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About Laryngeal and Hypopharyngeal Cancer

Overview and Types

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

- [What Are Laryngeal and Hypopharyngeal Cancers?](#)

Research and Statistics

See the latest estimates for new cases of laryngeal and hypopharyngeal cancers and deaths in the US and what research is currently being done.

- [Key Statistics for Laryngeal and Hypopharyngeal Cancers](#)
- [What's New in Laryngeal and Hypopharyngeal Cancers Research and Treatment?](#)

What Are Laryngeal and Hypopharyngeal Cancers?

Laryngeal and hypopharyngeal cancers start in the lower part of the throat. 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 cancer starts and spreads, see [What Is Cancer?](#)¹

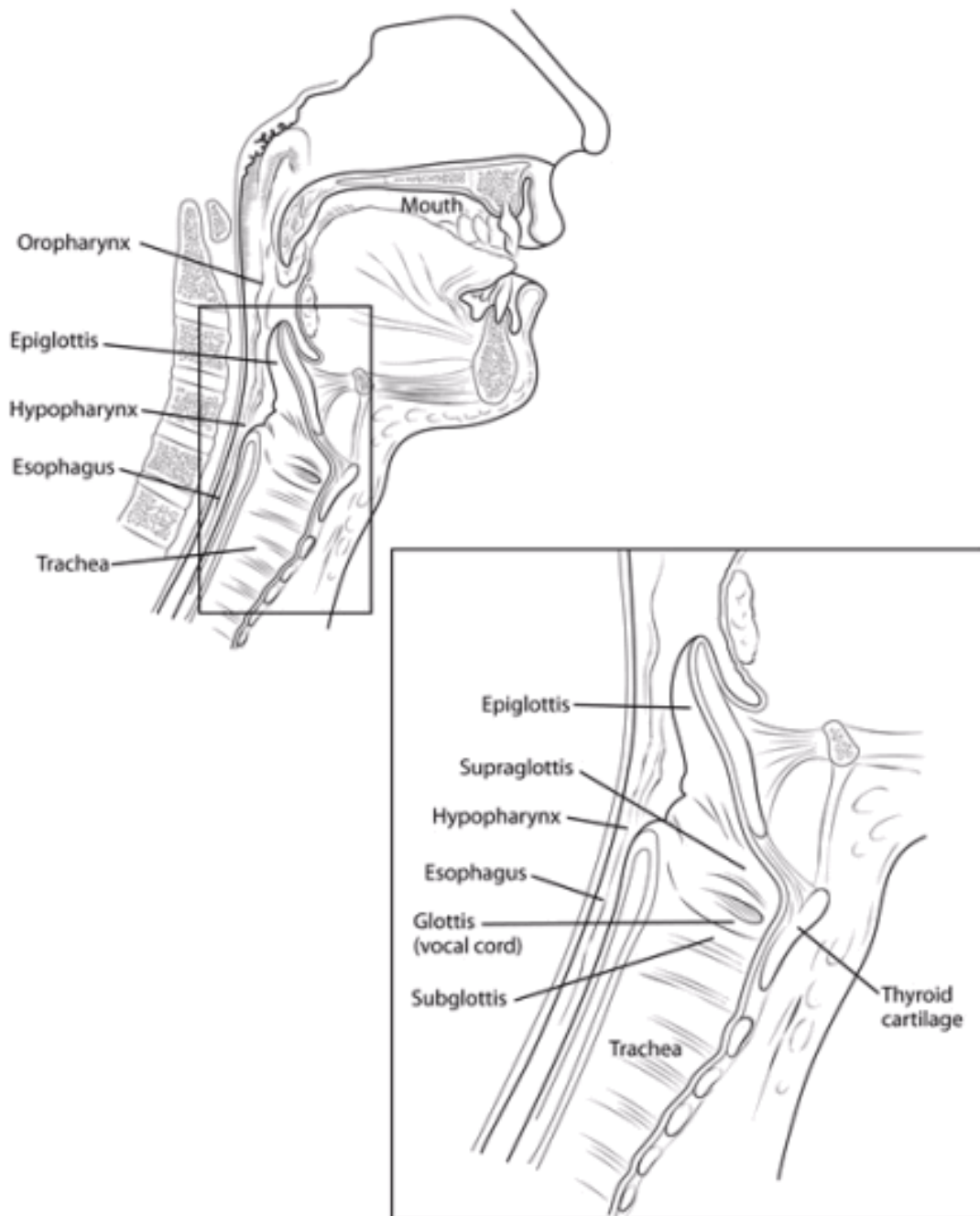
To understand these cancers, it helps to know a little about the larynx and hypopharynx.

What is the larynx?

The *larynx* is the voice box. It's one of the organs that helps us speak. It contains the vocal cords. It's in the neck, above the opening of the trachea (windpipe). There, it helps keep food and fluids from entering the trachea. The larynx is divided into 3 parts:

- The **supraglottis** is just above the vocal cords. It contains the epiglottis, which is a flap that closes off the larynx when you swallow. This sends food down the esophagus (the tube that connects to the stomach) and keeps food and fluids from going into your lungs.
- The **glottis** contains the vocal cords.
- The **subglottis** is below the vocal cords.

Cancer that starts in the larynx (laryngeal cancer) is treated based on which section it starts in.



Your larynx and vocal cords have several functions:

- The larynx produces sound for speaking. The vocal cords move and come together

to change the sound and pitch of your voice.

- The larynx protects your airway when you swallow. The epiglottis and vocal cords close tightly when you swallow to keep food and fluids from entering your lungs.
- The vocal cords open naturally when you breathe so that air can get in and out of your lungs.

What is the hypopharynx?

The hypopharynx is the part of the throat (pharynx) that lies beside and behind your larynx. The hypopharynx is the entrance into the esophagus (the tube that connects the throat to the stomach). When you swallow foods and liquids, they pass through your mouth and throat, through the hypopharynx and esophagus, and then into your stomach. The hypopharynx is made so that it helps make sure that food goes around the larynx and into the esophagus.

Cancers of the larynx and hypopharynx

Cancers that start in the larynx are called *laryngeal cancers*. Cancers that start in the hypopharynx are called *hypopharyngeal cancers*. Both types of cancers are covered here because these 2 structures are so close to each other.

Squamous cell carcinomas

Almost all cancers in the larynx or hypopharynx develop from thin, flat cells called *squamous cells*, which are in the epithelium, the innermost layer lining these 2 structures. Cancer that starts in this layer of cells is called *squamous cell carcinoma* or *squamous cell cancer*.

Most squamous cell cancers of the larynx and hypopharynx start as a pre-cancer called *dysplasia*. When seen under a microscope, these cells look abnormal but not quite like cancer cells. Most of the time, dysplasia doesn't turn into cancer. It often goes away without any treatment, especially if the underlying cause (like smoking) is stopped. (See [Risk Factors for Laryngeal and Hypopharyngeal Cancers²](#)) Most pre-cancers of the larynx and hypopharynx do not cause problems unless they're on the vocal cord(s).

Sometimes dysplasia will progress to carcinoma in situ or CIS. **CIS is the earliest form of cancer.** In CIS, the cancer cells are only seen in the epithelium lining the larynx or hypopharynx. They haven't grown into deeper layers or spread to other parts of the body. Most of these early cancers can be cured, but if CIS isn't treated, it can develop

into an invasive squamous cell cancer that will destroy nearby tissues and spread to other parts of the body.

Other cancers

Other rare types of cancer can also start in the larynx or hypopharynx.

Minor [salivary gland cancers](#)³: Some parts of the larynx and hypopharynx have tiny glands called *minor salivary glands* beneath their lining layer. These glands make mucus and saliva to lubricate and moisten the area. Cancer rarely develops in the cells of these glands.

[Sarcomas](#)⁴: The shape of the larynx and hypopharynx depends on a framework of connective tissues and cartilage. Cancers like *chondrosarcomas* or *synovial sarcomas* can develop from connective tissues of the larynx or hypopharynx, but this is extremely rare.

[Melanomas](#)⁵: These cancers usually start in the skin, but in rare cases they can start on inner (mucosal) surfaces of the body, such as in the larynx or hypopharynx.

Hyperlinks

1. www.cancer.org/cancer/cancer-basics/what-is-cancer.html
2. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/causes-risks-prevention/risk-factors.html
3. www.cancer.org/cancer/salivary-gland-cancer.html
4. www.cancer.org/cancer/soft-tissue-sarcoma.html
5. www.cancer.org/cancer/melanoma-skin-cancer.html

References

See all references for Laryngeal and Hypopharyngeal Cancer (www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html)

Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

Key Statistics for Laryngeal and Hypopharyngeal Cancers

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

- About 12,410 new cases of laryngeal cancer (9,860 in men and 2,550 in women)
- About 3,760 people (3,010 men and 750 women) will die from laryngeal cancer

About 60% of laryngeal cancers start in the glottis (the area containing the vocal cords themselves), while about 35% develop in the supraglottic area (above the vocal cords). The rest develop in either the subglottis (below the vocal cords) or overlap more than one area so that it is hard to tell where they started.

The rate of new cases of laryngeal cancer is falling by about 2% to 3% a year, most likely because fewer people are smoking.

About 3,000 cancers will start in the hypopharynx.

Survival statistics for these cancers are discussed in [Survival rates for laryngeal and hypopharyngeal cancers by stage](#)¹.

Visit the [American Cancer Society's Cancer Statistics Center](#)² for more key statistics.

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/survival-rates.html
2. <https://cancerstatisticscenter.cancer.org/>

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American Cancer Society. *Facts & Figures 2019*. American Cancer Society. Atlanta, Ga. 2019.

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Last Medical Review: November 27, 2017 Last Revised: January 8, 2019

What's New in Laryngeal and Hypopharyngeal Cancers Research and Treatment?

Research into the [causes](#)¹, [prevention](#)², and [treatment](#)³ of [laryngeal and hypopharyngeal cancers](#) is now being done at many medical centers, university hospitals, and other institutions around the world.

Gene changes in laryngeal and hypopharyngeal cancers

A great deal of research is being done to learn how changes in certain [genes](#)⁴ cause cells in the larynx or hypopharynx to become cancer. As doctors learn more about these gene changes, it could help them better identify which cancers are going to be harder to treat or are more likely to come back after treatment.

Researchers hope this information might also lead to better tests for early detection and to new [targeted treatments](#)⁵.

Treatment

In the coming years, promising new forms of treatment may work better and cause fewer long-term changes in how a person eats and speaks.

Surgery

Doctors continue to refine [surgery](#)⁶ techniques to try to limit the amount of normal tissue that's removed along with the tumor. This may help limit [side effects](#)⁷ after treatment.

One surgery technique now being studied is *transoral robotic surgery (TORS)*. In this approach, the surgeon operates by precisely moving robotic arms holding long surgical tools that are passed down the throat. TORS uses smaller incisions (cuts), so it might lessen the side effects and long-term changes from surgery. Doctors are also looking at

using chemo before TORS to help shrink tumors and maybe save more healthy tissue.

Transoral videolaryngoscopic surgery or TOVS is another surgery method that might prove to be helpful in removing small tumors and saving healthy tissue. In TOVS, the surgery is done using a scope that's put in through the mouth. The doctor looks into the scope to see inside and uses long, thin tools to take out the tumor.

Chemotherapy and chemoradiotherapy

New [chemotherapy](#)⁸ drugs and new combinations of drugs are being tested.

[Clinical trials](#)⁹ are also studying ways to best combine chemotherapy with [radiation](#)¹⁰ therapy. For example, studies are comparing outcomes when chemotherapy is given before, during, and/or after radiation therapy.

Targeted therapy

Newer [targeted therapy](#)¹¹ drugs attack specific substances in or around cancer cells that help them grow. These drugs work differently from standard chemo drugs because they target cancer cells with less damage to normal cells. They may work in some cases when chemo drugs don't, and they often have less severe side effects. Many targeted therapies are used to treat many kinds of cancer. Studies are looking at whether they might help treat laryngeal and hypopharyngeal cancers, too.

EGFR inhibitors: Squamous cell cancers of the larynx and hypopharynx (and other head and neck cancers) often have abnormally high levels of epidermal growth factor receptor (EGFR). EGFR helps the cancer cells grow out of control. Drugs that block EGFR and slow cell growth are under study for use in head and neck cancers. Some of these drugs include nimotuzumab, pembrolizumab (Keytruda[®]), nivolumab (Opdivo[®]), and ipilimumab (Yervoy[®]).

These drugs seem to work best when combined with other treatments, like radiation and chemotherapy.

Preserving function and quality of life

Doctors are looking at how transplant and tissue grafting might be used to help rebuild the throat area after surgery. This could help improve overall quality of life and limit changes in how people speak and eat.

Researchers are also looking at better ways to support patients with parenteral nutrition

so they can better tolerate treatment. (Parenteral nutrition is put into a vein, right into the blood, so the body can get the nutrients it needs when a person can't swallow food.)

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/causes-risks-prevention/what-causes.html
2. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/causes-risks-prevention/prevention.html
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11. www.cancer.org/treatment/treatments-and-side-effects/treatment-types/targeted-therapy.html

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Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

Written by

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

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Laryngeal and Hypopharyngeal 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 laryngeal and hypopharyngeal cancers.

- [Risk Factors for Laryngeal and Hypopharyngeal Cancers](#)
- [What Causes Laryngeal and Hypopharyngeal Cancers?](#)

Prevention

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

- [Can Laryngeal and Hypopharyngeal Cancers Be Prevented?](#)

Risk Factors for Laryngeal and Hypopharyngeal Cancers

A risk factor is anything that affects your chance of getting a disease like 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.

But risk factors don't tell us everything. Having a risk factor, or even several risk factors, doesn't mean that you will get the disease. And many people who get the disease may have few or no known risk factors.

[Laryngeal and hypopharyngeal cancers](#)¹ are often grouped with other cancers of the mouth and throat (commonly called *head and neck cancers*). These cancers often have many of the same risk factors, which are listed below.

Tobacco and alcohol use

[Tobacco use](#)² is the most important risk factor for head and neck cancers (including cancers of the larynx and hypopharynx). The risk for these cancers is much higher in smokers than in nonsmokers. Most people with these cancers have a history of smoking or other tobacco exposure. The more you smoke, the greater your risk. Smoke from cigarettes, pipes, and cigars all increase your risk of getting these cancers.

Some studies have also found that long-term exposure to secondhand smoke might increase the risk of these cancers, but more research is needed to confirm this.

Moderate or heavy [alcohol use](#)³ (more than 1 drink a day) also increases the risk of these cancers, although not as much as smoking.

People who use both tobacco and alcohol have the highest risk of all. Combining these 2 habits doesn't just add both risks together, it actually multiplies them. People who smoke and drink are many times more likely to get head and neck cancer than are people with neither habit.

If you are [thinking about quitting smoking and need help](#)⁴, call the American Cancer Society at 1-800-227-2345. A tobacco cessation and coaching service can help increase your chances of quitting for good. More information is also available in the [Stay Away from Tobacco](#)⁵ section of our website.

Poor nutrition

Poor nutrition may increase the risk of getting head and neck cancer. The exact reason for this isn't clear. Heavy drinkers often have vitamin deficiencies, which may help explain the role of alcohol in increasing risk of these cancers.

Researchers have been comparing eating habits and risk. It's been suggested that eating fewer fried foods and processed foods and eating more plant-based foods might help reduce laryngeal cancer risk.

Human papillomavirus infection

[Human papillomavirus](#)⁶ (HPV) is a group of over 150 related viruses. They are called *papilloma viruses* because some of them cause a type of growth called a *papilloma*, more commonly known as a wart.

Infection with certain types of [HPV can also cause some forms of cancer](#)⁷, including cancers of the penis, cervix, vulva, vagina, anus, and throat. Other types of HPV cause warts in different parts of the body.

HPV infection of the throat seems to be a factor in some throat cancers, such as some cancers of the [tonsils](#)⁸ and some cancers of the hypopharynx. HPV infection is very rarely a factor in laryngeal cancer.

Genetic syndromes

People with syndromes caused by [inherited gene](#)⁹ defects (mutations) have a very high risk of throat cancer, including cancer of the hypopharynx.

Fanconi anemia: People with this syndrome often have blood problems at an early age, which may lead to [leukemia](#)¹⁰ or aplastic anemia. They also have a very high risk of cancer of the mouth and throat.

Dyskeratosis congenita: This genetic syndrome can cause aplastic anemia, skin rashes, and abnormal fingernails and toenails. People with this syndrome have a very high risk of developing cancer of the mouth and throat when they are young.

Workplace exposures

Long and intense exposures to wood dust, paint fumes, and certain chemicals used in the metalworking, petroleum, plastics, and textile industries can increase the risk of laryngeal and hypopharyngeal cancers.

[Asbestos](#)¹¹ is a mineral fiber that was often used as an insulating material in many products in the past. Exposure to asbestos is an important risk factor for [lung cancer](#)¹² and [mesothelioma](#)¹³ (cancer that starts in the lining of the chest or abdomen). Some studies have suggested a link between asbestos exposure and laryngeal cancer, but not all studies agree.

Gender

Cancers of the larynx and hypopharynx are about 4 times more common in men than women. This is likely because the main risk factors—smoking and heavy alcohol use—are more common in men. But in recent years, as these habits have become more common among women, their risks for these cancers have increased as well.

Age

Cancers of the larynx and hypopharynx usually develop over many years, so they are not common in young people. Over half of patients with these cancers are 65 or older when the cancers are first found.

Race

Cancers of the larynx and hypopharynx are more common among African Americans and whites than among Asians and Latinos.

Gastroesophageal reflux disease

When acid from the stomach backs up into the esophagus it's called *gastroesophageal reflux disease* (GERD). GERD can cause heartburn and increase the chance of [cancer of the esophagus](#)¹⁴. Studies are being done to see if it increases the risk of laryngeal and hypopharyngeal cancers, too.

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html
2. www.cancer.org/cancer/cancer-causes/tobacco-and-cancer.html
3. www.cancer.org/cancer/cancer-causes/diet-physical-activity/alcohol-use-and-cancer.html
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13. www.cancer.org/cancer/malignant-mesothelioma.html
14. www.cancer.org/cancer/esophagus-cancer.html

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Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

What Causes Laryngeal and Hypopharyngeal Cancers?

We don't know what causes each case of [laryngeal or hypopharyngeal cancer](#)¹. But we

do know many of the risk factors for these cancers (see [Risk Factors for Laryngeal and Lypopharyngeal Cancers](#)) and how some of them cause normal cells to become cancer.

Scientists believe that some risk factors, such as [tobacco](#)² or heavy [alcohol use](#)³, cause these cancers by damaging the DNA of the cells that line the inside of the larynx and hypopharynx.

DNA is the chemical in each of our cells that makes up our [genes](#)⁴ – the instructions for how our cells function. We usually look like our parents because they are the source of our DNA. But DNA affects more than how we look. Some genes have instructions for controlling when cells grow and divide into new cells. Genes that help cells grow and divide are called *oncogenes*. Genes that slow down cell division or cause cells to 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.

Some people inherit DNA mutations (changes) from their parents that greatly increase their risk for developing certain cancers. But inherited gene mutations are not believed to cause very many cancers of the larynx or hypopharynx.

Gene changes related to these cancers usually happen during life, rather than being inherited. These *acquired* mutations often result from exposure to cancer-causing chemicals, like those found in tobacco smoke. An acquired change in the *p16* tumor suppressor gene seems to be important in laryngeal and hypopharyngeal cancers, although not all these cancers have this change. Several different gene changes are probably needed for cancer to develop, and not all of these changes are understood at this time.

Inherited mutations of oncogenes or tumor suppressor genes rarely cause these cancers, but some people seem to inherit a reduced ability to detoxify (break down) certain types of cancer-causing chemicals. These people are more sensitive to the cancer-causing effects of tobacco smoke, alcohol, and certain industrial chemicals. Researchers are developing tests that may help identify such people, but these tests are not yet reliable enough for routine use.

Some forms of [human papillomavirus \(HPV\)](#)⁵ are important causes of some throat cancers (including cancers of the hypopharynx). The outlook for people with these cancers appears to be better than for people whose cancers are the result of tobacco or alcohol use.

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-

- [laryngealand-hypopharyngeal.html](#)
2. www.cancer.org/cancer/cancer-causes/tobacco-and-cancer.html
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Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

Can Laryngeal and Hypopharyngeal Cancers Be Prevented?

Not all [laryngeal and hypopharyngeal cancers](#)¹ can be prevented, but the risk of developing these cancers can be greatly reduced by avoiding [certain risk factors](#) such as smoking and alcohol use.

[Tobacco use](#)² is the most important cause of these cancers. Avoiding exposure to tobacco (by [not smoking](#)³ and avoiding [secondhand smoke](#)⁴) lowers the risk of these cancers. [Heavy alcohol use](#)⁵ is a risk factor on its own. It also greatly increases the cancer-causing effect of tobacco smoke, so it's especially important to avoid the combination of drinking and smoking.

For people who work with chemicals linked to these cancers, having plenty of workplace ventilation and using industrial respirators are important protective measures.

Poor nutrition and vitamin deficiencies have been linked to laryngeal and

hypopharyngeal cancers. Eating a balanced, healthy diet may help lower your risk of these cancers (and many others). The American Cancer Society recommends eating a healthy diet, with an emphasis on plant foods. This includes eating at least 2½ cups of vegetables and fruits every day. Choosing whole-grain breads, pastas, and cereals instead of refined grains, and eating fish, poultry, or beans instead of processed meat and red meat may also help lower your risk of cancer. In general, eating a healthy diet is much better than adding vitamin supplements to an otherwise unhealthy diet. See the [American Cancer Society Guidelines on Nutrition and Physical Activity for Cancer Prevention](#)⁶ for our full guidelines.

Doctors have been looking at whether certain drugs or vitamins might help prevent these cancers, especially in people who are at high risk. So far, none have been successful enough to be recommended.

Avoid HPV infection

The risk of [human papillomavirus](#)⁷ (HPV) infection of the throat is increased in those who have oral sex and multiple sex partners. Smokers are more likely to get HPV infections, probably because the smoke damages their immune system or the cells that line the throat. These infections are common and rarely cause symptoms. While HPV infection is linked to some cases of cancer of the larynx or hypopharynx, most people with HPV infections of the throat do not go on to develop this cancer. And most cancers of the larynx and hypopharynx are not related to HPV infection.

Vaccines that reduce the risk of infection with certain types of HPV are available. At first, these vaccines were meant to lower the risk of cervical cancer, but they've been shown to lower the risk of [other cancers linked to HPV](#)⁸ as well, such as cancers of the anus, vulva, vagina, and mouth and throat cancers.

Since these vaccines are only effective if given before someone is infected with HPV, they are given at an early age. Learn more in [HPV Vaccines](#)⁹.

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html
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Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

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Laryngeal and Hypopharyngeal Cancer Early Detection, Diagnosis, and Staging

Detection and Diagnosis

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

- [Can Laryngeal and Hypopharyngeal Cancers Be Found Early?](#)
- [Signs and Symptoms of Laryngeal and Hypopharyngeal Cancers](#)
- [Tests for Laryngeal and Hypopharyngeal Cancers](#)

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.

- [Laryngeal Cancer Stages](#)
- [Hypopharyngeal Cancer Stages](#)
- [Survival Rates for Laryngeal and Hypopharyngeal Cancers](#)

Questions to Ask About Laryngeal and Hypopharyngeal Cancer

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

- [Questions to Ask Your Doctor About Laryngeal or Hypopharyngeal Cancer](#)
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Can Laryngeal and Hypopharyngeal Cancers Be Found Early?

Screening is testing for diseases like cancer in people without any symptoms. Screening tests may find some types of cancer early, when treatment is most likely to be effective.

But for now there is no simple screening test for laryngeal and hypopharyngeal cancers. These cancers are often hard to find and diagnose without complex tests. Because the cancers are not common, and the tests require specialized doctors, neither the American Cancer Society nor any other group recommends routine screening for these cancers.

Still, many laryngeal and some hypopharyngeal cancers can be found early. They usually cause symptoms, such as voice changes, which are described in [Signs and symptoms of laryngeal and hypopharyngeal cancers](#). Talk to your doctor if you have any of these symptoms. Many of the symptoms of laryngeal and hypopharyngeal cancers are more often caused by less serious, benign (non-cancerous) problems, or even other cancers. Still, it is important to see a doctor to find out what is causing your symptoms. The sooner the cause is found, the sooner it can be treated, if needed.

References

See all references for Laryngeal and Hypopharyngeal Cancer
(www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html)

Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

Signs and Symptoms of Laryngeal and Hypopharyngeal Cancers

In most cases, laryngeal and hypopharyngeal cancers are found because of the

symptoms they cause.

Hoarseness or voice changes

Laryngeal cancers that form on the vocal cords (glottis) often cause hoarseness or a change in the voice. This can lead to them being found at a very early stage. People who have voice changes (like hoarseness) that do not improve within 2 weeks should see their health care provider right away.

For cancers that don't start on the vocal cords, hoarseness occurs only after these cancers reach a later stage or have spread to the vocal cords. These cancers are sometimes not found until they have spread to the lymph nodes and the person notices a growing mass in the neck.

Other symptoms

Cancers that start in the area of the larynx above the vocal cords (supraglottis), the area below the vocal cords (subglottis), or the hypopharynx do not usually cause voice changes, and are therefore more often found at later stages.

Symptoms of these cancers may include:

- A sore throat that does not go away
- Constant coughing
- Pain when swallowing
- Trouble swallowing
- Ear pain
- Trouble breathing
- Weight loss
- A lump or mass in the neck (due to spread of the cancer to nearby lymph nodes)

Many of these symptoms are more likely to be caused by conditions other than laryngeal or hypopharyngeal cancer. Still, if you have any of these symptoms, it is very important to have them checked by a doctor so that the cause can be found and treated, if needed.

References

See all references for Laryngeal and Hypopharyngeal Cancer
(www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html)

Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

Tests for Laryngeal and Hypopharyngeal Cancers

[Laryngeal and hypopharyngeal cancers](#)¹ are usually found because of [signs or symptoms](#) a person is having. If cancer is suspected, tests will be needed to confirm the diagnosis. Getting a diagnosis of laryngeal or hypopharyngeal cancer when you haven't had symptoms is rare. When it does happen, the cancer is usually found because of tests done to check other medical problems.

Exams and tests for laryngeal or hypopharyngeal cancer

If you have signs or symptoms that suggest you might have a cancer of the larynx or hypopharynx, your doctor will need to do exams or tests to be sure.

Medical history and physical exam

Your doctor will ask you about your symptoms, possible risk factors, family history, and other medical problems. A physical exam can help find signs of possible cancer or other diseases. Your doctor will pay very close attention to your head and neck, looking for abnormal areas in your mouth or throat, as well as swollen lymph nodes in your neck.

Exam by a specialist

If your doctor suspects a cancer of the larynx or hypopharynx, you will be referred to an ear, nose, and throat (ENT) doctor, also called an *otolaryngologist*. This doctor will do a more complete exam of your head and neck. This will include an inside look at the larynx and hypopharynx, known as [laryngoscopy](#)², which can be done in 2 ways:

- **Direct (flexible) laryngoscopy:** To do this, the doctor puts a fiber-optic laryngoscope (a thin, flexible, lighted tube) in through your mouth or nose to look at

your larynx and nearby areas. Biopsies can be done through the scope (covered below).

- **Indirect laryngoscopy:** The doctor uses special small mirrors that are put into your mouth to look at your larynx and nearby areas.

Both types of exams can be done in the doctor's office. For either type of exam, the doctor may spray the back of your throat with numbing medicine to help make the exam easier.

People with laryngeal or hypopharyngeal cancer also have a higher risk for other cancers in the head and neck region, so the nasopharynx (part of the throat behind the nose), mouth, tongue, and the neck are also carefully looked at and checked for any signs of cancer.

Panendoscopy

[Panendoscopy](#)³ is a procedure that combines laryngoscopy, esophagoscopy, and (at times) bronchoscopy. This lets the doctor thoroughly examine the entire area around the larynx and hypopharynx, including the esophagus (swallowing tube) and trachea (windpipe).

This exam is usually done in an operating room while you are under general anesthesia. (This means drugs are used to put you into a deep sleep.) The doctor uses a rigid laryngoscope to look for tumors in the larynx and hypopharynx. Other parts of the mouth, nose, and throat are examined as well. The doctor may also use an endoscope to look into the esophagus or a bronchoscope to look into the trachea (windpipe).

Your doctor will look at these areas through the scope(s) to find any tumors, see how large they are, and see how far they have spread to nearby areas. The doctor might also take out (biopsy) small tissue samples from any tumors or other changed areas using special tools put in through the scopes.

Biopsies to diagnose laryngeal and hypopharyngeal cancers

In a biopsy, the doctor removes a sample of tissue to be looked at under a microscope. It's the only way to be sure of a diagnosis of laryngeal or hypopharyngeal cancer. There are many different types of biopsies. See [Testing Biopsy and Cytology Specimens for Cancer](#)⁴ to learn more about different kinds of biopsies, what the doctor looks for, how the tissue is tested to diagnosis cancer, and what the results will tell you.

Endoscopic biopsy

The larynx and hypopharynx are deep inside the neck, so taking out samples for biopsy can be complex. Biopsies of these areas are done in the operating room while you are under general anesthesia (asleep). The surgeon uses special instruments through an endoscope to remove small pieces of tissue.

Fine needle aspiration (FNA) biopsy

This type of biopsy isn't used to remove samples in the larynx or hypopharynx, but it may be done to find the cause of an swollen [lymph node](#)⁵ in the neck. A thin, hollow needle is put through the skin into the mass (or tumor) to get cells for a biopsy. The cells are then looked at under a microscope. If the FNA finds cancer, the pathologist (the doctor examining the samples) can often tell what type of cancer it is. If the cancer cells look like they might have come from the larynx or hypopharynx, an endoscopic exam and biopsy of these areas will be needed.

If the FNA doesn't find cancer, it only means that cancer was not found in that lymph node. There could still be cancer in other places. If you're having symptoms that might be from a laryngeal or hypopharyngeal cancer, you could still need other tests to find the cause of the symptoms.

FNA biopsies may also be useful in some patients already known to have laryngeal or hypopharyngeal cancer. If the person has a lump in the neck, an FNA can show if the mass is due to spread of the cancer. FNA may also be used in patients whose cancer has been treated by [surgery](#)⁶ and/or [radiation therapy](#)⁷, to help find out if a neck mass in the treated area is scar tissue or if it's a return (recurrence) of the cancer.

Imaging tests

Imaging tests use x-rays, magnetic fields, or radioactive substances to create pictures of the inside of your body. Imaging tests are not used to diagnose laryngeal or hypopharyngeal cancers, but they're done for a number of reasons after a cancer diagnosis, such as:

- To help look for a tumor if one is suspected
- To learn how far cancer may have spread
- To help determine if [treatment](#)⁸ is working
- To look for signs that the cancer has come back after treatment

Computed tomography (CT) scan

The [CT scan](#)⁹ (also known as a CAT scan) uses x-rays to make detailed cross-sectional images of your body. Instead of taking one picture like a standard x-ray, a CT scanner takes many pictures as it rotates around you. A computer then combines these pictures into an image of a slice of your body. Unlike a regular x-ray, a CT scan creates detailed images of the soft tissues and organs in the body.

This test can help your doctor determine the size of the tumor, see if it's growing into nearby tissues, and find out if it has spread to lymph nodes in your neck. It may also be done to look for the spread of cancer to your lungs.

Magnetic resonance imaging (MRI) scan

[MRI scans](#)¹⁰ use radio waves and strong magnets instead of x-rays. The energy from the radio waves is absorbed and then released in a pattern formed by the type of tissue and by certain diseases. A computer translates the pattern into a very detailed image of parts of your body.

Because it provides a very detailed picture, an MRI scan may be done to look for spread of the cancer in the neck. These scans can be very useful in looking at other areas of the body, too.

Barium swallow

This is often the first test done if someone is having a problem with swallowing. For this test, you drink a chalky liquid called barium to coat the walls of the throat and esophagus (swallowing tube). A [series of x-rays](#)¹¹ of the throat and esophagus is taken as you swallow. The barium can help show problems in the throat.

Chest x-ray

A chest [x-ray](#)¹² may be done to see if the cancer has spread to the lungs. If any suspicious spots are seen on the chest x-ray, a CT scan of the chest may be needed to get a more detailed picture.

Positron emission tomography (PET) scan

For a [PET scan](#)¹³, a form of radioactive sugar (known as *fluorodeoxyglucose* or *FDG*) is injected into the blood. The amount of radioactivity used is very low. Cancer cells grow quickly, so they absorb large amounts of the radioactive sugar. After about an hour, you

will be moved onto a table in the PET scanner. A special camera creates a picture of areas of radioactivity in your body. The picture is not finely detailed like a CT or MRI scan, but it provides helpful information about your whole body. Some machines can do both a PET and CT scan at the same time (PET/CT scan). This lets the doctor compare areas of higher radioactivity on the PET with the more detailed pictures of that area on the CT.

A PET scan may be used to look for possible areas of cancer spread, especially if there is a good chance that the cancer is more advanced. This test can also be used to help tell if a suspicious area seen on another imaging test is cancer or not.

Other tests

Other tests may be done as part of a workup in people diagnosed with laryngeal or hypopharyngeal cancer. These tests are not used to diagnose the cancer, but they may be done to see if a person is healthy enough for certain treatments, like [surgery](#)¹⁴ or [chemotherapy](#)¹⁵.

[Blood tests](#)¹⁶ are often done to see how well your liver and kidneys are working, and to help evaluate your overall health before treatment. Blood tests are also needed if you are getting chemo because it can affect the levels of blood cells in your body.

If surgery is planned, you might also get an electrocardiogram (EKG) to make sure your heart is working well. Some people having surgery also may need tests of their lung function. These are known as *pulmonary function tests* (PFTs).

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html
2. www.cancer.org/treatment/understanding-your-diagnosis/tests/endoscopy.html
3. www.cancer.org/treatment/understanding-your-diagnosis/tests/endoscopy.html
4. www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer.html
5. www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html
6. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/treating/recurrence.html
7. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/treating/radiation.html
8. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/treating.html

9. www.cancer.org/treatment/understanding-your-diagnosis/tests/ct-scan-for-cancer.html
10. www.cancer.org/treatment/understanding-your-diagnosis/tests/mri-for-cancer.html
11. www.cancer.org/treatment/understanding-your-diagnosis/tests/x-rays-and-other-radiographic-tests.html
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14. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/treating/recurrence.html
15. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/treating/chemotherapy.html
16. www.cancer.org/treatment/understanding-your-diagnosis/tests/understanding-your-lab-test-results.html

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American Society of Clinical Oncology. Laryngeal and Hypopharyngeal Cancer: Diagnosis. 12/2016. Accessed at www.cancer.net/cancer-types/laryngeal-and-hypopharyngeal-cancer/diagnosis on November 6, 2017.

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See all references for Laryngeal and Hypopharyngeal Cancer (www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html)

Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

Laryngeal Cancer Stages

After someone is diagnosed with laryngeal 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 of laryngeal cancer is stage 0, also known as **carcinoma in situ**(CIS). The other main stages range from I (1) through IV (4). Some stages are split further, using capital letters (A, B, etc.). 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.

How is the stage determined?

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

- The extent of the main **tumor (T)**: Where is the tumor? How far has it grown into the larynx and nearby structures? Has it affected vocal cord movement?
- The spread to nearby lymph **nodes (N)**: Has the cancer spread to nearby lymph nodes in the neck? If so, how many are affected, and how large are they?
- The spread (**metastasis**) to distant sites (**M**): Has the cancer spread to distant parts of the body? (The most common sites of spread are the lungs, liver, or bones.)

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 the T, N, and M categories of the cancer have been determined, this information is combined in a process called **stage grouping** to assign an overall stage. For more information, see [Cancer Staging](#)².

The system described below is the most recent AJCC system, effective January 2018.

Laryngeal cancer is typically given a **clinical stage** based on the results of any exams, biopsies, and imaging tests that might have been done (as described in [How Are Laryngeal and Hypopharyngeal Cancers Diagnosed?](#)). If surgery has been done, the **pathologic stage** (also called the *surgical stage*) can be determined.

The stages of laryngeal cancer are slightly different, based on [which part of the larynx](#)³ the cancer starts in:

- The **supraglottis** (the area above the vocal cords)
- The **glottis** (the area that includes the vocal cords)
- The **subglottis** (the area below the vocal cords)

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

Stages of supraglottic laryngeal cancer

AJCC stage	Stage grouping	Stage description*
0	Tis N0 M0	The tumor is only in the top layer of cells lining the inside of the larynx and has not grown any deeper (Tis). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).
I	T1 N0 M0	The tumor has grown deeper, but it is only in one part of the supraglottis, and the vocal cords move normally (T1). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).
II	T2 N0 M0	The tumor has grown deeper, and it has grown into more than one part of the supraglottis (or glottis), and the vocal cords move normally (T2).

		The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).
III	T3 N0 M0	The tumor is still only in the larynx, but it has caused a vocal cord to stop moving, OR the tumor is growing into nearby areas such as the postcricoid area, paraglottic space, pre-epiglottic (in front of the epiglottis) tissues, or the inner part of the thyroid cartilage (firm tissue that separates the thyroid gland from the front of the larynx) (T3). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).
	OR	
	T1 to T3 N1 M0	The tumor might or might not have grown into structures just outside the larynx, and it might or might not have affected a vocal cord (T1 to T3). The cancer has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).
IVA	T4a N0 or N1 M0	The tumor has grown through the thyroid cartilage and/or is growing into tissues beyond the larynx (such as the thyroid gland, trachea, esophagus, tongue muscles, or neck muscles). This is also known as moderately advanced local disease (T4a). The cancer has not spread to nearby lymph nodes (N0), or it has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).
	OR	
	T1-T4a N2 M0	The tumor might or might not have grown into structures outside the larynx (as far as moderately advanced disease), and it might or might not have affected a vocal cord (T1 to T4a). The cancer is N2: <ul style="list-style-type: none"> • It has spread to a single lymph node on the same side of

		<p>the neck as the tumor, which is larger than 3 centimeters (cm) but no larger than 6 cm across, OR</p> <ul style="list-style-type: none"> • It has spread to more than one lymph node on the same side of the neck as the tumor, none of which is larger than 6 cm across, OR • It has spread to at least one lymph node on the other side of the neck, none of which is larger than 6 cm across. <p>The cancer has not spread to distant parts of the body (M0).</p>
IVB	T4b Any N M0	<p>The tumor is growing into the area in front of the spine in the neck (the prevertebral space), surrounds a carotid artery, or is growing down into the space between the lungs. This is also known as very advanced local disease (T4b).</p> <p>The cancer might or might not have spread to nearby lymph nodes (any N). It has not spread to distant parts of the body (M0).</p>
	Any T N3 M0	<p>The tumor might or might not have grown into structures outside the larynx, and it might or might not have affected a vocal cord (any T).</p> <p>The cancer has spread to at least one lymph node that is larger than 6 cm across, OR it has spread to a lymph node and then grown outside of the lymph node (N3). It has not spread to distant parts of the body (M0).</p>
IVC	Any T Any N M1	<p>The tumor might or might not have grown into structures outside the larynx, and it might or might not have affected a vocal cord (any T).</p> <p>The cancer might or might not have spread to nearby lymph nodes (any N). The cancer has spread to distant parts of the body (M1).</p>

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

- TX: Main tumor cannot be assessed due to lack of information.
- NX: Regional lymph nodes cannot be assessed due to lack of information.

Stages of glottic laryngeal cancer

AJCC stage	Stage grouping	Stage description*
0	Tis N0 M0	The tumor is only in the top layer of cells lining the inside of the larynx and has not grown any deeper (Tis).
		The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).
I	T1 N0 M0	The tumor has grown deeper, but it is only in the vocal cords, and they move normally (T1).
		The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).
II	T2 N0 M0	The tumor has grown into the supraglottis or subglottis, and/or the vocal cords do not move normally (T2).
		The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).
III	T3 N0 M0	The tumor is still only in the larynx, but it has caused a vocal cord to stop moving, OR the tumor is growing into the paraglottic space, OR the tumor is growing into the inner part of the thyroid cartilage (firm tissue that separates the thyroid gland from the front of the larynx) (T3).
		The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).
	OR	
	T1 to T3 N1 M0	The tumor might or might not have grown into structures just outside the larynx, and it might or might not have affected a vocal cord (T1 to T3).
		The cancer has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).

IVA	T4a N0 or N1 M0	<p>The tumor has grown through the thyroid cartilage and/or is growing into tissues beyond the larynx (such as the thyroid gland, trachea, cricoid cartilage, esophagus, tongue muscles, or neck muscles). This is also known as moderately advanced local disease (T4a).</p> <p>The cancer has not spread to nearby lymph nodes (N0), or it has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).</p>
	OR	
	T1-T4a N2 M0	<p>The tumor might or might not have grown into structures outside the larynx (as far as moderately advanced disease), and it might or might not have affected a vocal cord (T1 to T4a). The cancer is N2:</p> <ul style="list-style-type: none"> • It has spread to a single lymph node on the same side of the neck as the tumor, which is larger than 3 centimeters (cm) but no larger than 6 cm across, OR • It has spread to more than one lymph node on the same side of the neck as the tumor, none of which is larger than 6 cm across, OR • It has spread to at least one lymph node on the other side of the neck, none of which is larger than 6 cm across. <p>The cancer has not spread to distant parts of the body (M0).</p>
IVB	T4b Any N M0	<p>The tumor is growing into the area in front of the spine in the neck (the prevertebral space), surrounds a carotid artery, or is growing down into the space between the lungs. This is also known as very advanced local disease (T4b). The cancer might or might not have spread to nearby lymph nodes (any N). It has not spread to distant parts of the body (M0).</p>
	OR	

	Any T N3 M0	<p>The tumor might or might not have grown into structures outside the larynx, and it might or might not have affected a vocal cord (any T).</p> <p>The cancer has spread to at least one lymph node that is larger than 6 cm across, OR it has spread to a lymph node and then grown outside of the lymph node (N3). It has not spread to distant parts of the body (M0).</p>
IVC	Any T Any N M1	<p>The tumor might or might not have grown into structures outside the larynx, and it might or might not have affected a vocal cord (any T).</p> <p>The cancer might or might not have spread to nearby lymph nodes (any N). The cancer has spread to distant parts of the body (M1).</p>

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

- TX: Main tumor cannot be assessed due to lack of information.
- NX: Regional lymph nodes cannot be assessed due to lack of information.

Stages of subglottic laryngeal cancer

AJCC stage	Stage grouping	Stage description*
0	Tis N0 M0	<p>The tumor is only in the top layer of cells lining the inside of the larynx and has not grown any deeper (Tis).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p>
I	T1 N0 M0	<p>The tumor has grown deeper, but it is only in the subglottis (T1).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p>

II	T2 N0 M0	<p>The tumor has grown into the vocal cords, which might or might not move normally (T2).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p>
III	T3 N0 M0	<p>The tumor is still only in the larynx, but it has caused a vocal cord to stop moving, OR the tumor is growing into the paraglottic space, OR the tumor is growing into the inner part of the thyroid cartilage (firm tissue that separates the thyroid gland from the front of the larynx) (T3).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p>
	OR	
	T1 to T3 N1 M0	<p>The tumor might or might not have grown into structures just outside the larynx, and it might or might not have affected a vocal cord (T1 to T3).</p> <p>The cancer has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).</p>
IVA	T4a N0 or N1 M0	<p>The tumor is growing through the cricoid or thyroid cartilage and/or is growing into structures beyond the larynx (such as the thyroid gland, trachea, esophagus, tongue muscles, or neck muscles). This is also known as moderately advanced local disease (T4a).</p> <p>The cancer has not spread to nearby lymph nodes (N0), or it has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).</p>
	OR	
	T1-T4a N2 M0	<p>The tumor might or might not have grown into structures outside the larynx (as far as moderately advanced disease), and it might or might not have affected a vocal cord (T1 to T4a). The cancer is N2:</p>

		<ul style="list-style-type: none"> • It has spread to a single lymph node on the same side of the neck as the tumor, which is larger than 3 centimeters (cm) but no larger than 6 cm across, OR • It has spread to more than one lymph node on the same side of the neck as the tumor, none of which is larger than 6 cm across, OR • It has spread to at least one lymph node on the other side of the neck, none of which is larger than 6 cm across. <p>The cancer has not spread to distant parts of the body (M0).</p>
IVB	T4b Any N M0	<p>The tumor is growing into the area in front of the spine in the neck (the prevertebral space), surrounds a carotid artery, or is growing down into the space between the lungs. This is also known as very advanced local disease (T4b).</p> <p>The cancer might or might not have spread to nearby lymph nodes (any N). It has not spread to distant parts of the body (M0).</p>
	Any T N3 M0	<p>The tumor might or might not have grown into structures outside the larynx, and it might or might not have affected a vocal cord (any T).</p> <p>The cancer has spread to at least one lymph node that is larger than 6 cm across, OR it has spread to a lymph node and then grown outside of the lymph node (N3). It has not spread to distant parts of the body (M0).</p>
IVC	Any T Any N M1	<p>The tumor might or might not have grown into structures outside the larynx, and it might or might not have affected a vocal cord (any T).</p> <p>The cancer might or might not have spread to nearby lymph nodes (any N). The cancer has spread to distant parts of the body (M1).</p>

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

- TX: Main tumor cannot be assessed due to lack of information.

- NX: Regional lymph nodes cannot be assessed due to lack of information.

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/treating.html
2. www.cancer.org/treatment/understanding-your-diagnosis/staging.html
3. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html

Last Medical Review: December 20, 2017 Last Revised: December 20, 2017

Hypopharyngeal Cancer Stages

After someone is diagnosed with hypopharyngeal 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 of hypopharyngeal cancer is stage 0, also known as carcinoma in situ (CIS). The other main stages range from I (1) through IV (4). Some stages also use capital letters (A, B, etc.). 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. 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.

How is the stage determined?

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

- The size extent of the main **tumor (T)**: How big is the tumor? How far has it grown into the hypopharynx and nearby structures?

- The spread to nearby lymph **nodes (N)**: Has the cancer spread to nearby lymph nodes in the neck? If so, how many are affected, and how large are they?
- The spread (**metastasis**) to distant sites (**M**): Has the cancer spread to distant parts of the body? (The most common sites of spread are the lungs, liver, or bones.)

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 the T, N, and M categories of the cancer have been determined, this information is combined in a process called stage grouping to assign an overall stage. For more information, see [Cancer Staging²](#).

The system described below is the most recent AJCC system, effective January 2018.

Hypopharyngeal cancer typically is given a **clinical stage** based on the results of any exams, biopsies, and imaging tests that might have been done (as described in [How Are Laryngeal and Hypopharyngeal Cancers Diagnosed?](#)). If surgery has been done, the **pathologic stage** (also called the **surgical stage**) can be determined.

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

Stages of hypopharyngeal cancer

AJCC Stage	Stage grouping	Stage description*
0	Tis N0 M0	The tumor is only in the top layer of cells lining the inside of the hypopharynx and has not grown any deeper (Tis). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).
I	T1 N0 M0	The tumor has grown deeper, but it is only in one part of the hypopharynx, and it is no more than 2 centimeters (cm) across (T1). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).
II	T2 N0 M0	The tumor has grown into more than one part of the

		<p>hypopharynx, OR it has grown into a nearby area, OR it is larger than 2 but no larger than 4 cm across and has not affected the vocal cords (T2).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p>
III	T3 N0 M0	<p>The tumor is larger than 4 cm across, OR the tumor is affecting the movement of the vocal cords, OR the tumor has grown into the esophagus (T3).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p>
	OR	
	T1 to T3 N1 M0	<p>The tumor can be any size and might or might not have grown into structures outside the hypopharynx, and it might or might not have affected a vocal cord (T1 to T3).</p> <p>The cancer has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).</p>
IVA	T4a N0 or N1 M0	<p>The tumor has grown into the thyroid or cricoid cartilage, the hyoid bone, the thyroid gland, or nearby areas of muscle or fat. This is also known as moderately advanced local disease (T4a).</p> <p>The cancer has not spread to nearby lymph nodes (N0), or it has spread to a single lymph node on the same side of the neck as the tumor, which is no larger than 3 centimeters (cm) across (N1). The cancer has not spread to distant parts of the body (M0).</p>
	OR	
	T1-T4a N2 M0	<p>The tumor can be any size and might or might not have grown into structures outside the hypopharynx (as far as moderately advanced disease), and it might or might not have affected a vocal cord (T1 to T4a). The cancer is N2:</p> <ul style="list-style-type: none"> • It has spread to a single lymph node on the same side of the neck as the tumor, which is larger than 3 centimeters

		<p>(cm) but no larger than 6 cm across, OR</p> <ul style="list-style-type: none"> • It has spread to more than one lymph node on the same side of the neck as the tumor, none of which is larger than 6 cm across, OR • It has spread to at least one lymph node on the other side of the neck, none of which is larger than 6 cm across. <p>The cancer has not spread to distant parts of the body (M0).</p>
IVB	T4b Any N M0	<p>The tumor is growing into the area in front of the spine in the neck, surrounds a carotid artery, or is growing down into the space between the lungs. This is also known as very advanced local disease (T4b).</p> <p>The cancer might or might not have spread to nearby lymph nodes (any N). It has not spread to distant parts of the body (M0).</p>
	OR	
	Any T N3 M0	<p>The tumor can be any size and might or might not have grown into structures outside the hypopharynx, and it might or might not have affected a vocal cord (any T).</p> <p>The cancer has spread to at least one lymph node that is larger than 6 cm across, OR it has spread to a lymph node and then grown outside of the lymph node (N3). It has not spread to distant parts of the body (M0).</p>
IVC	Any T Any N M1	<p>The tumor can be any size and might or might not have grown into structures outside the hypopharynx, and it might or might not have affected a vocal cord (any T).</p> <p>The cancer might or might not have spread to nearby lymph nodes (any N). The cancer has spread to distant parts of the body (M1).</p>

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

- TX: Main tumor cannot be assessed due to lack of information.
- NX: Regional lymph nodes cannot be assessed due to lack of information.

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/treating.html
2. www.cancer.org/treatment/understanding-your-diagnosis/staging.html

References

American Joint Committee on Cancer. Oropharynx (p16-) and Hypopharynx. In: *AJCC Cancer Staging Manual*. 8th ed. New York, NY: Springer; 2017: 123-135.

Last Medical Review: December 20, 2017 Last Revised: December 20, 2017

Survival Rates for Laryngeal and Hypopharyngeal Cancers

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 cancer to people in the overall population. For example, if the **5-year relative survival rate** for a specific stage of laryngeal or hypopharyngeal cancer is 80%, it means that people who have that cancer are, on average, about 80% 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 laryngeal and hypopharyngeal cancer in the United States, based on how far the cancer has spread. The SEER database, however, does not group cancers using AJCC TNM stages (stage 1, stage 2, stage 3, etc.) for [laryngeal](#) or [hypopharyngeal](#) cancer. Instead, it groups cancers into localized, regional, and distant stages:

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

5-year relative survival rates for laryngeal and hypopharyngeal cancers

These numbers are based on people diagnosed with cancers of the larynx or hypopharynx between 2008 and 2014. For laryngeal cancers, survival rates differ based on which part of the larynx the cancer started in (supraglottis, glottis, or subglottis).

Supraglottis (part of the larynx above the vocal cords)

SEER stage	5-year relative survival rate
Localized	60%
Regional	47%
Distant	30%
All SEER stages combined	46%

Glottis (part of the larynx including the vocal cords)

SEER stage	5-year relative survival rate
Localized	83%

Regional	50%
Distant	42%
All SEER stages combined	77%

Subglottis (part of the larynx below the vocal cords)

SEER stage	5-year relative survival rate
Localized	61%
Regional	(not available)
Distant	47%
All SEER stages combined	53%

Hypopharynx

SEER stage	5-year relative survival rate
Localized	52%
Regional	33%
Distant	19%
All SEER stages combined	31%

Understanding the numbers

- **These numbers apply only to the stage of the cancer when it is first diagnosed.** They do not apply later on if the cancer grows, spreads, or comes back after treatment.
- **These numbers don't take everything into account.** Survival rates are grouped based on how far the cancer has spread. But other factors, such as your age and overall health, and how well the cancer responds to treatment, can also affect your outlook.
- **People now being diagnosed with laryngeal or hypopharyngeal 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.

*SEER = Surveillance, Epidemiology, and End Results

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Last Medical Review: December 20, 2017 Last Revised: February 13, 2019

Questions to Ask Your Doctor About Laryngeal or Hypopharyngeal Cancer

It is important to have frank, open discussions with your cancer care team. They want to answer all of your questions, no matter how minor they might seem. For instance, consider these questions:

- Where is my cancer located?
- Has my cancer spread beyond where it started?
- What is the [stage](#) of my cancer, and what does that mean?
- Do I need other [tests](#) before we can decide on treatment?
- Are there other doctors I need to see?
- How much experience do you have treating this type of cancer?
- What [treatment choices](#)¹ do I have?
- Are you aware of any [clinical trials](#)² I might be eligible for?
- What do you recommend and why?

- What is the goal of the treatment?
- What are the chances my cancer can be cured with treatment?
- How quickly do we need to decide on treatment?
- What should I do to be ready for treatment?
- How long will treatment last? What will it involve? Where will it be done?
- What risks or side effects that I should expect? How long are they likely to last?
- How will this treatment affect my voice? If my larynx is removed, what are the options for restoring my voice?
- How will treatment affect my daily activities?
- What can we do if the treatment doesn't work or if the cancer recurs?
- What type of [follow-up](#)³ will I need after treatment?
- Where can I find more information and support?

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 that you can plan your work or activity schedule. Or you may want to ask about getting a second opinion.

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/treating.html
2. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
3. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/after-treatment.html

References

See all references for Laryngeal and Hypopharyngeal Cancer
(www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/references.html)

Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

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Treating Laryngeal and Hypopharyngeal Cancer

How are laryngeal and hypopharyngeal cancers treated?

Treatment for laryngeal or hypopharyngeal cancer may include:

- [Surgery for Laryngeal and Hypopharyngeal Cancers](#)
- [Radiation Therapy for Laryngeal and Hypopharyngeal Cancers](#)
- [Chemotherapy for Laryngeal and Hypopharyngeal Cancers](#)
- [Targeted Therapy for Laryngeal and Hypopharyngeal Cancers](#)

Common treatment approaches

Depending on the stage of the cancer and your overall health, different treatment options may be used alone or in combination. In creating your treatment plan, the most important factors to consider are the site and the stage (extent) of the cancer. Your cancer care team will also take into account your general health and your personal preferences. A major focus of treatments is to try to save your larynx and voice if at all possible. Most experts don't recommend surgery that will totally remove the larynx unless there are no other options.

- [Treating Laryngeal and Hypopharyngeal Cancers by Stage](#)
- [Treating Recurrent Laryngeal and Hypopharyngeal Cancers](#)

Who treats laryngeal and hypopharyngeal cancers?

Based on your treatment options, you might have different types of doctors on your treatment team. These doctors can include:

- An **otolaryngologist** (also known as an *ear, nose, and throat*, or *ENT* doctor): a surgeon who treats certain diseases of the head and neck.
- A **radiation oncologist**: a doctor who treats cancer with radiation therapy.
- A **medical oncologist**: a doctor who treats cancer with medicines such as chemotherapy.

Many other specialists could be involved in your care as well, including physician assistants, nurse practitioners, nurses, nutrition specialists, speech therapists, social workers, and other health professionals. In fact, a speech therapist and dietician are key players on your cancer care team. You'll meet with them before treatment starts so they can see how well you can swallow and make a nutrition plan for you to follow during treatment.

- [Health Professionals Associated With Cancer Care¹](#)

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. For instance, if the cancer is too advanced to be cured, the goal may be to remove or destroy as much of the cancer as possible to keep the tumor from growing, spreading, or returning for as long as possible. Some of the treatments can also be used as palliative treatment if all the cancer cannot be removed. Palliative treatment is meant to relieve symptoms, such as pain or trouble swallowing, but it's not expected to cure the cancer.

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.

- [Questions to Ask Your Doctor About Laryngeal or Hypopharyngeal Cancer²](#)
- [Seeking a Second Opinion³](#)

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 Trials](#)⁴

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 Medicine](#)⁵

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](#)⁶

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](#)⁷
- [Palliative or Supportive Care](#)⁸

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 Laryngeal and Hypopharyngeal Cancers

Surgery is commonly used to treat [laryngeal and hypopharyngeal cancers](#)¹. Depending on the type, [stage](#),² location of the cancer, and other tissues involved, different operations may be used to remove the cancer and sometimes other tissues near the larynx or hypopharynx. In almost all surgeries, the plan is to take out all of the cancer along with a rim (margin) of healthy tissue around it.

Surgery might be the only treatment needed for some early stage cancers. It also might be used along with other treatments, like [chemotherapy](#) or [radiation](#), for later stage cancers.

After the cancer is removed, reconstructive surgery may be done to help make the changed areas look and work better.

Surgery to treat the cancer

Endoscopic surgery

For this surgery, an [endoscope](#)³ is passed down your throat to find the tumor. The endoscope is a long thin tube with a light and camera on the end of it. This can be done to biopsy and treat some early stage tumors of the larynx.

The doctor can see the tumor using the camera, and pass long surgical instruments through the endoscope to strip away the superficial layers of tissue on the vocal cords. Most people can speak normally again after this operation.

Lasers can also be used through the endoscope. They can be used to either vaporize or excise (cut out) the tumor. A drawback of laser surgery is that it leaves nothing behind that can be taken out and tested. If the laser is used to remove part of a vocal cord, it may result in a hoarse voice.

Corpectomy

For a corpectomy the surgeon removes all or part of your vocal cords. This can be used to treat very small or superficial glottic (vocal cord) cancers. The effect of this procedure on speech depends on how much of the vocal cords are removed. Removing part of a vocal cord may cause hoarseness. Removing both vocal cords makes normal speech no longer possible.

Laryngectomy

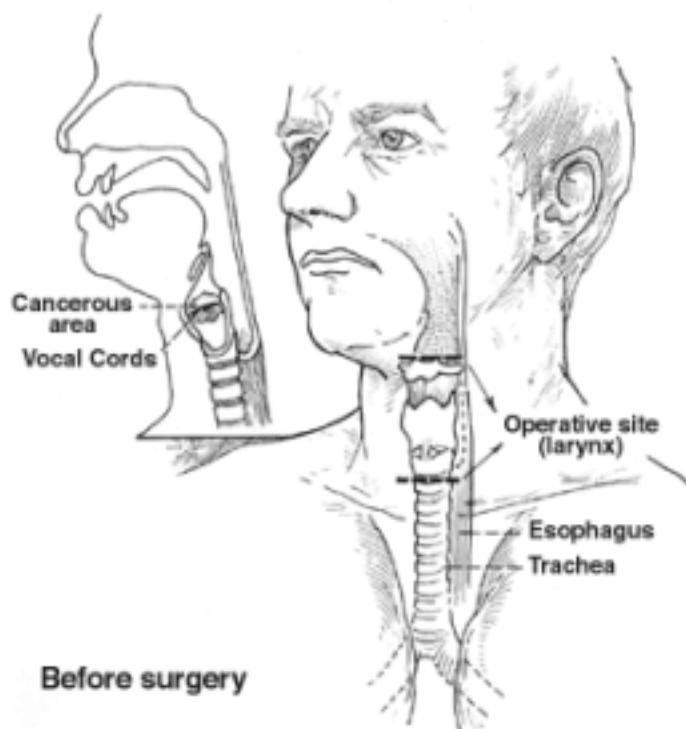
Laryngectomy is the removal of part or all of the larynx (voice box).

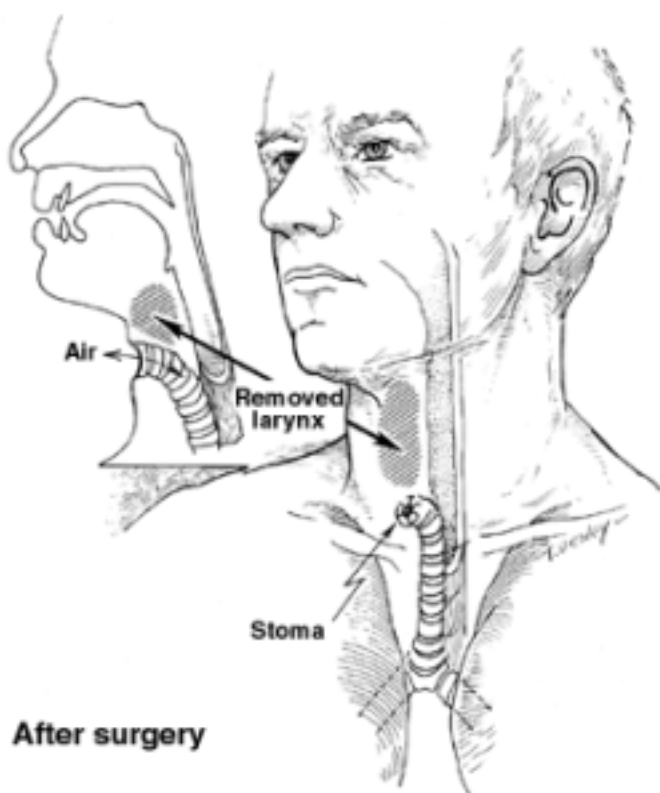
Partial laryngectomy: Smaller cancers of the larynx often can be treated by removing only part of the voice box. There are different types of partial laryngectomies, but they all have the same goal: to take out all of the cancer while leaving behind as much of the larynx as possible.

In a *supraglottic laryngectomy*, only the part of your larynx above the vocal cords is removed. This procedure can be used to treat some supraglottic cancers, and will allow you to speak normally afterward.

For small cancers of the vocal cords, the surgeon may be able to remove the cancer by taking out only one side of the larynx (one vocal cord) and leaving the other behind. This is called a *hemilaryngectomy*. Some speech remains after this surgery.

Total laryngectomy: In this procedure, your entire larynx is removed. The trachea (windpipe) is then brought up through the skin of the front of your neck as a [stoma](#)⁴ (or hole) that you breathe through (see the picture below). This is called a *tracheostomy*. When the entire larynx is removed, you can no longer speak normally, but you can learn other ways of speaking. (See [Living as a Laryngeal or Hypopharyngeal Cancer Survivor](#)⁵) The connection between the throat and the esophagus (swallowing tube) is usually not affected, so you can swallow food and liquids just as you did before the operation.





Illustrations by permission of the Mayo Foundation. From "Looking Forward...A Guidebook for the Laryngectomee" by R.L. Keith, et al, New York, Thieme-Stratton, Inc. and copyrighted by the Mayo Foundation, 1984.

Total or partial pharyngectomy

Surgery to remove all or part of the pharynx (throat) is called a *pharyngectomy*. This operation may be used to treat cancers of the hypopharynx. Often, the larynx is removed along with the hypopharynx. After surgery, you may need reconstructive surgery to rebuild this part of the throat and improve your ability to swallow.

Lymph node removal

Cancers of the larynx and hypopharynx may spread to the [lymph nodes](#)⁶ in the neck. If your doctor thinks that lymph node spread is likely, lymph nodes (and other nearby tissues) may be removed from your neck. This operation, called a *neck dissection*, is done at the same time as the surgery to remove the main tumor. Doctors determine how likely the cancer has spread to the lymph nodes based on the size and location of the tumor and whether or not the lymph nodes are enlarged on an [imaging test](#)⁷.

There are several forms of neck dissections, ranging from a *radical neck dissection* to a less extensive *selective neck dissection*. They differ in the amount of tissue removed from the neck.

In a full radical dissection, nerves and muscles responsible for some neck and shoulder movement are removed along with the lymph nodes. This might be needed to be sure that all of the lymph nodes likely to contain cancer are removed. If possible, doctors will try to remove less normal tissue to try to keep your shoulder and neck working normally.

Thyroidectomy

Sometimes the cancer spreads into the thyroid gland and all or part of it must be removed. The thyroid sits in the front of your neck and wraps around to the sides of the trachea (windpipe). It makes hormones that control your metabolism and how your body uses calcium.

If all of the thyroid gland is removed, your body can no longer make the thyroid hormone it needs. In this case, you must take thyroid hormone (levothyroxine) pills to replace the loss of the natural hormone.

Other surgeries that may be needed

Reconstructive surgery

These operations may be done to help restore the structure or function of areas affected by major surgeries needed to remove the cancer.

Myocutaneous flaps: Sometimes a muscle and area of skin may be rotated from an area close to your throat, such as the chest (pectoralis major flap), to reconstruct or rebuild part of your throat.

Free flaps: With the advances in microvascular surgery (sewing together small blood vessels under a microscope), surgeons now have many more reconstruction options. Tissues from other parts of your body such as a piece of intestine or a piece of arm muscle can be used to replace parts of your throat.

Tracheostomy/tracheotomy

A tracheostomy (tracheotomy) is when the trachea (windpipe) is connected to a hole (stoma) in the front of the neck to help a person breathe by letting air in and out of the

lungs through that hole. It may be used in certain cases.

For instance, after a partial laryngectomy or pharyngectomy, a temporary (short-term) tracheostomy may be needed to help protect your airway while you recover from surgery. To do this, a small plastic tube called a *trach tube* is put into your trachea through a hole in the front of your neck. The tube stays in place for a short time, and is removed when it's no longer needed. You then breathe through your mouth and nose like you did before.

As described above, a permanent tracheostomy is needed after a total laryngectomy. In this case, the opening in the trachea is attached to a hole in the skin in the front of your neck. A trach tube or stoma cover may be needed to help keep the tracheostomy hole open. You will breathe through this opening instead of through your mouth and nose.

If a laryngeal or hypopharyngeal cancer is blocking the windpipe and is too big to remove completely, an opening may be made to connect the lower part of your windpipe to a stoma (hole) in the front of your neck to bypass the tumor and allow you to breathe more comfortably.

Gastrostomy tube

Cancers in the larynx and hypopharynx may keep you from swallowing enough food to maintain good nutrition. This can make you weak and make it harder to complete treatment.

A *gastrostomy tube* (*G tube*) is a feeding tube that's put through the skin and muscle of your abdomen (belly) and right into your stomach. The tube is often put in place with the help of a flexible, lighted instrument (endoscope) passed down your mouth and into the stomach. This is done while you are sedated. When it's placed through endoscopy, it's called a *percutaneous endoscopic gastrostomy*, or *PEG tube*. Another option is to put the tube in during an operation. Once in place, liquid nutrition can be put right into the stomach through the tube.

Often, the gastrostomy tube is only needed for a short time to help you get enough nutrition during cancer treatment. The tube can be removed once you can swallow again after treatment. It's important to keep swallowing even when you're getting most of your nutrition through a G tube. This helps keep those muscles active and gives you a better chance of going back to normal swallowing after treatment is complete.

Possible risks and side effects of surgery

All surgery carries some risks, including blood clots, infections, complications from anesthesia, and pneumonia. These risks are generally low but are higher with more complicated operations.

Patients who have a laryngectomy or pharyngectomy typically lose the ability to speak normally. Some people will need a tracheostomy after surgery. Less extensive operations can also affect speech in some cases. (See [Living as a Laryngeal or Hypopharyngeal Cancer Survivor](#)⁸ for more about speech after surgery.)

Surgeries that affect the throat or voice box can lead to a gradual narrowing (stenosis) of the throat or larynx (if it remains after surgery). Sometimes this can affect breathing. If this happens, you might need a tracheostomy.

Throat or larynx surgeries may also sometimes affect your ability to swallow. This can affect how you eat, and might be severe enough to require a permanent feeding tube.

Laryngectomy and pharyngectomy can also lead to the development of a fistula (an abnormal opening between 2 areas that are not normally connected). Surgery may be needed to fix it.

A very rare but serious complication of neck surgery is rupture of a carotid artery (the large artery on either side of the neck).

For more general information on surgery as a treatment for cancer, see [Cancer Surgery](#)⁹.

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html
2. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/detection-diagnosis-staging/staging.html
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See all references for Laryngeal and Hypopharyngeal Cancer
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Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

Radiation Therapy for Laryngeal and Hypopharyngeal Cancers

Radiation therapy uses high-energy x-rays, gamma rays, or particles to kill cancer cells. When treating [laryngeal and hypopharyngeal cancers](#)¹, radiation therapy might be used in several ways:

- As the main (primary) treatment for some early [stage](#)² laryngeal and hypopharyngeal cancers. If the cancer is small, it can often be destroyed by radiation and [surgery](#) isn't needed. This can help to preserve better voice quality.
- To treat patients who are too sick to have surgery.
- After surgery, to try to kill any small areas of cancer that may remain and help lower the chance the cancer will come back. (This is called *adjuvant treatment*.)
- To treat cancer that comes back after treatment ([cancer recurrence](#)³).
- To ease symptoms of advanced laryngeal and hypopharyngeal cancer such as pain, bleeding, trouble swallowing, and problems caused when cancer spreads to the bones. (This is called [palliative or supportive care](#)⁴.)

Many times [chemotherapy](#) is given along with the radiation. This combination, called *chemoradiation*, can work better than radiation alone, but it also has more [side effects](#)⁵.

Radiation to this part of your body can affect your teeth and gums, so it's important to see a dentist before starting treatment. A dentist can make sure your mouth is healthy before treatment. During and after treatment a dentist can help check for and treat any problems that may come up, such as infection or tooth/bone damage.

Smoking during radiation treatment is linked to worse outcomes, so you should stop smoking completely before starting treatment. Smoking also increases the risk of the cancer coming back after treatment as well as the risk of getting another cancer, so [quitting smoking](#)⁶ for good is the best way to improve your survival.

Types of radiation therapy

There are 2 main types of radiation therapy.

External beam radiation therapy

This is the most common type of radiation therapy used to treat laryngeal and hypopharyngeal cancer. Radiation from a source outside the body is focused on the cancer.

Before your treatments start, the radiation team will use a [CT scan](#)⁷ to take careful measurements to determine the correct angles for aiming the radiation beams and the proper dose of radiation. A mesh head and body cast may be made to hold your head, neck, and shoulders in the exact same position for each treatment.

Radiation therapy is much like getting an x-ray, but the radiation is much stronger. The procedure itself is painless. Each treatment lasts only a few minutes, but the setup time – getting you into place for treatment – usually takes longer.

Radiation therapy for laryngeal and hypopharyngeal cancer is usually given in daily fractions (doses), 5 days per week, for about 7 weeks.

Other schedules for radiation may be used to treat laryngeal cancer. For instance, in *hyperfractionation radiation therapy*, a slightly higher daily radiation dose is split into 2 smaller doses and the patient gets 2 doses per day instead of 1.

There are also newer techniques that help doctors focus the radiation more precisely:

- **Three-dimensional conformal radiation therapy (3D-CRT):** 3D-CRT uses the results of imaging tests such as [MRI](#)⁸ and special computers to precisely map the location of the tumor. Several radiation beams are then shaped and aimed at the tumor from different directions. Each beam alone is fairly weak, which makes it less likely to damage normal tissues it passes through, but the beams meet at the tumor to give a higher dose of radiation there.
- **Intensity modulated radiation therapy (IMRT):** IMRT is an advanced form of 3D therapy. It uses a computer-driven machine that actually moves around the patient as it delivers radiation. Along with shaping the beams and aiming them at the tumor from several angles, the intensity (strength) of the beams can be adjusted to limit the dose reaching the most sensitive nearby normal tissues. This may let the doctor deliver a higher dose to the tumor. **This is the most common way radiation is**

given for laryngeal and hypopharyngeal cancer.

Brachytherapy

Internal radiation therapy, also known as brachytherapy, uses radioactive material put right into or near the cancer. Brachytherapy may be used alone or along with external beam radiation therapy. It's rarely used to treat laryngeal and hypopharyngeal cancer.

Side effects of radiation therapy

Many people treated with radiation to the neck and throat area have [painful sores](#)⁹ in the mouth and throat that can make it very [hard to eat and drink](#)¹⁰. This can lead to weight loss and malnutrition. The sores heal with time after the radiation ends, but some people continue to have problems swallowing long after treatment ends. Ask about swallowing exercises you can do to help keep those muscles working and increase your chance of eating normally after treatment.

Other [side effects](#)¹¹ of radiation therapy may include:

- Skin problems in the area being treated, ranging from redness to blistering and peeling
- Dry mouth
- Worsening of hoarseness
- Trouble swallowing
- Loss of taste
- Possible breathing trouble from swelling
- Tiredness
- Hearing problems

Most of these side effects slowly go away when treatment is over. Side effects of radiation tend to be worse if chemotherapy is given at the same time. Tell your doctor about any side effects you have because there are often ways to help.

Radiation aimed at the head and neck might damage the salivary glands, leading to dry mouth that doesn't get better with time. This can cause discomfort and problems swallowing, and can also lead to tooth decay. People treated with radiation to the neck and throat must pay close attention to their oral health.

Radiation may also damage your thyroid gland. Your doctor will do blood tests to see how well your thyroid is working. You may need treatment if it's been damaged.

When radiation is used as the main treatment for cancer of the larynx, it could very rarely lead to breakdown of the cartilage in the throat. If this happens, you may need a [tracheostomy](#) or [laryngectomy](#).

More information about radiation therapy

To learn more about how radiation is used to treat cancer, see [Radiation Therapy](#)¹².

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects](#)¹³.

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html
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Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

Chemotherapy for Laryngeal and Hypopharyngeal Cancers

Chemotherapy (chemo) uses anti-cancer drugs that are injected into a vein or given by mouth. These drugs enter the bloodstream and reach all areas of the body, making this treatment useful for cancers that have spread.

Chemo may be used in these ways for [laryngeal and hypopharyngeal cancers](#)¹:

- Along with [radiation](#) as the main treatment for more advanced cancers of the larynx. This treatment, called *chemoradiation*, can allow some patients to avoid [laryngectomy](#) and be able to speak. **Chemoradiation is a common treatment for laryngeal and hypopharyngeal cancers.** (See chemoradiation below.)
- As part of chemoradiation after cancer has been removed with [surgery](#). The goal is to try to kill any small areas of cancer that may remain and lower the chance the cancer will come back. This is called *adjuvant treatment*.
- Before radiation or surgery to help shrink a large tumor so it's easier to treat or to ease problems it might be causing. This may be called *neoadjuvant treatment* or *induction chemotherapy*. It's also thought that tumor response to induction chemo may help in making plans for the next treatment. If there's good response (the tumor shrinks), chemoradiation and organ preservation may be best. (These are covered below in the chemoradiation section.) If there's little or no tumor response, surgery may be needed.
- To help relieve symptoms from cancers that are too big or have spread too far to be completely removed with surgery. This may be called [supportive or palliative care](#)².

Chemo drugs

Chemo drugs work by attacking cells that are dividing quickly, this includes cancer cells. Some of the chemo drugs commonly used for cancers of the larynx and hypopharynx include:

- Cisplatin
- Carboplatin
- 5-fluorouracil (5-FU)
- Docetaxel (Taxotere[®])
- Paclitaxel (Taxol[®])
- Epirubicin

Treatment may involve the use of a single drug or 2 or more in combination. A common combination is cisplatin and 5-FU, but other combinations are also used.

Doctors give chemo in cycles, with each period of treatment followed by a rest period to give the body time to recover. In most cases, each cycle lasts for a few weeks.

Chemoradiation

Chemoradiation (also called *chemoradiotherapy*) is chemotherapy given at the same time as [radiation](#). This has been shown to shrink laryngeal and hypopharyngeal tumors more than either treatment alone. Some call this *organ preservation treatment* because chemoradiation can be used instead of [surgery](#) so the structures in and near the larynx are not altered.

Chemoradiation can be used in different situations:

- As the main treatment to treat some laryngeal and hypopharyngeal cancers. If the tumor goes away completely with chemoradiation, no other treatment may be needed. But if some cancer remains, surgery may be needed.
- As the main treatment for people who are too sick for surgery or don't want to have surgery.
- After surgery to try to lower the risk that the cancer will come back. This may be needed if cancer is found at the edges (margins) of the removed tumor, or if the cancer has other features that make it more likely to come back after surgery.
- If the cancer has spread to nearby [lymph nodes](#)³.

A common regimen is to give a dose of cisplatin every 3 weeks (for a total of 3 doses) during radiation. For people who cannot tolerate chemoradiation, the [targeted drug](#) cetuximab is often used with radiation instead.

Chemo side effects

Chemo drugs kill 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 can also be affected by chemo. This leads to [side effects](#)⁴. Side effects depend on the specific drugs used, their dose, and the length of treatment. Side effects tend to be worse when chemo is given along with radiation. Common side effects of chemo include:

- Nausea and vomiting
- Loss of appetite
- Mouth sores
- Diarrhea
- Hair loss
- An increased chance of infection (from a shortage of white blood cells)
- Problems with bleeding or bruising (from a shortage of blood platelets)

- Fatigue or shortness of breath (from low red blood cell counts)

Along with the risks above, some chemo drugs can cause other side effects. For instance, cisplatin, docetaxel, and paclitaxel can cause nerve damage (called neuropathy), which can lead to numbness, tingling, or even pain in the hands and feet. The nerve damage caused by cisplatin can also cause hearing loss. This often improves once treatment is stopped, but it can last a long time in some people.

Although most side effects improve once treatment is stopped, some can last a long time or even last forever. If your doctor plans treatment with chemo, be sure to discuss the drugs that will be used and the possible side effects. Once chemo is started, let your health care team know if you have side effects, so they can be treated. There are ways to prevent or treat many of the side effects of chemo. For instance, there are many drugs that can help prevent or treat nausea and vomiting.

More information about chemotherapy

To learn more about how chemotherapy is used to treat cancer, see [Chemotherapy](#)⁵.

To learn about some of the side effects listed here and how to manage them, see [Managing Cancer-related Side Effects](#)⁶.

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html
2. www.cancer.org/treatment/treatments-and-side-effects/palliative-care.html
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Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

Targeted Therapy for Laryngeal and Hypopharyngeal Cancers

As researchers have learned more about the changes in cells that cause cancer,

they've been able to develop newer drugs that specifically target these changes. Targeted drugs work differently from [standard chemo drugs](#). They may work in some cases when chemo doesn't. They also tend to have different (and less severe) side effects. So they may be useful in treating people who cannot tolerate chemo [side effects](#)¹.

Cetuximab (Erbix[®]) is a [monoclonal antibody](#)², which is a man-made version of an immune system protein. It targets epidermal growth factor receptor (EGFR), a protein on the surface of certain cells that helps them grow and divide. [Laryngeal and hypopharyngeal cancer](#)³ cells often have more than normal amounts of EGFR. By blocking EGFR, cetuximab can slow or stop cancer cell growth.

Cetuximab may be combined with [radiation therapy](#) for some earlier stage cancers. For more advanced cancers, such as those that have spread or come back after treatment, it may be combined with chemo drugs like cisplatin and 5FU, or it may be used by itself.

Cetuximab is given by infusion into a vein (IV), usually once a week. A rare but serious side effect of cetuximab is an allergic reaction during the first infusion, which could cause problems with breathing and low blood pressure. You will be given medicine before treatment to help prevent this.

Many people develop skin problems such as an acne-like rash on the face and chest during treatment, which in some cases can lead to infections. Other side effects might include headache, tiredness, fever, nausea, and diarrhea.

Talk to your doctor about the [side effects](#)⁴ you should watch for and what can be done to help prevent or treat them.

Studies of other targeted therapy drugs to treat laryngeal and hypopharyngeal cancers are going on now.

To learn more about this cancer treatment see [Targeted Therapy](#)⁵.

Hyperlinks

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Treating Laryngeal and Hypopharyngeal Cancers by Stage

Most of the time, the treatment of [laryngeal or hypopharyngeal cancer](#)¹ is based on its [stage](#)² – how far it has spread. But other factors, such as your overall health and your personal preferences, may also affect treatment options. Talk to your doctor if you have

any [questions](#)³ about the treatment plan he or she recommends. Make sure you understand the [goal of treatment](#)⁴. Ask how treatment will change how you look, talk, breathe, and eat.

Laryngeal cancers

Stage 0

These cancers are almost always glottic (vocal cord) cancers that are found early because of voice changes. They are nearly always curable with either [endoscopic surgery](#) or [radiation therapy](#). The patient is then watched closely to see if the cancer returns. If the cancer does come back, radiation can be used.

Almost all people at this stage can be cured without major surgery. But it's important for them to know that if they smoke, continuing to do so makes treatment less likely to work and increases the risk that another tumor will develop.

Stage I and II laryngeal cancers

Most people with stage I and II laryngeal cancers can be treated successfully without totally removing their larynx.

Either [radiation](#) alone (without surgery) or [partial laryngectomy](#) can be used in most people. Many doctors use radiation therapy for smaller cancers. Voice results tend to be better with radiation therapy than with partial laryngectomy, and there tend to be fewer problems with radiation treatment.

The treatment for glottic (vocal cord) cancers and supraglottic cancers (those starting above the vocal cords) is slightly different. Some early glottic cancers may be treated by removing the vocal cord with cancer ([cordectomy](#)), or even by [laser surgery](#). [Radiation](#) or [surgery](#) is usually enough to treat most glottic cancers unless there are signs that the treatment might not have cured the cancer (such as finding cancer cells at the edge of the removed tumor). If you need more treatment after surgery, your options might include radiation therapy, [chemoradiation](#), or surgery to remove more of the larynx.

Supraglottic cancers are more likely to spread to the neck [lymph nodes](#)⁵. If so, the nodes are treated too. If you're having surgery for your tumor (supraglottic laryngectomy), then the surgeon may remove lymph nodes from your neck (called a lymph node dissection). If your treatment is radiation therapy alone, you will also get radiation to the lymph nodes in the neck. If, after surgery, the cancer is found to have features that make it more likely to come back, more treatment such as radiation

therapy, chemoradiation, or more extensive surgery may be needed.

Stage III and IV laryngeal cancers

Stage III and IV laryngeal cancers are often treated with some combination of [surgery](#), [radiation](#), and/or [chemotherapy](#).

The main options for initial treatment are surgery or chemotherapy with radiation. Radiation therapy alone (or with the [targeted drug cetuximab](#)) may be an option for people who cannot tolerate more intensive treatments.

Surgery for these tumors is almost always complete removal of the larynx (total laryngectomy), but a small number of these cancers might be treated by partial laryngectomy.

At this stage, these cancers have a higher risk of spreading to nearby [lymph nodes](#)⁶ in the neck, so these lymph nodes are often removed along with the tumor if surgery is being done. Radiation therapy, often given with chemo, may be needed after surgery, especially if the cancer has spread to the lymph nodes or has other features that make it more likely to come back.

Instead of using surgery as the first step, many doctors now prefer to start treatment with chemoradiation (radiation and chemotherapy given together). If any cancer remains after treatment, surgery can then be done to try to remove it. This treatment can be difficult, but it works as well as total laryngectomy and gives a chance to save the larynx. If the framework of the larynx (such as the thyroid cartilage) has been destroyed by the cancer, the larynx may never work normally again, no matter what treatment is chosen. In these cases, the best treatment may be surgery to remove the larynx and nearby tissues with cancer (such as the thyroid gland).

Another option may be to start with just chemotherapy, which is called *induction chemotherapy*. If the tumor shrinks, radiation therapy or chemoradiation is then given. If the tumor doesn't shrink, surgery is usually the next treatment.

Cancers that are too big or have spread too far to be completely removed by surgery are often treated with radiation, usually combined with chemotherapy or cetuximab. Sometimes, if the tumor shrinks enough, surgery of lymph nodes in the neck may be an option. But for many advanced cancers, the goal of treatment is often to stop or slow the growth of the cancer for as long as possible and to help relieve any symptoms it may be causing.

Most experts agree that treatment in a [clinical trial](#)⁷ should be considered for advanced

stage laryngeal cancers. This way patients can get the best treatment available now and may also get the treatments that are thought to be even better.

Hypopharyngeal cancers

These cancers are often harder to treat than laryngeal cancers. Because they don't cause symptoms when they're small, most are already at an advanced [stage](#)⁸ when they're diagnosed. Tumors in this area also tend to spread to the [lymph nodes](#)⁹, even when there's no obvious mass in the neck. Because of this, treatment of the lymph nodes in the neck is often recommended.

Stage I hypopharyngeal cancers

The main options for initial treatment of these cancers are [surgery](#)¹⁰ with or without [radiation](#) to the lymph nodes.

Surgery includes removing all or part of the pharynx (throat) as well as lymph nodes on both sides of the neck (lymph node dissection). The larynx (voice box) often needs to be removed as well. People who have a high chance of the cancer returning (based on what's found during surgery) may then be treated with radiation or [chemotherapy](#) combined with radiation (chemoradiation).

Some patients with small tumors may get radiation as their main treatment. The cancer is assessed again after the treatment is complete and if there's any cancer left, surgery is done.

Stages II, III, and IV hypopharyngeal cancers

There are 3 main options to treat these cancers.

The first is [surgery](#) to remove the pharynx, larynx, and [lymph nodes](#)¹¹ in the neck. This is usually followed by [radiation](#) alone or radiation with [chemo](#), especially if there's a high chance that the cancer will come back based on what is found during surgery.

Another option is to be treated first with radiation or both radiation and chemo ([chemoradiation](#)). If any cancer remains after treatment, surgery can then be done to try to remove it.

The third option is to get chemotherapy as the first treatment, called *induction chemotherapy*. This is usually followed by radiation therapy or chemoradiation, depending on how much the tumor shrinks. If the tumor does not shrink, surgery might

be done. If the lymph nodes in the neck are still enlarged after treatment, surgery can be done to remove them (lymph node dissection).

Cancers that are too big or have spread too far to be completely removed by surgery are often treated with radiation, usually combined with chemo or [cetuximab](#). Sometimes, if the tumor shrinks enough, surgery of lymph nodes in the neck may be an option. But for many advanced cancers, the goal of treatment is often to stop or slow the growth of the cancer for as long as possible and to help relieve any symptoms it may be causing.

Most experts agree that treatment in a [clinical trial](#)¹² should be considered for advanced stage hypopharyngeal cancers. This way patients can get the best treatment available now and may also get the treatments that are thought to be even better.

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Treating Recurrent Laryngeal and Hypopharyngeal Cancers

Cancer is called [recurrent](#)¹ when it come backs after treatment. Recurrence can be local (in or near the same place it started) or distant (spread to other parts of the body, like the lungs or bone). Treatment options for patients whose [laryngeal or hypopharyngeal cancers](#)² come back after treatment depend mainly on what the first treatment was and where the cancer recurs.

Because these cancer recurrences are hard to treat, patients may want to think about taking part in [clinical trials](#)³ of newer treatments.

Local recurrence

Local recurrences in people who have already had limited [surgery](#) such as partial laryngectomy can often be treated with more extensive surgery (such as total laryngectomy). This may be followed by [radiation therapy](#) or chemoradiation (radiation and chemo are given at the same time).

Local recurrence may also be treated with [chemotherapy](#). Chemo may be given along with [cetuximab](#). Or, chemoradiation may be used.

If cancer comes back locally after radiation therapy, the usual treatment is total laryngectomy, but more radiation therapy is sometimes used.

If surgery can't be done, chemo or chemoradiation can be used to help control the cancer and ease any problems it might be causing. (This is called [palliative or supportive care](#)⁴.)

Distant recurrence

Distant recurrences that have not responded to radiation therapy and surgery are treated with [chemotherapy](#) and/or [targeted therapy](#). Chemoradiation may also be used, if a person can tolerate it.

If there are only a few tumors, [surgery](#) may be done. [Radiation](#) or chemo are also options.

Chemo or chemoradiation can be used to help control the cancer and ease any problems it might be causing. (This is called [palliative or supportive care](#)⁵.)

Hyperlinks

1. www.cancer.org/treatment/survivorship-during-and-after-treatment/understanding-recurrence.html
2. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html
3. www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html
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Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

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

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After Laryngeal and Hypopharyngeal Cancer Treatment

Living as a Cancer Survivor

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

- [Living as a Laryngeal or Hypopharyngeal Cancer Survivor](#)

Cancer Concerns After Treatment

Treatment may remove or destroy the cancer, but it is very common to have questions about cancer coming back or treatment no longer working.

- [Second Cancers After Laryngeal or Hypopharyngeal Cancer](#)

Living as a Laryngeal or Hypopharyngeal Cancer Survivor

For many people with laryngeal or hypopharyngeal cancer, the end of treatment can be both stressful and exciting. You may be relieved to finish treatment, yet it's hard not to worry about cancer coming back (recurring). This is very common if you've had cancer.

For others, the cancer might never go away completely. Some still may get regular treatments to try and help keep the cancer in check. Learning to [live with cancer](#)¹ that does not go away can be difficult and very stressful.

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

Follow-up care

If you have completed treatment, your doctors will still want to watch you closely. It's very important to go to all follow-up appointments. People with cancer of the larynx or hypopharynx are at risk of the cancer coming back and are at risk for developing new cancers in the head and neck area, so they must be watched closely after treatment. Your cancer care team will discuss which tests should be done and how often based on the type and [stage](#)² of the cancer, the type of treatment you had, and your response to that treatment.

When these cancers [come back \(recur\)](#)³, it's most often in the first couple of years after treatment, so you will see the doctor more often during this time. Your head and neck will be examined (often including [laryngoscopy](#)⁴) about every other month during the first year or so after treatment. More time will be allowed between follow-up visits if there's no sign of cancer coming back (recurrence) as time goes by. Chest x-rays and other [imaging tests](#)⁵ may be used to watch for recurrence or a new tumor, especially if you have new symptoms.

If you were treated with radiation and it affected your thyroid gland, you might need regular blood tests to check your thyroid function. People treated with radiation may also have problems with [dry mouth](#)⁶ and tooth decay, so you may need regular dental exams. Both radiation and surgery can lead to problems with speech and swallowing. These are often checked and treated by a speech therapist after treatment.

Almost any cancer treatment can have [side effects](#)⁷. Some last for a few weeks to months, but others can last the rest of your life. Be sure to tell your cancer care team about any symptoms or side effects that bother you so they can help you manage them.

It's very important to report any new problems to your doctor right away. This might help your doctor help find recurrent cancer as early as possible, when the cancer is small and easier to treat.

If cancer does recur, treatment will depend on the location of the cancer and what treatments you've had before. To learn more about this, see [Recurrent Laryngeal and](#)

[Hypopharyngeal Cancers](#)⁸. For more general information on dealing with cancer recurrence, see [Understanding Recurrence](#)⁹.

Stoma (tracheostomy) care following total laryngectomy

Having a stoma ([tracheostomy](#)¹⁰) means that the air you breathe will no longer pass through your nose or mouth, which normally help moisten, warm, and filter the air (removing dust and other particles). This means the air going into your lungs will be dryer and cooler. This may irritate the lining of your breathing tubes and cause thick or crusty mucus to build up.

It's important to learn how to take care of your stoma. You'll need to use a humidifier over the stoma as much as possible, especially right after the operation, until your airway lining has a chance to adjust to the drier air. You'll also need to learn how to suction out and clean your stoma to help keep your airway open.

Your doctors, nurses, and other health care professionals can teach you how to care for and protect your stoma. This will include precautions to keep water from getting into your windpipe while showering or bathing, as well as keeping small particles out of your windpipe.

Support groups formed by other people with tracheostomies can be good sources of information on stoma care and the use of products to protect and clean it.

Restoring speech after total laryngectomy

Total [laryngectomy](#)¹¹ removes your larynx (voice box), and you won't be able to speak using your vocal cords. After a laryngectomy, your windpipe (trachea) is separated from your throat, so you can no longer send air from your lungs out through your mouth to speak. But there are ways you can learn to talk after total laryngectomy:

- **Tracheo-esophageal puncture (TEP):** This is the most common way that surgeons try to restore speech. It can be done either during the surgery to treat the cancer or later. This procedure creates a connection between the windpipe and esophagus through a small hole at the stoma site. A small one-way valve put into this hole makes you able to force air from your lungs into your mouth. After this operation, you can cover your stoma with a finger to force air out of your mouth, producing sustained speech. (Some newer "hands-free" models do not require you to cover the stoma to speak.) This takes practice, but after surgery you can work closely with a speech therapist to learn how to do this.

- **Electrolarynx:** If you cannot have a TEP for medical reasons, or while you are learning to use your TEP voice, you may use an electrical device to produce a mechanical voice. The battery-operated device is placed at the corner of your mouth or against the skin of your neck. When you press a button on the device, it makes a vibrating sound. By moving your mouth and tongue, you can form this sound into words. You'll need training with a speech therapist to learn to use it properly.
- **Esophageal speech:** With training, some people learn to swallow air into the esophagus (the tube that connects your mouth to your stomach) and force it out through their mouth. As the air passes through the throat it will cause vibrations which, with training, can be turned into speech. This is the most basic form of speech rehabilitation. New devices and surgical techniques often make learning esophageal speech unnecessary.

Learning to speak again will take time and effort, and your voice will not sound the same. You will need to see a speech therapist who is trained in helping people who have had a laryngectomy. The speech therapist will play a major role in helping you to learn to speak.

Help for swallowing and nutrition problems

Cancers of the larynx or hypopharynx and their treatments can sometimes cause problems such as trouble swallowing, dry mouth, or even loss of teeth. This can make it [hard to eat](#)¹², which can lead to weight loss and weakness due to poor nutrition.

Some people may need to adjust what they eat during and after treatment or may need nutritional supplements to help make sure they get the nutrition they need. Some people may even need to have a feeding tube placed in the stomach.

A team of doctors and nutritionists can work with you to help you manage your individual nutritional needs. This can help you maintain your weight and get the nutrients you need. They can also talk to you about swallowing exercises that can help keep these muscles working and give you a better chance of eating normally after treatment.

Restoring your sense of smell

If you have lost your sense of smell, or are smelling odors that aren't really there, olfactory rehabilitation might be another part of your recovery. Problems with smell

(called olfactory disorders) can affect your appetite, sense of taste, food enjoyment, and how much you eat. Nearly all people who have had a laryngectomy will find they cannot smell things the way they did before. This is because air no longer travels through your nose.

With olfactory rehabilitation, you can be taught techniques that cause nasal airflow and may help you recover your sense of smell. Examples are the nasal airflow-inducing maneuver (NAIM) and polite yawning. Olfactory rehabilitation (rehab) is available at some large medical centers. Talk to your health care team to learn more.

Sexual impact of laryngectomy

[Laryngectomy](#)¹³, with the resulting [tracheostomy](#)¹⁴ (stoma), can change the way you look as well as the way you talk and breathe. Sexual intimacy may be affected by these changes, but there are things you can do that can help during intimacy. Learn more details in [Sex and the Man With Cancer](#)¹⁵ and [Sex and the Woman With Cancer](#)¹⁶.

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 the 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

Keeping health insurance and copies of your medical records

Even after treatment, it's very important to keep health insurance. 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](#)¹⁷.

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

If you have (or have had) laryngeal or hypopharyngeal cancer, you probably want to know if there's anything you can do that might lower your risk of the cancer growing or coming back, such as exercising, eating a certain type of diet, or taking nutritional supplements. But it's not yet clear if there are things you can do that will help.

Adopting healthy behaviors such as [not smoking](#)¹⁸, [eating well](#)¹⁹, [getting regular physical activity](#)²⁰, and [staying at a healthy weight](#)²¹ might help, but no one knows for sure. But we do know that these types of changes can have positive effects on your health that can extend beyond your risk of laryngeal or hypopharyngeal cancer or other cancers.

About dietary supplements

So far, no [dietary supplements](#)²² (including vitamins, minerals, and herbal products) have been shown to clearly help lower the risk of laryngeal or hypopharyngeal cancer progressing or coming back. This doesn't mean that no supplements will help, but it's important to know that none have been proven to do so.

Dietary supplements are not regulated like medicines in the United States – they do not have to be proven effective (or even safe) before being sold, although there are limits on what they're allowed to claim they can do. If you're thinking about taking any type of nutritional supplement, talk to your health care team. They can help you decide which ones you can use safely while avoiding those that might be harmful.

Could I get a second cancer after treatment?

People who've had laryngeal or hypopharyngeal cancer can still get other cancers. In fact, laryngeal or hypopharyngeal cancer survivors are at higher risk for getting some other types of cancer. Learn more in [Second Cancers After Laryngeal or Hypopharyngeal Cancer](#).

Getting emotional support

Some amount of feeling depressed, anxious, or worried is normal when cancer is a part of your life. Some people are affected more than others. But everyone can benefit from help and support from other people, whether friends and family, religious groups, support groups, professional counselors, or others. Learn more in [Life After Cancer](#)²³.

Hyperlinks

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Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

Second Cancers After Laryngeal or Hypopharyngeal Cancer

Cancer survivors can be affected by a number of 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've had, it's still possible to get another (new) cancer, even after surviving the first.

In fact, certain types of cancer and cancer treatments can be linked to a higher risk of certain second cancers.

Survivors of [laryngeal cancer](#)¹ can get any second cancer, but they have an increased risk of:

- [Cancers of the mouth and throat](#)²
- [Esophagus cancer](#)³
- [Colon cancer](#)⁴
- [Liver cancer](#)⁵
- [Lung cancer](#)⁶
- [Bladder cancer](#)⁷
- [Kidney cancer](#)⁸
- [Thyroid cancer](#)⁹

Many of these cancers are linked to smoking and alcohol use, which are also risk factors for laryngeal cancer.

Survivors of [cancer of the hypopharynx](#)¹⁰ can get any second cancer, but have an increased risk of:

- [Cancers of the mouth and throat](#)¹¹
- [Cancer of the nasal cavity](#)¹²
- [Cancer of the nasopharynx](#)¹³
- Cancer of the larynx (voicebox)
- [Esophagus cancer](#)¹⁴
- [Stomach cancer](#)¹⁵
- [Colon cancer](#)¹⁶
- [Rectal cancer](#)¹⁷
- [Pancreas cancer](#)¹⁸
- [Liver cancer](#)¹⁹
- [Lung cancer](#)²⁰
- [Bladder cancer](#)²¹

Many of these cancers are linked to smoking and alcohol use, which are also risk factors for hypopharyngeal cancer.

Survivors of laryngeal and hypopharyngeal cancers should follow the [American Cancer Society guidelines for the early detection of cancer](#)²² and [stay away from tobacco products](#)²³.

To help maintain good health, survivors should also:

- Get to and stay at a [healthy weight](#)²⁴
- Adopt a [physically active lifestyle](#)²⁵
- Consume a [healthy diet](#)²⁶, with a focus on plant foods
- Limit [alcohol](#)²⁷ intake 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.

See [Second Cancers in Adults](#)²⁸ to learn more.

Hyperlinks

1. www.cancer.org/cancer/laryngeal-and-hypopharyngeal-cancer/about/what-is-laryngealand-hypopharyngeal.html
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Last Medical Review: November 27, 2017 Last Revised: November 27, 2017

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