosa (the tissue under the epithelium) or into the submucosa. It has spread to 1 or 2 nearby lymph nodes.</p> <p>The cancer can be any grade and located anywhere in the esophagus.</p>
IIIA	<p>The cancer is growing into the lamina propria, muscularis mucosa (the tissue under the epithelium), submucosa or the thick muscle layer (muscularis propria). It has spread to no more than 6 nearby lymph nodes. It has not spread to distant organs.</p> <p>The cancer can be any grade and located anywhere in the esophagus.</p>
IIIB	<p>The cancer is growing into:</p> <ul style="list-style-type: none"> The thick muscle layer (muscularis propria) and spread to no more than 6 nearby lymph nodes OR The outer layer of the esophagus (the adventitia) and spread to no more than 6 nearby lymph nodes OR The pleura (the thin layer of tissue covering the lungs), the pericardium (the thin sac surrounding the heart), or the diaphragm (the muscle below the lungs that separates the chest from the abdomen) and spread to no more than 2 nearby lymph nodes. <p>It has not spread to distant organs.</p> <p>The cancer can be any grade and located anywhere in the esophagus.</p>
IVA	<p>The cancer is growing into:</p> <ul style="list-style-type: none"> The pleura (the thin layer of tissue covering the lungs), the pericardium (the thin sac surrounding the heart), or

	<p>the diaphragm (the muscle below the lungs that separates the chest from the abdomen) and spread to no more than 6 nearby lymph nodes OR</p> <ul style="list-style-type: none"> • The trachea (windpipe), the aorta (the large blood vessel coming from the heart), the spine, or other crucial structures and no more than 6 nearby lymph nodes OR • Any layers of the esophagus and spread to 7 or more nearby lymph nodes. <p>It has not spread to distant organs.</p> <p>The cancer can be any grade and located anywhere in the esophagus.</p>
IVB	The cancer has spread to distant lymph nodes and/or other organs. such as the liver and lungs. The cancer can be any grade and located anywhere in the esophagus.

Adenocarcinoma stages

The location of the cancer in the esophagus does not affect the stage of adenocarcinomas.

AJCC Stage	Stage description
	ADENOCARCINOMA
0	<p>The cancer is only in the epithelium (the top layer of cells lining the inside of the esophagus). It has not started growing into the deeper layers. This stage is also known as high-grade dysplasia. It has not spread to any lymph nodes or distant organs.</p> <p>The cancer grade does not apply.</p>
IA	<p>The cancer is growing into the lamina propria or muscularis mucosa (the tissue under the epithelium). It has not spread to any lymph nodes or distant organs.</p> <p>The cancer is grade 1 or an unknown grade.</p>
IB	The cancer is growing into the lamina propria, muscularis

	<p>mucosa (the tissue under the epithelium), or the submucosa. It has not spread to nearby lymph nodes or to distant organs.</p> <p>The cancer can be grade 1 or 2 or an unknown grade.</p>
IC	<p>The cancer is growing into the lamina propria, muscularis mucosa (the tissue under the epithelium), submucosa or the thick muscle layer (muscularis propria). It has not spread to nearby lymph nodes or to distant organs.</p> <p>The cancer can be grade 1, 2 or 3.</p>
IIA	<p>The cancer is growing into the thick muscle layer (muscularis propria). It has not spread to nearby lymph nodes or to distant organs.</p> <p>The cancer can be grade 3 or an unknown grade.</p>
IIB	<p>The cancer is growing into the lamina propria, muscularis mucosa (the tissue under the epithelium), or the submucosa. It has spread to 1 or 2 nearby lymph nodes. It has not spread to distant organs.</p> <p>The cancer can be any grade.</p>
	<p>OR</p> <p>The cancer is growing into the outer layer of the esophagus (the adventitia). It has not spread nearby lymph nodes.</p> <p>The cancer can be any grade.</p>
IIIA	<p>The cancer is growing into the lamina propria, muscularis mucosa (the tissue under the epithelium), the submucosa, or the thick muscle layer (muscularis propria).</p> <p>It has spread to no more than 6 nearby lymph nodes. It has not spread to distant organs.</p> <p>The cancer can be any grade.</p>
IIIB	<p>The cancer is growing into:</p> <ul style="list-style-type: none"> • The thick muscle layer (muscularis propria) and spread to no more than 6 nearby lymph nodes OR

	<ul style="list-style-type: none"> • The outer layer of the esophagus (the adventitia) and spread to no more than 6 nearby lymph nodes OR • The pleura (the thin layer of tissue covering the lungs), the pericardium (the thin sac surrounding the heart), or the diaphragm (the muscle below the lungs that separates the chest from the abdomen) and spread to no more than 2 nearby lymph nodes. <p>It has not spread to distant organs.</p> <p>The cancer can be any grade.</p>
IVA	<p>The cancer is growing into:</p> <ul style="list-style-type: none"> • The pleura (the thin layer of tissue covering the lungs), the pericardium (the thin sac surrounding the heart), or the diaphragm (the muscle below the lungs that separates the chest from the abdomen) and spread to no more than 6 nearby lymph nodes OR • The trachea (windpipe), the aorta (the large blood vessel coming from the heart), the spine, or other crucial structures and no more than 6 nearby lymph nodes OR • Any layers of the esophagus and spread to 7 or more nearby lymph nodes. <p>It has not spread to distant organs.</p> <p>The cancer can be any grade.</p>
IVB	<p>The cancer has spread to distant lymph nodes and/or other organs. such as the liver and lungs. The cancer can be any grade.</p>

Resectable versus unresectable cancer

The AJCC staging system provides a detailed summary of how far an esophagus cancer has spread. But for treatment purposes, doctors are often more concerned about whether the cancer can be removed completely with [surgery](#)⁴

(resected). If, based on where the cancer is located and how far it has spread, it could be removed completely by surgery, it is considered potentially *resectable*. If the cancer has spread too far to be removed completely, it is considered *unresectable*.

As a general rule, all stage 0, I, and II esophageal cancers are potentially resectable. Most stage III cancers are potentially resectable also, even when they have spread to nearby lymph nodes, as long as the cancer has not grown into the trachea (windpipe), the aorta (the large blood vessel coming from the heart), the spine, or other nearby important structures. Unfortunately, many people whose cancer is potentially resectable might not be able to have surgery to remove their cancers because they aren't healthy enough.

Cancers that have grown into nearby structures or that have spread to distant lymph nodes or to other organs are considered unresectable, so treatments other than surgery are usually the best option.

Hyperlinks

1. www.cancer.org/cancer/esophagus-cancer/treating.html
2. www.cancer.org/cancer/esophagus-cancer/about/what-is-cancer-of-the-esophagus.html
3. www.cancer.org/treatment/understanding-your-diagnosis/staging.html
4. www.cancer.org/cancer/esophagus-cancer/treating/surgery.html

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Survival Rates for Esophageal Cancer

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. Talk with your doctor about how these numbers may apply to you, as he or she is familiar with your situation.

What is a 5-year relative survival rate?

A **relative survival rate** compares people with the same type and stage of esophageal cancer to people in the overall population. For example, if the **5-year relative survival rate** for a specific stage of esophageal cancer is 60%, it means that people who have that cancer are, on average, about 60% 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 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 esophageal 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** means that the cancer is only growing in the esophagus. This includes AJCC stage I and some stage II tumors (such as those that are T1, T2, or T3, N0, M0). Stage 0 cancers are not included in these statistics.
- **Regional** means that the cancer has spread to nearby lymph nodes or tissues. This includes T4 tumors and cancers with lymph node spread (N1, N2, or N3).
- **Distant** means that the cancer has spread to organs or lymph nodes away from the main tumor, and includes all M1 (stage IV) cancers.

5-year relative survival rates for esophageal cancer

(Based on people diagnosed with esophageal cancer between 2008 and 2014.)

Stage	5-Year Relative Survival Rate
Localized	45%
Regional	24%
Distant	5%
All SEER stages combined	19%

These survival rates do not separate squamous cell carcinomas from adenocarcinomas, although people with adenocarcinomas are generally thought to have a slightly better prognosis (outlook) overall.

Understanding the numbers

- **People now being diagnosed with esophageal 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.
- **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, overall health, how well the cancer responds to treatment, and other factors will also affect your outlook.

*SEER = Surveillance, Epidemiology, and End Results

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What Should You Ask Your Doctor About Esophageal Cancer?

It's important for you to have honest, open discussions with your cancer care team. They want to answer all your questions, so that you can make informed treatment and life decisions. For instance, consider these questions:

When you're told you have esophageal cancer

- Where is the cancer located?
- Has the cancer spread beyond where it started?
- What is [the cancer's stage \(extent\)](#), and what does that mean?
- Will I need other [tests](#) before we can decide on treatment?
- Do I need to see any other doctors or health professionals?
- If I'm concerned about the costs and insurance coverage for my diagnosis and treatment, who can help me?

When deciding on a treatment plan

- What are my [treatment options](#)¹?
- What do you recommend and why?
- How much experience do you have treating this type of cancer?
- Should I get a [second opinion](#)²? How do I do that? Can you recommend someone?
- What would the goal of the treatment be?
- 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 be like? Where will it be done?
- What risks or side effects are there to the treatments you suggest? Are there things I can do to reduce these side effects?
- How might treatment affect my daily activities? Can I still work full time?
- What are the chances the cancer will recur (come back) with these treatment plans?
- What will we do if the treatment doesn't work or if the cancer recurs?
- What if I have trouble getting to and from my treatments because of transportation problems?

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 asking 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 on nights, holidays, or weekends?
- Do I need to change what I eat during treatment?
- Are there any limits on what I can do?
- Can I exercise during treatment? If so, what kind of exercise should I do, and how often?
- Can you suggest a mental health professional I can see if I start to feel overwhelmed, depressed, or distressed?
- What if I need some social support during treatment because my family lives far away?

After treatment

- Do I need a special diet after treatment?
- Are there any limits on what I can do?
- What other symptoms should I watch for?
- What kind of exercise should I do now?
- What type of follow-up will I need after treatment?
- How often will I need to have follow-up exams and imaging tests?

- Will I need any blood tests?
- How will we know if the cancer has come back? What should I watch for?

Along with these sample questions, be sure to write down some of your own. For instance, you might want more information about recovery times so you can plan your work or activity schedule. You might also want to ask about [clinical trials](#)³ for which you may qualify.

Keep in mind that doctors are not the only ones who can provide you with information. Other health care professionals, such as nurses and social workers, may have the answers to some of your questions. You can find more information about communicating with your health care team in [The Doctor-Patient Relationship](#)⁴.

Hyperlinks

1. www.cancer.org/cancer/esophagus-cancer/treating.html
2. www.cancer.org/treatment/finding-and-paying-for-treatment/choosing-your-treatment-team/seeking-a-second-opinion.html
3. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
4. www.cancer.org/treatment/understanding-your-diagnosis/talking-about-cancer/the-doctor-patient-relationship.html

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Treating Esophagus Cancer

Local treatments

Local treatments treat the tumor in a specific location, without affecting the rest of the body. These treatments are more likely to be useful for earlier stage (less advanced) cancers, although they might also be used in some other situations.

- [Surgery for Esophageal Cancer](#)
- [Radiation Therapy for Esophageal Cancer](#)
- [Endoscopic Treatments for Esophageal Cancer](#)

Systemic treatments

Systemic treatments are drugs, which can be given by mouth or directly into the bloodstream. These are called *systemic therapies* because they travel through your whole system, allowing them to reach cancer cells almost anywhere in the body. Depending on the type of esophageal cancer, several different types of drugs might be used.

- [Chemotherapy for Esophageal Cancer](#)
- [Targeted Therapy for Esophageal Cancer](#)
- [Immunotherapy for Esophageal Cancer](#)

Common treatment approaches

Depending on the [stage of the cancer](#)¹ and other factors, different types of treatment may be combined at the same time or used after one another.

Some of these treatments can also be used as palliative treatment when all the cancer

cannot be removed. Palliative treatment is meant to relieve symptoms, such as pain and trouble swallowing, but it is not expected to cure the cancer.

- [Treating Esophageal Cancer by Stage](#)
- [Treating Recurrent Esophageal Cancer](#)
- [Palliative Therapy for Esophageal Cancer](#)

Who treats esophageal cancer?

Doctors on your cancer treatment team might include:

- A **thoracic surgeon**: a doctor who treats diseases of the chest with surgery
- A **surgical oncologist**: a doctor who uses surgery to treat cancer
- A **radiation oncologist**: a doctor who treats cancer with radiation therapy
- A **medical oncologist**: a doctor who treats cancer with medicines such as chemotherapy or targeted therapy
- A **gastroenterologist**: a doctor who specializes in treatment of diseases of the gastrointestinal (digestive) system

You might have many other specialists on your treatment team as well, including physician assistants (PAs), nurse practitioners (NPs), nurses, psychologists, nutritionists, social workers, and other health professionals.

- [Health Professionals Associated With Cancer Care²](#)

Making treatment decisions

It's important to discuss all treatment options, including their goals and possible side effects, with your doctors to help make the decision that best fits your needs. You may feel that you need to make a decision quickly, but it's important to give yourself time to absorb the information you have learned. Ask your cancer care team questions.

If time permits, it is often a good idea to seek a second opinion. A second opinion can give you more information and help you feel more confident about the treatment plan you choose.

- [What Should You Ask Your Doctor About Esophageal Cancer?³](#)
- [Seeking a Second Opinion⁴](#)

Thinking about taking part in a clinical trial

Clinical trials are carefully controlled research studies that are done to get a closer look at promising new treatments or procedures. Clinical trials are one way to get state-of-the-art cancer treatment. In some cases they may be the only way to get access to newer treatments. They are also the best way for doctors to learn better methods to treat cancer. Still, they're not right for everyone.

If you would like to learn more about clinical trials that might be right for you, start by asking your doctor if your clinic or hospital conducts clinical trials.

- [Clinical Trials⁵](#)

Considering complementary and alternative methods

You may hear about alternative or complementary methods that your doctor hasn't mentioned to treat your cancer or relieve symptoms. These methods can include vitamins, herbs, and special diets, or other methods such as acupuncture or massage, to name a few.

Complementary methods refer to treatments that are used along with your regular medical care. Alternative treatments are used instead of a doctor's medical treatment. Although some of these methods might be helpful in relieving symptoms or helping you feel better, many have not been proven to work. Some might even be harmful.

Be sure to talk to your cancer care team about any method you are thinking about using. They can help you learn what is known (or not known) about the method, which can help you make an informed decision.

- [Complementary and Alternative Medicine⁶](#)

Help getting through cancer treatment

Your cancer care team will be your first source of information and support, but there are other resources for help when you need it. Hospital- or clinic-based support services are an important part of your care. These might include nursing or social work services, financial aid, nutritional advice, rehab, or spiritual help.

The American Cancer Society also has programs and services – including rides to treatment, lodging, and more – to help you get through treatment. Call our National Cancer Information Center at 1-800-227-2345 and speak with one of our trained

specialists.

- [Find Support Programs and Services in Your Area](#)⁷

Choosing to stop treatment or choosing no treatment at all

For some people, when treatments have been tried and are no longer controlling the cancer, it could be time to weigh the benefits and risks of continuing to try new treatments. Whether or not you continue treatment, there are still things you can do to help maintain or improve your quality of life.

Some people, especially if the cancer is advanced, might not want to be treated at all. There are many reasons you might decide not to get cancer treatment, but it's important to talk to your doctors and you make that decision. Remember that even if you choose not to treat the cancer, you can still get supportive care to help with pain or other symptoms.

- [If Cancer Treatments Stop Working](#)⁸
- [Palliative or Supportive Care](#)⁹

The treatment information given here is not official policy of the American Cancer Society and is not intended as medical advice to replace the expertise and judgment of your cancer care team. It is intended to help you and your family make informed decisions, together with your doctor. Your doctor may have reasons for suggesting a treatment plan different from these general treatment options. Don't hesitate to ask him or her questions about your treatment options.

Surgery for Esophageal Cancer

For some earlier stage cancers, surgery can be used to try to remove the cancer and some of the normal surrounding tissue. In some cases, it might be combined with other treatments, such as [chemotherapy](#) and/or [radiation therapy](#).

Esophagectomy

Surgery to remove some or most of the esophagus is called an *esophagectomy*. Often a small part of the stomach is removed as well. The upper part of the esophagus is then connected to the remaining part of the stomach. Part of the stomach is pulled up into the chest or neck to become the new esophagus. How much of the esophagus is removed depends upon the stage of the tumor and where it's located:

- If the cancer is in the lower part of the esophagus (near the stomach) or at the place where the esophagus and stomach meet (the gastroesophageal or GE junction), the surgeon will remove part of the stomach, the part of the esophagus containing the cancer, and about 3 to 4 inches (about 7.6 to 10 cm) of normal esophagus above this. Then the stomach is connected to what is left of the esophagus either high in the chest or in the neck.
- If the tumor is in the upper or middle part of the esophagus, most of the esophagus will need to be removed to be sure to get enough tissue above the cancer. The stomach will then be brought up and connected to the esophagus in the neck. If for some reason the stomach can't be pulled up to attach it to the remaining part of the esophagus, the surgeon may use a piece of the intestine to bridge the gap between the two. When a piece of intestine is used, it must be moved without damaging its blood vessels. If the vessels are damaged, not enough blood will get to that piece of intestine, and the tissue will die.

Esophagectomy techniques

Open esophagectomy: In the standard, open technique, the surgeon operates through one or more large incisions (cuts) in the neck, chest, or abdomen (belly). Many different approaches can be used to remove part of the esophagus.

- For a *transthoracic esophagectomy*, the esophagus is removed with the main incisions in the abdomen and the chest.
- If the main incisions are in the abdomen and neck, it is called a *transhiatal esophagectomy*.
- Some procedures are done through incisions in the neck, chest, and abdomen.

You and your surgeon should discuss in detail the operation planned for you and what you can expect.

Minimally invasive esophagectomy: For some early (small) cancers, the esophagus can be removed through several small incisions instead of large incisions. The surgeon

puts a scope (like a tiny telescope) through one of the incisions to see everything during the operation. Then the surgical instruments go in through other small incisions. To do this type of procedure well, the surgeon needs to be highly skilled and have a great deal of experience removing the esophagus this way. Because it uses smaller incisions, minimally invasive esophagectomy may allow the patient to leave the hospital sooner and recover faster.

No matter which approach is used, esophagectomy is not a simple operation, and it may require a long hospital stay. It is very important to have it done at a center that has a lot of experience treating these cancers and performing these procedures.

If the cancer has not yet spread far beyond the esophagus, removing the esophagus (and nearby lymph nodes) may cure the cancer. Unfortunately, most esophageal cancers are not found early enough for doctors to cure them with surgery.

Lymph node removal

For either type of esophagectomy, nearby lymph nodes are also removed during the operation as well. These are then checked in the lab to see if they contain cancer cells. If the cancer has spread to lymph nodes, the outlook is not as good, and the doctor may recommend other treatments (like [chemotherapy](#) and/or [radiation](#)) after surgery.

Possible risks of esophagectomy

Like most serious operations, surgery of the esophagus has some risks.

- Short-term risks include reactions to anesthesia, excess bleeding, blood clots in the lungs or elsewhere, and infections. Most people will have at least some pain after the operation, which can usually be helped with pain medicines.
- Lung complications are common. Pneumonia may develop, leading to a longer hospital stay, and sometimes even death.
- Some people might have voice changes after the surgery.
- There may be a leak at the place where the stomach (or intestine) is connected to the esophagus, which might require another operation to fix. This is not as common as it used to be because of improvements in surgical techniques.
- Strictures (narrowing) can form where the esophagus is surgically connected to the stomach, which can cause problems swallowing for some patients. To relieve this symptom, these strictures can be expanded during an upper endoscopy procedure.
- After surgery, the stomach may empty too slowly because the nerves that control its contractions can be affected by surgery. This can sometimes lead to frequent

nausea and vomiting.

- After surgery, bile and stomach contents can back up into the esophagus because the ring-shaped muscle that normally controls this (the lower esophageal sphincter) is often removed or changed by the surgery. This can cause symptoms such as heartburn. Sometimes antacids or motility drugs can help relieve these symptoms.

Some complications from this surgery can be life threatening. The risk of dying from this operation is related to the doctor's experience with these procedures. In general, the best outcomes are achieved with surgeons and hospitals that have the most experience. This is why patients should ask the surgeon about his or her experience: how often they operate on the esophagus, how many times they have done this procedure, and what percentage of their patients have died after this surgery. The hospital where the surgery is done is also important, and any hospital that you consider should be willing to show you their survival statistics.

For more general information about surgery as a treatment for cancer, see [A Guide to Cancer Surgery](#)¹.

Surgery for palliative care

Sometimes minor types of surgery are used to help prevent or relieve problems caused by the cancer, instead of trying to cure it. For example, minor surgery can be used to place a feeding tube directly into the stomach or small intestine in people who need help getting enough nutrition. This is discussed in [Palliative Therapy for Esophageal Cancer](#).

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/surgery.html

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Radiation Therapy for Esophageal Cancer

Radiation therapy uses high-energy rays (such as x-rays) or particles to destroy cancer cells. It is often combined with other types of treatment, such as [chemotherapy](#) (chemo) and/or [surgery](#), to treat esophageal cancer. Chemotherapy can make radiation therapy more effective against some esophagus cancers. Using these 2 treatments together is called **chemoradiation** or **chemoradiotherapy**.

When is radiation therapy used for esophagus cancer?

Radiation therapy may be used:

- As part of the main treatment of esophageal cancer in some patients, typically along with chemo (known as *chemoradiation*). This is often used for people who can't have surgery due to poor health or for people who don't want surgery.
- Before surgery (and along with chemo when possible), to try to shrink the cancer and make it easier to remove (called *neoadjuvant treatment*).
- After surgery (and along with chemo when possible), to try to kill any areas of cancer cells that may have been left behind but are too small to see. This is known as *adjuvant therapy*.
- To ease the symptoms of advanced esophageal cancer such as pain, bleeding, or trouble swallowing. This is called [palliative therapy](#).

Types of radiation therapy

There are 2 main types of radiation therapy used to treat esophageal cancer.

External-beam radiation therapy: This is the type of radiation therapy used most often for people with esophageal cancer. The radiation is focused on the cancer from a machine outside the body. It is much like getting an x-ray, but the radiation is more intense. How often and how long the radiation treatments are delivered depends on the reason the radiation is being given and other factors. It can last anywhere from a few days to weeks.

Internal radiation therapy (brachytherapy): For this type of treatment, the doctor passes an endoscope (a long, flexible tube) down the throat to place radioactive material very close to the cancer. The radiation travels only a short distance, so it reaches the tumor but has little effect on nearby normal tissues. The radioactive source is then removed a short time later. Brachytherapy can be given 2 ways:

- For *high-dose rate (HDR) brachytherapy*, the doctor leaves the radioactive material

near the tumor for a few minutes at a time, which may require several treatments.

- In *low-dose rate (LDR) brachytherapy*, a lower dose of radiation is put near the tumor for longer periods (1 or 2 days) at a time. The patient needs to stay in the hospital during this treatment, but it can usually be completed in only 1 or 2 sessions.

Brachytherapy is most often used with more advanced esophageal cancers to shrink tumors so a patient can swallow more easily. This technique cannot be used to treat a very large area, so it is better used as a way to relieve symptoms (and not to try to cure the cancer).

Side effects of radiation therapy

If you are going to get radiation therapy, it's important to ask your doctor beforehand about the possible side effects so you know what to expect. Possible [Side effects](#)¹ of external radiation therapy can include:

- Skin changes in areas getting radiation, ranging from redness to blistering and peeling
- Nausea and vomiting
- Diarrhea
- Fatigue
- Painful sores in the mouth and throat
- Dry mouth or thick saliva
- Pain with swallowing

These side effects are often worse if chemotherapy is given at the same time as radiation.

Most side effects of radiation are temporary, but some less common side effects can be permanent. For example, in some cases radiation can cause a stricture (narrowing) in the esophagus, which might require further treatment. Radiation to the chest can cause lung damage, which may lead to problems breathing and shortness of breath.

If you notice any side effects, talk to your doctor right away so steps can be taken to reduce or relieve them.

See [Radiation Therapy](#)² for more information about how radiation is used to treat cancer..

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html
2. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/radiation.html

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Chemotherapy for Esophageal Cancer

Chemotherapy (chemo) is treatment with anti-cancer drugs.

How is chemotherapy given?

The main way chemo is given for esophageal cancer is called **systemic chemotherapy**. The drugs are injected into your vein or you take them by mouth. These drugs enter your bloodstream and reach most areas of your body.

Doctors give chemo in cycles, with each period of treatment followed by a period of rest to give the body time to recover. Chemotherapy cycles generally last about 2 to 4 weeks, and people usually get at least several cycles of treatment.

When is chemotherapy used for esophageal cancer?

Chemo may be used at different times during treatment for esophageal cancer.

- **Adjuvant chemo:** Chemo can be given *after* [surgery](#). The goal is to kill any cancer cells that may have been left behind during surgery because they were too small to see, as well as cancer cells that might have escaped from the main tumor and settled in other parts of the body (but are too small to see on imaging tests).
- **Neoadjuvant chemo:** For some cancers, chemo is given (often with radiation) *before* surgery to try to shrink the cancer and make surgery easier.
- **Chemo for advanced cancers:** For cancers that have spread to other organs, such as the liver, chemo can also be used to help shrink tumors and relieve symptoms. Although it is not likely to cure the cancer, it often helps people live longer.

Chemo by itself rarely cures esophageal cancer. It is often given together with [radiation therapy](#) (called *chemoradiation* or *chemoradiotherapy*). Chemoradiation is often used before surgery. This can lower the chance of the cancer coming back and help people live longer than using surgery alone. Chemoradiation is also sometimes given after surgery, but it isn't clear that it is as helpful as giving it before surgery.

Drugs used to treat esophageal cancer

Some common drugs and drug combinations used to treat esophageal cancer include:

- Carboplatin and paclitaxel (Taxol) (which may be combined with radiation)
- Cisplatin and 5-fluorouracil (5-FU) (often combined with radiation)

- ECF: epirubicin (Ellence), cisplatin, and 5-FU (especially for gastroesophageal junction tumors)
- DCF: docetaxel (Taxotere), cisplatin, and 5-FU
- Cisplatin with capecitabine (Xeloda)
- Oxaliplatin and either 5-FU or capecitabine
- Irinotecan (Captoran)
- Trifluridine and tipiracil (Lonsurf), a combination drug in pill form

For some esophagus cancers, chemo may be used along with the targeted drug trastuzumab (Herceptin) or ramucirumab (Cyramza). For more information on these drugs, see [Targeted Therapy for Esophageal Cancer](#).

Possible side effects of chemotherapy

Chemo drugs attack cells that are dividing quickly, which is why they work against cancer cells. But other cells, such as those in the bone marrow (where new blood cells are made), the lining of the mouth and intestines, and the hair follicles, also divide quickly. These cells are also likely to be affected by chemo, which can lead to side effects. [Side effects](#)¹ depend on the specific drugs used, their dose, and the length of treatment. Common side effects of chemo include:

- Nausea and vomiting
- Loss of appetite
- Hair loss
- Mouth sores
- Diarrhea or constipation
- Low blood counts
- Increased chance of infection (from having too few white blood cells)
- Easy bleeding or bruising (from having too few blood platelets)
- Fatigue (from having too few red blood cells)

Along with these, some side effects are specific to certain drugs. For example:

- **Hand-foot syndrome.** During treatment with capecitabine or 5-FU (when given as an infusion), this can start out as redness in the hands and feet, and then progress to pain and sensitivity in the palms and soles. If it worsens, blistering or skin peeling can occur, sometimes leading to painful sores. It's important to tell your doctor right away about any early symptoms, such as redness or sensitivity, so that steps can

be taken to keep things from getting worse.

- **Neuropathy (nerve damage).** This is a common side effect of oxaliplatin, cisplatin, docetaxel, and paclitaxel. Symptoms include numbness, tingling, and even pain in the hands and feet. Oxaliplatin can also cause intense sensitivity to cold in the throat and esophagus (the tube connecting the throat to the stomach) and the palms of the hands. This can cause problems swallowing liquids or holding a cold glass. If you will be getting oxaliplatin, talk with your doctor about side effects beforehand, and let him or her know right away if you develop numbness and tingling or other side effects.
- **Allergic or sensitivity reactions.** Some people can have reactions while getting the drug oxaliplatin. Symptoms can include skin rash, chest tightness and trouble breathing, back pain, or feeling dizzy, lightheaded, or weak. Be sure to tell your nurse right away if you notice any of these symptoms while you are getting chemo.
- **Diarrhea.** This is a common side effect with many of these drugs, but can be particularly bad with irinotecan. It needs to be treated right away — at the first loose stool — to prevent severe dehydration. This often means taking drugs like loperamide (Imodium). If you are on a chemo drug that is likely to cause diarrhea, your doctor will give you instructions on what drugs to take and how often to take them to control this symptom.

Most of these side effects tend to go away after treatment is finished. Some, such as hand and foot numbness, may last for a long time. There are often ways to lessen these side effects. For example, you can be given drugs to help prevent or reduce nausea and vomiting.

Be sure to discuss any questions about side effects with your cancer care team, and report any side effects or changes you notice while getting chemo so that they can be treated promptly. In some cases, the doses of the chemo drugs may need to be reduced or treatment may need to be delayed or stopped to prevent the effects from getting worse.

People with esophageal cancer have often already lost weight before the cancer was found. Treatments such as chemo, radiation, and chemoradiation can cause painful sores in the mouth and throat. These can make it hard to eat well enough to get good nutrition, making weight loss worse. Some people with esophageal cancer may need to have a feeding tube, usually called a *jejunostomy tube* (or J-tube), put in place before treatment. This is done through a small hole in the skin over the abdomen during a minor operation. A J-tube lets liquid nutrition be put directly into the small intestine to prevent further weight loss and improve nutrition. This can make treatment easier to

tolerate. Feeding tubes can easily be removed when they are no longer needed. Less often, the tube is placed into the stomach instead. This is known as a *gastrostomy tube* or G-tube.

For more information about chemo, see [Chemotherapy](#)².

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html
2. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/chemotherapy.html

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Targeted Therapy for Esophageal Cancer

As researchers have learned more about the changes in cells that cause cancer, they have developed newer drugs that specifically target these changes. Targeted drugs work differently from standard [chemotherapy](#) drugs. They sometimes work when standard chemo drugs don't, and they often have different side effects. They can be used either along with chemo or by themselves if chemo is no longer working.

Trastuzumab

A small number of esophagus cancers have too much of the HER2 protein on the surface of their cells, which can help cancer cells to grow. Having too much of this protein is caused by having too many copies of the *HER2* gene.

A drug that targets the HER2 protein, known as trastuzumab (Herceptin), may help treat these cancers when used along with chemotherapy. If you have esophageal cancer and can't have surgery, your doctor may have your tumor biopsy samples tested for the HER2 protein or gene. People whose cancers have normal amounts of the HER2 protein or gene are very unlikely to be helped by this drug.

Trastuzumab is injected into a vein (IV) once every 3 weeks along with chemo. The optimal length of time to give it is not yet known.

Most of the [side effects](#)¹ of trastuzumab are relatively mild and can include fever and chills, weakness, nausea, vomiting, cough, diarrhea, and headache. These occur less often after the first dose. This drug can also sometimes cause heart damage, leading to the heart muscle becoming weak. This drug is not given with certain chemo drugs called *anthracyclines*, such as epirubicin (Ellence) or doxorubicin (Adriamycin), because it can further increase the risk of heart damage if they are given together. Before starting treatment with this drug, your doctor may test your heart function with an echocardiogram or a MUGA scan.

Ramucirumab

For cancers to grow and spread, they need to create new blood vessels so that the tumors get blood and nutrients. One of the proteins that tells the body to make new blood vessels is called VEGF. VEGF binds to cell surface proteins called receptors to act. Ramucirumab (Cyramza™) is a monoclonal antibody that binds to a receptor for

VEGF. This keeps VEGF from binding to the receptor and signaling the body to make more blood vessels. This can help slow or stop the growth and spread of cancer.

Ramucirumab is used to treat cancers that start at the gastroesophageal (GE) junction when they are advanced (the GE junction is the place where the stomach and esophagus meet). It is most often used after another drug stops working.

This drug is given as infusion into a vein (IV) every 2 weeks.

The most common side effects of this drug are high blood pressure, headache, and diarrhea. Rare but possibly serious side effects include blood clots, severe bleeding, holes forming in the stomach or intestines (called perforations), and problems with wound healing. If a hole forms in the stomach or intestine it can lead to severe infection and may require surgery to correct.

For more information about what to expect when taking these drugs, see [Targeted Cancer Therapy](#)².

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html
2. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/targeted-therapy.html

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Kleinberg L, Kelly R, Yang S, Wang JS, Forastiere AA. Chapter 74 – Cancer of the Esophagus. In: Niederhuber JE, Armitage JO, Dorshow JH, Kastan MB, Tepper JE, eds. *Abeloff's Clinical Oncology*. 5th ed. Philadelphia, Pa. Elsevier: 2014.

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Immunotherapy for Esophageal Cancer

Immunotherapy is the use of medicines that help a person's own immune system find and destroy cancer cells. It can be used to treat some people with esophagus cancer.

Immune checkpoint inhibitors

An important part of the immune system is its ability to keep itself from attacking normal cells in the body. To do this, it uses “checkpoints” – molecules on immune cells that need to be turned on (or off) to start an immune response. Cancer cells sometimes use these checkpoints to avoid being attacked by the immune system. But newer drugs that target these checkpoints hold a lot of promise as cancer treatments.

Pembrolizumab (Keytruda) targets PD-1, a protein on immune system cells called T cells that normally helps keep these cells from attacking other cells in the body. By blocking PD-1, this drug boosts the immune response against cancer cells. This can shrink some tumors or slow their growth.

This drug can be used in some people with advanced cancer of the gastroesophageal junction (GEJ) who have had at least 2 prior treatments, including [chemotherapy](#).

Pembrolizumab is given as an intravenous (IV) infusion, typically every 3 weeks.

Possible side effects

Side effects of this drug can include:

- Feeling tired or weak
- Fever
- Cough

- Nausea
- Itching
- Skin rash
- Loss of appetite
- Muscle or joint pain
- Shortness of breath
- Constipation or diarrhea

Other, more serious side effects occur less often:

Infusion reactions: Some people might have an infusion reaction while getting this drug. This is like an allergic reaction, and can include fever, chills, flushing of the face, rash, itchy skin, feeling dizzy, wheezing, and trouble breathing. It's important to tell your doctor or nurse right away if you have any of these symptoms while getting this drug.

Autoimmune reactions: This drug works by basically removing the brakes on the body's immune system. Sometimes the immune system starts attacking other parts of the body, which can cause serious or even life-threatening problems in the lungs, intestines, liver, hormone-making glands, kidneys, skin, or other organs.

It's very important to report any new side effects to your health care team promptly. If serious side effects do occur, treatment may need to be stopped and you may get high doses of corticosteroids to suppress your immune system.

To learn more about how immunotherapy drugs are used to treat cancer, see [Cancer Immunotherapy](#)¹.

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects](#)².

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/immunotherapy.html
2. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects.html

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Endoscopic Treatments for Esophageal Cancer

Several types of treatment for esophageal cancer can be done by passing an endoscope (a long, flexible tube) down the throat and into the esophagus. Some of these treatments may be used to try to cure very early stage cancers, or even to prevent them from developing by treating Barrett's esophagus or dysplasia. Other treatments are used mainly to help relieve symptoms from more advanced esophageal cancers that can't be removed.

Endoscopic mucosal resection

Endoscopic mucosal resection (EMR) can be used for dysplasia (pre-cancer) and some small, very early-stage cancers of the esophagus.

In this technique, a piece of the inner lining of the esophagus is removed with instruments passed down the endoscope. After the abnormal tissue is removed, patients take drugs called *proton pump inhibitors* to suppress acid production in the stomach. This can help keep the disease from returning.

The most common side effect of EMR is bleeding in the esophagus, which is usually not serious. Less common but more serious side effects can include esophageal strictures (areas of narrowing) that might need to be treated by with dilation, and puncture (perforation) of the wall of the esophagus.

Photodynamic therapy

Photodynamic therapy (PDT) can be used to treat Barrett's esophagus, esophageal pre-cancers (dysplasia), and some very early stage esophageal cancers. It is also often used to treat large cancers that are blocking the esophagus. In this situation, PDT is not meant to destroy all the cancer, but to kill enough of the cancer to improve a person's ability to swallow.

For this technique, a light-activated drug called porfimer sodium (Photofrin[®]) is injected into a vein. Over the next couple of days, the drug is more likely to collect in cancer cells than in normal cells. A special type of laser light is then focused on the cancer through an endoscope. This light changes the drug into a new chemical that can kill the cancer cells. The dead cells may then be removed a few days later during an upper endoscopy. This process can be repeated if needed.

The advantage of PDT is that it can kill cancer cells with very little harm to normal cells. But because the chemical must be activated by light, it can only kill cancer cells near the inner surface of the esophagus – those that can be reached by the light. This light cannot reach cancers that have spread deeper into the esophagus or to other organs.

PDT can cause swelling in the esophagus for a few days, which may lead to some problems swallowing. Strictures (areas of extreme narrowing) can also happen. These often need to be treated by with dilation. Other possible side effects include bleeding or holes in the esophagus.

Some of this drug also collects in normal cells in the body, such as skin and eye cells. This can make you very sensitive to sunlight or strong indoor lights. Too much exposure can cause serious skin reactions, which is why doctors recommend staying out of any strong light for 4 to 6 weeks after the injection.

This treatment can cure some very early esophageal cancers that have not spread to deeper tissues. But this procedure destroys the tissue, so it can be hard to be certain that the cancer hasn't spread into deeper layers of the esophagus. Since the light used in PDT can only reach those cancer cells near the surface of the esophagus, cells of deeper cancers could be left behind, and grow into a new tumor. People getting this treatment need to have follow-up endoscopies to make sure the cancer hasn't grown back. They also need to stay on a drug called a proton pump inhibitor to stop stomach acid production.

For more information on this technique, see [Photodynamic Therapy](#)¹.

Radiofrequency ablation (RFA)

This procedure can be used to treat dysplasia in areas of Barrett's esophagus. It may lower the chance of cancer developing in that area.

A balloon containing many small electrodes is passed into an area of Barrett's esophagus through an endoscope. The balloon is then inflated so that the electrodes are in contact with the inner lining of the esophagus. Then an electrical current is passed through it, which kills the cells in the lining by heating them.

Over time, normal cells will grow in to replace the Barrett's cells. People getting this treatment need to stay on drugs to block stomach acid production after the procedure. Endoscopy (with biopsies) is then done periodically to watch for any further changes in the lining of the esophagus. Rarely, RFA can cause strictures (narrowing) or bleeding in the esophagus.

Treatments to help keep the esophagus open

Laser ablation

This technique can be used to help open the esophagus when it is blocked by an advanced cancer. This can help improve problems swallowing.

A laser beam is aimed at the cancer through the tip of an endoscope to destroy the cancerous tissue. The laser is called a *neodymium: yttrium-aluminum-garnet (Nd:YAG) laser*. Laser endoscopy can be helpful, but the cancer often grows back, so the procedure may need to be repeated every month or two.

Argon plasma coagulation

This technique is like laser ablation, but it uses argon gas and a high-voltage spark delivered through the tip of an endoscope. The spark causes the gas to reach very high temperatures, which can then be aimed at the tumor. This approach is used to help unblock the esophagus for people who have trouble swallowing.

Electrocoagulation (electrofulguration)

For this treatment, a probe is passed down into the esophagus through an endoscope to burn the tumor off with electric current. In some cases, this treatment can help relieve esophageal blockage.

Esophageal stent

A stent is a device that, once in place, self-expands (opens up) to become a tube that helps hold the esophagus open. Stents are made of mesh material. Most often stents are made of metal, but they can also be made of plastic. Using endoscopy, a stent can be placed into the esophagus across the length of the tumor.

How well the stent works depends on the type that is used and where it is placed. Stents will relieve trouble swallowing for most people. They are often used after other endoscopic treatments to help keep the esophagus open.

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/photodynamic-therapy.html

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Treating Esophageal Cancer by Stage

Most of the time, the initial treatment of esophagus cancer is based on its [stage](#)¹— how far it has spread. But other factors, such as a person's overall health, can also affect treatment options. Talk to your doctor if you have any questions about the treatment plan he or she recommends.

Treating stage 0 esophagus cancer

A stage 0 tumor is not true cancer. It contains abnormal cells called *high-grade dysplasia* and is a type of pre-cancer. The abnormal cells look like cancer cells, but they are only found in the inner layer of cells lining the esophagus (the epithelium). They

have not grown into deeper layers of the esophagus. This stage is often diagnosed when someone with Barrett's esophagus has a routine biopsy.

Options for treatment typically include [endoscopic treatments](#) such as photodynamic therapy (PDT), radiofrequency ablation (RFA), or endoscopic mucosal resection (EMR). Long-term follow-up with frequent upper endoscopy is very important after endoscopic treatment to continue to look for pre-cancer (or cancer) cells in the esophagus.

Another option is to have the abnormal part of the esophagus removed with an [esophagectomy](#). This is a major operation, but one advantage of this approach is that it doesn't require lifelong follow-up with endoscopy.

Treating stage I esophagus cancer

In this stage the cancer has grown into some of the deeper layers of the esophagus wall (past the innermost layer of cells) but has not reached the lymph nodes or other organs.

T1 cancers: Some very early stage I cancers that are only in a small area of the mucosa and haven't grown into the submucosa (T1a tumors) can be treated with [EMR](#), usually followed by some type of endoscopic procedure to destroy any remaining abnormal areas in the esophagus lining.

But most patients with T1 cancers who are healthy enough will have [surgery](#) (esophagectomy) to remove the part of their esophagus that contains the cancer. [Chemotherapy](#) and [radiation therapy](#) (chemoradiation) may be recommended after surgery if there are signs that all of the cancer may not have been removed.

T2 cancers: For patients with cancers that have invaded the muscularis propria (T2 tumors), treatment with chemoradiation is often given before surgery. Surgery alone may be an option for smaller tumors (less than 2 cm). If the cancer is in the part of the esophagus near the stomach, chemo without radiation may be given before surgery.

If the cancer is in the upper part of the esophagus (in the neck), chemoradiation may be recommended as the main treatment instead of surgery. For some patients, this may cure the cancer. Close follow-up with endoscopy is very important in looking for possible signs of cancer returning.

People with stage I cancers who can't have surgery because they have other serious health problems, or who don't want surgery, may be treated with EMR and endoscopic ablation, chemo, radiation therapy, or both together (chemoradiation).

Treating stages II and III cancer of the esophagus

Stage II includes cancers that have grown into the main muscle layer of the esophagus or into the connective tissue on the outside of the esophagus. This stage also includes some cancers that have spread to 1 or 2 nearby lymph nodes.

Stage III includes some cancers that have grown through the wall of the esophagus to the outer layer, as well as cancers that have grown into nearby organs or tissues. It also includes most cancers that have spread to nearby lymph nodes.

For people who are healthy enough, treatment for these cancers is most often chemoradiation followed by [surgery](#). Patients with adenocarcinoma at the place where the stomach and esophagus meet (the gastroesophageal junction) are sometimes treated with chemo (without radiation) followed by surgery. Surgery alone may be an option for some small tumors.

If surgery is the first treatment, chemoradiation may be recommended afterward, especially if the cancer is an adenocarcinoma or if there are signs that some cancer may have been left behind.

In some instances (especially for cancers in the upper part of the esophagus), chemoradiation may be recommended as the main treatment instead of surgery. Patients who do not have surgery need close follow-up with endoscopy to look for possible signs of remaining cancer. Unfortunately, even when cancer cannot be seen, it can still be present below the inner lining of the esophagus, so close follow-up is very important.

Patients who cannot have surgery because they have other serious health problems are usually treated with chemoradiation.

Treating stage IV cancer of the esophagus

Stage IV esophageal cancer has spread to distant lymph nodes or to other distant organs.

In general, these cancers are very hard to get rid of completely, so surgery to try to cure the cancer is usually not a good option. Treatment is used mainly to help keep the cancer under control for as long as possible and to relieve any symptoms it is causing.

[Chemo](#) may be given (possibly along with [targeted drug therapy](#)) to try to help patients feel better and live longer, but the benefit of giving chemo is not clear. [Radiation therapy](#)

or other treatments may be used to help with pain or trouble swallowing.

For cancers that started at the gastroesophageal (GE) junction, treatment with the targeted drug ramucirumab (Cyramza) may be an option at some point. It can be given by itself or combined with chemo. Another option at some point might be treatment with the [immunotherapy](#) drug pembrolizumab (Keytruda).

Some people prefer not to have treatments that have serious side effects and choose to receive only treatments that will help keep them comfortable and add to their quality of life. For more information on treatments that may be helpful, see [Palliative Therapy for Esophageal Cancer](#).

Hyperlinks

1. www.cancer.org/cancer/esophagus-cancer/detection-diagnosis-staging/staging.html

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Treating Recurrent Esophageal Cancer

Recurrent means the cancer has come back after treatment. The recurrence may be local (near the area of the initial tumor), or it may be in distant organs.

Local recurrence

If the cancer was initially treated endoscopically (such as with endoscopic mucosal resection or photodynamic therapy), it most often comes back in the esophagus. This type of recurrence is often treated with [surgery to remove the esophagus](#). If the patient isn't healthy enough for surgery, the cancer may be treated with [chemotherapy](#), [radiation](#), or both.

If cancer recurs locally (such as in nearby lymph nodes), radiation and/or chemotherapy may be used after the esophagus has been removed. Radiation may not be an option if it was already given as part of the initial treatment. If chemotherapy was given before, it is usually still possible to give more chemotherapy. Sometimes the same drugs that were used before are given again, but often other drugs are used. Other treatment options for local recurrence after surgery might include more surgery or other treatments to help prevent or relieve symptoms.

If the cancer recurs locally after chemoradiation (without surgery), esophagectomy might be an option if the person is healthy enough. If surgery is not possible, treatment options might include chemotherapy or other treatments to help prevent or relieve

symptoms.

Distant recurrence

Esophageal cancer that recurs in distant parts of the body is treated like a stage IV cancer. (See [Treating Esophageal Cancer by Stage](#) for more details.)

Your options depend on which, if any, drugs you received before the cancer came back and how long ago you received them, as well as on your health. Radiation therapy may be an option to relieve symptoms as well.

Recurrent cancers can often be hard to treat, so you might also want to ask your doctor if you might be eligible for [clinical trials](#)¹ involving newer treatments.

Managing symptoms of recurrent esophageal cancer

People with recurrent esophageal cancer will usually be given treatments aimed at preventing or relieving symptoms as needed. Learn more in [Palliative Therapy for Esophageal Cancer](#).

For more on dealing with cancer recurrence, see [Understanding Recurrence](#)².

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
2. www.cancer.org/treatment/survivorship-during-and-after-treatment/understanding-recurrence/coping-with-cancer-recurrence.html

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Palliative Therapy for Esophageal Cancer

Palliative therapy is treatment aimed at preventing or relieving symptoms instead of trying to cure the cancer. The main purpose of this type of treatment is to improve the patient's comfort and quality of life.

Several types of treatment can be used to help prevent or relieve symptoms of esophageal cancer. In some cases, they are given along with other treatments that are intended to cure the cancer. In other cases, palliative treatments are given when a cure is not possible.

Esophageal dilation

This procedure is used to stretch out an area of the esophagus that is narrowed or blocked to allow better swallowing.

A small balloon-like device or a device shaped like a cylinder is passed down the throat and pushed through the narrowed area to stretch it out. This can be repeated if needed. Before the procedure, your doctor may give you a sedative to help you relax and may numb your throat by spraying it with a local anesthetic.

There is a small risk of bleeding or tearing a hole in the esophagus (called a *perforation*) with this procedure, which could require surgery or other treatments to fix. The esophagus typically stays open only a few weeks after dilation, so this is often followed by other treatments (such as placing a stent) to help keep the esophagus open.

Other endoscopic procedures

Several types of endoscopic procedures can be used to help keep the esophagus open in people who are having trouble swallowing. These techniques are described in more detail in [Endoscopic Treatments for Esophageal Cancer](#). Procedures that may be used include:

- Esophageal stent placement
- Photodynamic therapy
- Electrocoagulation
- Laser ablation
- Argon plasma coagulation

Radiation therapy

External-beam radiation can often help relieve some of the symptoms from advanced esophageal cancer, including pain and problems swallowing. Radiation is often used for cancer that has spread to the brain or spine, but it is also useful in treating problems with swallowing from a narrowed or blocked esophagus.

If an area had been treated with external beam radiation therapy earlier, it might not be able to be treated that way again. In that case, brachytherapy may be an option. Brachytherapy is especially useful in helping to relieve a blocked esophagus. See [Radiation Therapy for Esophageal Cancer](#) for more details.

Chemotherapy and targeted therapy

When used to help treat advanced esophageal cancer, [chemotherapy](#) and [targeted therapy](#) can both be considered a type of palliative therapy because they are intended

to help slow the growth of the cancer and relieve symptoms from the cancer, as opposed to trying to cure it.

Pain management

Pain control is an important concern for people with cancer. There are many ways to treat cancer pain. People with cancer should let their cancer care team know right away if they are in pain. The cancer care team can provide medicines and other palliative treatments to relieve pain and other symptoms. See [Cancer Pain](#)¹ to learn more.

Hyperlinks

1. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/pain.html

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After Esophagus Cancer Treatment

Living as a Cancer Survivor

For many people, cancer treatment often raises questions about next steps as a survivor.

- [Living as an Esophagus Cancer Survivor](#)

Cancer Concerns After Treatment

Treatment may remove or destroy the cancer, but it is very common to worry about the risk of another cancer, the cancer coming back, or treatment no longer working.

- [Can I Get Another Cancer After Having Esophagus Cancer?](#)

Living as an Esophagus Cancer Survivor

For some people with esophagus cancer, treatment can remove or destroy the cancer. The end of treatment can be both stressful and exciting. You may be relieved to finish treatment, but yet it's hard not to worry about cancer coming back. (When cancer comes back after treatment, it is called *recurrence*.) This is very common concern if you've had cancer.

For other people, the esophagus cancer might never go away completely. Some people

may get regular treatments with chemotherapy, radiation therapy, or other treatments to try and help keep the cancer in check. Learning to live with cancer that does not go away can be difficult and very stressful. It has its own type of uncertainty.

Life after esophageal cancer means returning to some familiar things and also making some new choices.

Follow-up care

Even if you have completed treatment, you will likely have follow-up visits with your doctor for many years. It's very important to go to all your follow-up appointments. During these visits, your doctors will ask if you are having any problems and may do exams and lab tests or imaging tests to look for signs of cancer or treatment side effects.

Some treatment side effects might last a long time or might not even show up until years after you have finished treatment. Your doctor visits are a good time to ask questions and talk about any changes or problems you notice or concerns you have. It's very important to report any new symptoms to the doctor right away, especially if they include trouble swallowing or chest pain. Early treatment can relieve many symptoms and improve your quality of life.

To some extent, the frequency of follow up visits and tests will depend on the stage of your cancer, the treatment you received, and the chance of it coming back.

Survivors of esophageal cancer should also follow the [American Cancer Society guidelines for the early detection of cancer, such as those for breast, cervical, lung, and prostate cancer¹](#).

Ask your doctor for a survivorship care plan

Talk with your doctor about developing a survivorship care plan for you. This plan might include:

- A suggested schedule for follow-up exams and tests
- A schedule for other tests you might need in the future, such as early detection (screening) tests for other types of cancer, or tests to look for long-term health effects from your cancer or its treatment
- A list of possible late- or long-term side effects from your treatment, including what to watch for and when you should contact your doctor

- Diet and physical activity suggestions
- Reminders to keep your appointments with your primary care provider (PCP), who will monitor your general health care

Help for trouble swallowing, nutrition, and pain

Palliative treatments are aimed at helping to relieve the symptoms of esophagus cancer, rather than trying to cure the cancer. In some cases they are used along with other treatments that focus on curing the cancer, but palliative treatments are often used in people with advanced cancer to help improve their quality of life.

Cancer of the esophagus often causes trouble swallowing, which can lead to weight loss and weakness due to poor nutrition. A team of doctors and nutritionists can work with you to provide nutritional supplements and information about your individual nutritional needs. This can help you maintain your weight and nutritional intake. For more information and nutrition tips for during and after cancer treatment, see [Nutrition for the Person With Cancer During Treatment](#)².

There are many ways to control pain caused by cancer of the esophagus. If you have pain, tell your cancer care team right away, so they can give you prompt and effective pain management. For more information, see [Cancer Pain](#)³.

For more information on palliative treatments, see [Palliative Therapy for Esophageal Cancer](#)⁴.

Keeping health insurance and copies of your medical records

Even after treatment, it's very important to keep [health insurance](#)⁵. Tests and doctor visits cost a lot, and even though no one wants to think of their cancer coming back, this could happen.

At some point after your cancer treatment, you might find yourself seeing a new doctor who doesn't know about your medical history. It's important to keep copies of your medical records to give your new doctor the details of your diagnosis and treatment. Learn more in [Keeping Copies of Important Medical Records](#)⁶.

Lifestyle changes after cancer of the esophagus

You can't change the fact that you have had cancer. What you can change is how you

live the rest of your life – making choices to help you stay healthy and feel as well as you can. This can be a time to look at your life in a new way. Maybe you're thinking about how to improve your health over the long term. Some people even start during cancer treatment.

Making healthier choices

For many people, a diagnosis of cancer helps them focus on their health in ways they may not have thought much about in the past. Are there things you could do that might make you healthier? Maybe you could try to [eat better or get more exercise](#)⁷. Maybe you could cut down on alcohol, or [give up tobacco](#)⁸. Even things like keeping your stress level under control may help. Now is a good time to think about making changes that can have positive effects for the rest of your life. You will feel better and you will also be healthier.

You can start by working on those things that worry you most. Get help with those that are harder for you. For instance, if you are thinking about [quitting smoking](#)⁹ and need help, call the American Cancer Society for information and support at 1-800-227-2345.

Eating better

Eating right can be hard for anyone, but it can get even tougher during and after cancer treatment. This is especially true for cancers of the esophagus. The cancer or its treatment may affect how you swallow or cause other problems. [Nausea](#)¹⁰ can be a problem from some treatments. You may [not feel like eating](#)¹¹ and [lose weight when you don't want to](#)¹². All of these things can be very frustrating.

During treatment: Many people lose weight or have taste problems during treatment. If this happens to you, do the best you can. Eat whatever appeals to you. Eat what you can, when you can. Now is not the time to restrict your diet. You may find it helps to eat small portions every 2 to 3 hours. Try to keep in mind that these problems usually improve over time. You may want to ask your cancer team about seeing a dietitian, an expert in nutrition who can give you ideas on how to optimize your weight and diet during treatment.

After treatment: Many patients have trouble with reflux after treatment. It may help to stay upright for several hours after eating.

In some patients, the stomach was used to replace all or part of the esophagus. This can mean that the stomach can't hold food for digestion like it did before. The food that is swallowed quickly passes into the intestine, leading to symptoms of diarrhea,

sweating, and flushing after eating. This is called the *dumping syndrome*. This may mean you have to change your diet and how you eat. For example, you may need to eat smaller amounts of food more often.

Your health care team can help you adjust your diet if you are having problems eating.

To help maintain good health, survivors should also:

- Achieve and maintain a healthy weight
- Adopt a physically active lifestyle
- Consume a healthy diet, with an emphasis on plant foods
- Limit consumption of alcohol to no more than 1 drink per day for women or 2 per day for men

These steps may also lower the risk of some cancers, as well as having many other health benefits.

For more information, see [Nutrition and Physical Activity During and After Cancer Treatment: Answers to Common Questions](#)¹³.

Rest, fatigue, and exercise

Extreme tiredness, called *fatigue*, is very common in people treated for cancer. This is not a normal tiredness, but a bone-weary exhaustion that often doesn't get better with rest. For some people, fatigue lasts a long time after treatment, and can make it hard for them to be active and do other things they want to do. But exercise can help reduce fatigue. Studies have shown that patients who follow an exercise program tailored to their personal needs feel better physically and emotionally and can cope better, too.

If you were sick and not very active during treatment, it's normal for your fitness, endurance, and muscle strength to decline. Any plan for physical activity should fit your own situation. A person who has never exercised will not be able to take on the same amount of exercise as someone who plays tennis twice a week. If you haven't been active in a few years, you will have to start slowly – maybe just by taking short walks.

Talk with your health care team before starting any exercises. Get their opinion about your exercise plans. Then, try to find an exercise buddy so you're not doing it alone. Having family or friends involved when starting a new activity program can give you that extra boost of support to keep you going when the push just isn't there.

If you are very tired, you will need to learn to balance activity with rest. It's OK to rest

when you need to. Sometimes it's really hard for people to allow themselves to rest when they are used to working all day or taking care of a household, but this is not the time to push yourself too hard. Listen to your body and rest when you need to. (For more information on dealing with fatigue, see [Cancer-related Fatigue](#)¹⁴ and [Anemia in People With Cancer](#)¹⁵.)

Keep in mind exercise can improve your physical and emotional health.

- It improves your cardiovascular (heart and circulation) fitness.
- Along with a good diet, it will help you get to and stay at a healthy weight.
- It makes your muscles stronger.
- It reduces fatigue and helps you have more energy.
- It can help lower anxiety and depression.
- It can make you feel happier.
- It helps you feel better about yourself.

And long term, we know that getting regular physical activity plays a role in helping to lower the risk of some cancers, as well as having other health benefits.

How might having esophagus cancer affect your emotional health?

During and after treatment, you may find yourself overcome with many different emotions. This happens to a lot of people.

You may find yourself thinking about death and dying. Or maybe you're more aware of the effect the cancer has on your family, friends, and career. You may take a new look at your relationships with those around you. Unexpected issues may also cause concern. For instance, you might be stressed by financial concerns resulting from your treatment. You might also see your health care team less often after treatment and have more time on your hands. These changes can make some people anxious.

Almost everyone who is going through or has been through cancer can benefit from getting some type of support. You need people you can turn to for strength and comfort. Support can come in many forms: family, friends, cancer support groups, church or spiritual groups, [online support communities](#)¹⁶, or one-on-one counselors. What's best for you depends on your situation and personality. Some people feel safe in peer-support groups or education groups. Others would rather talk in an informal setting, such as church. Others may feel more at ease talking one-on-one with a trusted friend or counselor. Whatever your source of strength or comfort, make sure you have a place to go with your concerns.

The cancer journey can feel very lonely. It's not necessary or good for you to try to deal with everything on your own. And your friends and family may feel shut out if you do not include them. Let them in, and let in anyone else who you feel may help. If you aren't sure who can help, call your American Cancer Society at 1-800-227-2345 and we can put you in touch with a [group or resource](#)¹⁷ that may work for you. You can also see [Coping With Cancer](#)¹⁸ or [Life After Cancer](#)¹⁹ for more information.

Can I lower the risk of my esophagus cancer progressing or coming back?

Most people want to know if there are specific lifestyle changes they can make to reduce their risk of their cancer progressing or coming back. Unfortunately, for most cancers there isn't much solid evidence to guide people. This doesn't mean that nothing will help – it's just that for the most part this is an area that hasn't been well studied. Most studies have looked at lifestyle changes as ways of preventing cancer in the first place, not slowing it down or preventing it from coming back.

At this time, not enough is known about esophagus cancer to say for sure if there are things you can do that will be helpful. Tobacco and alcohol use have clearly been linked to esophagus cancer, so not smoking or drinking may help reduce your risk. We don't know for certain if this will help, but we do know that it can help improve your appetite and overall health. It can also reduce the chance of developing other types of cancer. If you want to [quit smoking](#)²⁰ and need help, call your American Cancer Society at 1-800-227-2345.

Adopting other healthy behaviors such as [eating well, getting regular physical activity](#)²¹, and staying at a healthy weight may help as well, but no one knows for sure. However, we do know that these types of changes can have positive effects on your health that can extend beyond your risk of cancer.

Hyperlinks

1. www.cancer.org/healthy/find-cancer-early/cancer-screening-guidelines/american-cancer-society-guidelines-for-the-early-detection-of-cancer.html
2. www.cancer.org/treatment/survivorship-during-and-after-treatment/staying-active/nutrition/nutrition-during-treatment.html
3. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/pain.html
4. www.cancer.org/cancer/esophagus-cancer/treating/palliative-therapy.html
5. <http://www.cancer.org/treatment/findingandpayingfortreatment/understandinghealth>

- [hinsurance/managingyourhealthinsurance/index.htm](#)
6. <http://www.cancer.org/treatment/survivorshipduringandaftertreatment/behealthyaftertreatment/keeping-copies-of-important-medical-records>
 7. www.cancer.org/treatment/survivorship-during-and-after-treatment/staying-active/nutrition/nutrition-and-physical-activity-during-and-after-cancer-treatment.html
 8. www.cancer.org/healthy/stay-away-from-tobacco.html
 9. www.cancer.org/healthy/stay-away-from-tobacco/guide-quitting-smoking.html
 10. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/nausea-and-vomiting.html
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 13. www.cancer.org/treatment/survivorship-during-and-after-treatment/staying-active/nutrition/nutrition-and-physical-activity-during-and-after-cancer-treatment.html
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 20. www.cancer.org/healthy/stay-away-from-tobacco/guide-quitting-smoking.html
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Can I Get Another Cancer After Having Esophagus Cancer?

Cancer survivors can be affected by many health problems, but often their greatest concern is facing cancer again. If a cancer comes back after treatment it is called a “recurrence.” But some cancer survivors may develop a new, unrelated cancer later. This is called a “second cancer.” No matter what type of cancer you have had, it is still possible to get another (new) cancer, even after surviving the first.

Unfortunately, being treated for cancer doesn't mean you can't get another cancer. People who have had cancer can still get the same types of cancers that other people get. In fact, certain types of cancer and cancer treatments can be linked to a higher risk of specific second cancers.

Survivors of esophagus cancer can get any type of second cancer, but they have an increased risk of:

- [Cancers of the mouth and throat](#)¹
- [Cancer of the larynx \(voice box\)](#)²
- [Lung cancer](#)³

- [Thyroid cancer](#)⁴
- [Small intestine cancer](#)⁵

Men who were treated for esophagus cancer also have an increased risk of [stomach cancer](#)⁶.

The most [common risk factors for cancer of the esophagus](#)⁷ are smoking and alcohol intake, which are also linked to many of these cancers.

For people who have had esophageal cancer, most experts don't recommend any additional testing to look for second cancers unless you have symptoms.

See [Second Cancers in Adults](#)⁸ for more information about causes of second cancers.

Hyperlinks

1. www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer.html
2. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer.html
3. www.cancer.org/cancer/lung-cancer.html
4. www.cancer.org/cancer/thyroid-cancer.html
5. www.cancer.org/cancer/small-intestine-cancer.html
6. www.cancer.org/cancer/stomach-cancer.html
7. www.cancer.org/cancer/esophagus-cancer/causes-risks-prevention/risk-factors.html
8. www.cancer.org/treatment/treatments-and-side-effects/physical-side-effects/second-cancers-in-adults.html

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