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# Oral Cavity and Oropharyngeal Cancer Early Detection, Diagnosis, and Staging

## Detection and Diagnosis

Finding cancer early, when it's small and hasn't spread, 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 Oral Cavity and Oropharyngeal Cancers Be Found Early?](#)
- [Signs and Symptoms of Oral Cavity and Oropharyngeal Cancer](#)
- [Tests for Oral Cavity and Oropharyngeal 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.

- [Oral Cavity and Oropharyngeal Cancer Stages](#)
- [Survival Rates for Oral Cavity and Oropharyngeal Cancer](#)

## Questions to Ask Your Cancer Care Team

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

- [What Should You Ask Your Doctor About Oral Cavity and Oropharyngeal Cancers?](#)
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# Can Oral Cavity and Oropharyngeal Cancers Be Found Early?

There's no routine screening test or plan for oral cavity and oropharyngeal cancers. Still, many pre-cancers and cancers in these areas can be found early (when they're small) during routine screening exams by a dentist, doctor, dental hygienist, or by self-exam.

Some early cancers have [symptoms](#) that cause people to seek medical or dental attention. But a lot of these cancers don't cause symptoms until they've grown or spread to other tissues. Or, they may cause symptoms much like those caused by problems other than cancer, such as a toothache or ear pain.

Some dentists and doctors recommend that you look at your mouth in a mirror every month to check for any changes, like white patches, sores, or lumps. This is very important if you use or have used tobacco, and/or if you routinely drink alcohol, as these put you at much higher [risk for these cancers](#)<sup>1</sup>.

Regular dental check-ups that include an exam of the entire mouth are important in finding oral and oropharyngeal cancers (and pre-cancers) early.

Along with a clinical exam of the mouth and throat, some dentists and doctors may use special dyes and/or lights to look for abnormal areas, especially if you are at higher risk for these cancers. If an abnormal area is spotted, tests may also be used to help decide if they might be cancers (and need to be biopsied) or to choose the best spot to take tissue from for a biopsy. (See [Tests for Oral Cavity and Oropharyngeal Cancers](#) to learn more about biopsies.) Here are some of the tests most often used:

- One method uses a dye called *toluidine blue*. If the dye is spread over an abnormal area, it will turn blue.
- Another method uses laser light. When the light is reflected off abnormal tissue, it looks different from the light reflected off normal tissue.
- Another system uses a special light to look at the changed area after the mouth has been rinsed with a solution of acetic acid (the acid in vinegar).
- If an abnormal area is found, sometimes it can be tested by exfoliative cytology. To do this, the change tissue is scraped with a stiff brush (brush biopsy). The cells from the scraping are sent to a lab where they're checked under the microscope to see if there are pre-cancer or cancer cells.

## Hyperlinks

1. [www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer/causes-risks-prevention/risk-factors.html](http://www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer/causes-risks-prevention/risk-factors.html)

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National Cancer Institute. Oral Cavity, Pharyngeal, and Laryngeal Cancer Screening (PDQ®)—Health Professional Version. February 9, 2018. Accessed at [www.cancer.gov/types/head-and-neck/hp/oral-screening-pdq#section/\\_1](http://www.cancer.gov/types/head-and-neck/hp/oral-screening-pdq#section/_1) on February 21, 2018.

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# Signs and Symptoms of Oral Cavity and Oropharyngeal Cancer

Possible signs and symptoms of oral cavity and oropharyngeal cancers include:

- A sore in the mouth that doesn't heal (the most common symptom)
- Pain in the mouth that doesn't go away (also very common)
- A lump or thickening in the cheek
- A white or red patch on the gums, tongue, tonsil, or lining of the mouth
- A sore throat or a feeling that something is caught in the throat that doesn't go away
- Trouble chewing or swallowing
- Trouble moving the jaw or tongue
- Numbness of the tongue or other area of the mouth
- Swelling of the jaw that causes dentures to fit poorly or become uncomfortable

- Loosening of the teeth or pain around the teeth or jaw
- Voice changes
- A lump or mass in the neck
- Weight loss
- Constant bad breath

Many of these signs and symptoms can also be caused by things other than cancer, or even by other cancers. Still, it's very important to see a doctor or dentist if any of these conditions lasts more than 2 weeks so that the cause can be found and treated, if needed.

## References

National Cancer Institute. Lip and Oral Cavity Cancer Treatment (Adult) (PDQ®)–Patient Version. January 29, 2018. Accessed at [www.cancer.gov/types/head-and-neck/patient/adult/lip-mouth-treatment-pdq](http://www.cancer.gov/types/head-and-neck/patient/adult/lip-mouth-treatment-pdq) on February 23, 2018.

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# Tests for Oral Cavity and Oropharyngeal Cancers

A doctor or dentist may find some oral cavity and oropharyngeal cancers or pre-cancers during a routine exam, but many of these cancers are found because of [signs or symptoms](#) a person is having. A dentist or doctor should examine the problem area. Then, if cancer is suspected, tests will be needed.

## Exams by a doctor

## Medical history and physical exam

As a first step, the doctor will ask you questions about symptoms, [possible risk factors](#)<sup>1</sup>, and any other medical problems you may have.

The doctor will examine you to look for possible signs of mouth or throat cancer or pre-cancer. These could be bumps or other changed areas on your head, face or neck, or problems with the nerves of the face and mouth. The doctor will look at the entire inside of your mouth, and might feel around in it with a gloved finger. Other tests may be used to look for changed areas in your mouth or throat, or to get a better sense of what an abnormal area might be. Some of these tests are described in [Can Oral Cavity and Oropharyngeal Cancers Be Found Early?](#)

## Complete head and neck exam

If there is a reason to think you might have cancer, your doctor will refer you to a doctor who specializes in these cancers, such as an oral and maxillofacial surgeon or a head and neck surgeon (also known as an ear, nose, and throat [ENT] doctor or an otolaryngologist). This specialist will most likely do a complete head and neck exam, as well as other exams and tests.

During a complete head and neck exam, the specialist will pay special attention to the head and neck area, being sure to look and feel for any abnormal areas. This exam will include the [lymph nodes](#)<sup>2</sup> in your neck, which will be felt carefully for any signs of cancer.

Because the oropharynx is part of the throat deep inside the neck, some parts are not easy to see. The doctor may use mirrors or special fiber-optic scopes to look at these areas. Both of these exams can be done in the doctor's office. For either of them, the doctor may first spray the back of your throat with numbing medicine to help make the exam easier.

- **Indirect pharyngoscopy and laryngoscopy:** To do this, the doctor uses small mirrors on long, thin handles to look at your throat, the base of your tongue, and part of the larynx (voice box).
- **Direct (flexible) pharyngoscopy and laryngoscopy:** For this exam, the doctor puts a flexible fiber-optic scope (called an [endoscope](#)<sup>3</sup>) in through your mouth or nose to look at areas that can't easily be seen with mirrors, such as the region behind the nose (nasopharynx) and the larynx (voice box), or to get a clearer look at areas of change that were seen with the mirrors.

## Panendoscopy

During a [panendoscopy](#)<sup>4</sup>, the doctor uses different types of endoscopes passed down the mouth or nose to do a laryngoscopy, esophagoscopy, and (at times) bronchoscopy. This lets the doctor thoroughly examine the oral cavity, oropharynx, larynx (voice box), esophagus (tube leading to the stomach), and the trachea (windpipe) and bronchi (breathing passageways in the lungs).

This exam is usually done in an operating room while you are under general anesthesia (drugs that put you into a deep sleep). The doctor uses a laryngoscope to look for tumors in the throat and voice box. Other parts of your mouth, nose, and throat are examined, too. If a tumor is found that's large or seems likely to have spread, the doctor may also use an esophagoscope to look into the esophagus or a bronchoscope to look into the trachea and bronchi.

Your doctor will look at these areas through the scopes to find any tumors, see how big they are, and see how far they may have spread to nearby areas. A small piece of tissue from any tumors or other abnormal areas may be taken out (biopsied) to be looked at under a microscope to see if they contain cancer. Biopsies can be done with special tools that are used through the scopes.

## Biopsy

In a [biopsy](#)<sup>5</sup>, the doctor removes a small piece of tissue, called a sample, to be looked at under a microscope. A biopsy is the only way to know for sure that oral cavity or oropharyngeal cancer is present. A sample of tissue or cells is always needed to confirm a cancer diagnosis before treatment is started. Several types of biopsies may be used, depending on each case.

## Exfoliative cytology

To do this, the doctor scrapes the changed area and smears the collected tissue onto a glass slide. The sample is then stained with a dye so the cells can be seen under the microscope. If any of the cells look abnormal, the area can then be biopsied.

The advantage of this test is that it's easy, and even only slightly abnormal-looking areas can be checked. This can lead to an earlier diagnosis and a greater chance of cure if there is cancer. But this method doesn't show all cancers. And sometimes it's not possible to tell the difference between cancer cells and abnormal cells that aren't cancer (dysplasia), so a biopsy would still be needed.

## Incisional biopsy

For this type of biopsy, the doctor cuts a small piece of tissue from the area that looks abnormal. This is the most common type of biopsy used to check changes in the mouth or throat.

The biopsy can be done either in the doctor's office or in the operating room, depending on where the tumor is and how easy it is to get a good tissue sample. If it can be done in the doctor's office, the area around the tumor will be numbed before the biopsy is done. If the tumor is deep inside the mouth or throat, the biopsy might be done in the operating room while you are under general anesthesia (in a deep sleep). The surgeon uses special instruments through an [endoscope](#)<sup>6</sup> to take out small tissue samples.

## Fine needle aspiration (FNA) biopsy

For this test, the doctor uses a very thin, hollow needle attached to a syringe to pull out (aspirate) some cells from a tumor or lump. These cells are then looked at under a microscope to see if cancer is present.

[FNA biopsy](#)<sup>7</sup> is not used to sample abnormal areas in the mouth or throat, but it's sometimes used for a neck lump (mass) that can be felt or seen on a CT scan. FNA can be helpful in several situations, such as:

- **Finding the cause of a new neck mass:** An FNA biopsy is sometimes used as the first test for someone with a newly found neck lump. It may show that the lump is a benign (not cancer) [lymph node](#)<sup>8</sup> that has grown because of a nearby infection, such as a sinus or tooth infection. In this case, treatment of the infection is all that's needed. Or the FNA may find a benign, fluid-filled cyst that can be cured by surgery. But even when the FNA results are benign, if symptoms suggest cancer, more tests (such as pharyngoscopy and panendoscopy) are needed. If the FNA finds cancer, the doctor looking at the sample can usually tell what type of cancer it is. If the cells look like a squamous cell cancer, more exams will be done to search for the source of the cancer in the mouth and throat. If the FNA shows a different type of cancer, such as [lymphoma](#)<sup>9</sup> or a cancer that has spread to a lymph node in the neck from another organ (like the [thyroid](#)<sup>10</sup>, [stomach](#)<sup>11</sup>, or [lungs](#)<sup>12</sup>) more tests will be done to find it, and treatment for that type of cancer will be given.
- **Learning the extent of a known cancer:** FNA is often done after oral or oropharyngeal cancer has been diagnosed to find out if the cancer has spread to [lymph nodes](#)<sup>13</sup> in the neck. This information will help the doctor decide the best treatment for the cancer.

- **Seeing if cancer has come back after treatment:** FNA may be used for people whose cancer has been treated by [surgery](#)<sup>14</sup> and/or [radiation therapy](#)<sup>15</sup>, to find out if a new neck mass in the treated area is scar tissue or cancer that has come back.

## Lab tests of biopsy samples

All biopsy samples are sent to a lab to be checked under a microscope by a pathologist, a doctor who is specially trained to diagnose cancer with lab tests. The doctor can usually tell cancer cells from normal cells, as well as what type of cancer it is, by the way the cells look. In some cases, the doctor may need to coat the cells with special stains to help tell what type of cancer it is.

### *HPV testing*

For cancers of the throat, doctors have the biopsy samples tested to see if [HPV](#)<sup>16</sup> infection is present. This is a key part of [staging](#) (finding out the extent of the cancer) and is considered when making [treatment](#)<sup>17</sup> decisions. This information can also help the doctor predict the probable course of the cancer, because people whose cancers are linked to HPV tend to do better than those whose cancers are not.

## 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 oral cavity or oropharyngeal cancers, but they may be done for a number of reasons both before and after a cancer diagnosis, including:

- To help look for a tumor if one is suspected
- To learn how far cancer may have spread
- To find out if treatment is working
- To look for possible signs that the cancer has come back (recurred) after treatment

### **Chest x-ray**

After diagnosis, an [x-ray](#)<sup>18</sup> of your chest may be done to see if the cancer has spread to your lungs.



## Computed tomography (CT)

A [CT scan](#)<sup>19</sup> uses x-rays to make detailed, cross-sectional images of your body. Unlike a regular x-ray, a CT scan creates detailed images of the soft tissues and organs in the body. It can help your doctor see the size and location of a tumor, if it's growing into nearby tissues, and if it has spread to lymph nodes in the neck. The test also may be done to look for spread of cancer to the lungs.

## Magnetic resonance imaging (MRI)

Like CT scans, [MRI scans](#)<sup>20</sup> show detailed images of soft tissues in the body. But MRI scans use radio waves and strong magnets instead of x-rays. 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 also be very useful in looking at other areas of the body, too, especially the brain and spinal cord.

## Positron emission tomography (PET)

For a [PET scan](#)<sup>21</sup>, a form of radioactive sugar is put into the blood. Cancer cells use sugar at a higher rate than normal cells, so they will absorb more of the radioactive sugar. After about an hour, you will be moved onto a table in the PET scanner. A special camera is used to create pictures 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.

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

A PET scan is often combined with a CT scan using a machine that can perform both scans at the same time (PET/CT scan). This lets the doctor compare areas of higher radioactivity on the PET with the more detailed appearance of that area on the CT.

## Barium swallow

A [barium swallow](#)<sup>22</sup> can be used to see the lining of the upper part of the digestive system, especially the esophagus (the tube that connects the throat to the stomach). In this test, you drink a chalky liquid called *barium* which coats the walls of your throat and esophagus. A series of x-rays is taken as you swallow. Because people with oral and oropharyngeal cancers are at risk for [cancer of the esophagus](#)<sup>23</sup>, your doctor may order this test to check for this cancer. It's also useful to see if the cancer is causing problems

with normal swallowing.

## Other tests

Other [tests](#)<sup>24</sup> may be done as part of a work-up if a patient has been diagnosed with oral cavity or oropharyngeal cancer. These tests are not used to diagnose the cancer, but they may be done for other reasons, such as to see if a person is healthy enough for treatments such as [surgery](#)<sup>25</sup>, [radiation therapy](#)<sup>26</sup>, or [chemotherapy](#)<sup>27</sup>.

## Blood tests

No blood tests can diagnose cancer in the oral cavity or oropharynx. Still, your doctor may order routine blood tests to get an idea of your overall health, especially before treatment. Such tests can help diagnose malnutrition, low red blood cell counts ([anemia](#)<sup>28</sup>), liver disease, and kidney disease. Blood tests may also suggest the cancer has spread to the liver or bone. When this happens, more tests are needed.

## Other tests before surgery

If surgery is planned, you might also have 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 called pulmonary function tests (PFTs).

## Dental exam

If radiation therapy will be used as part of the treatment, you'll be asked to see a dentist before starting. The dentist will help with preventive dental care and may remove teeth, if needed, before radiation treatment is started.

If the cancer is in your jaw or the roof of your mouth, a dentist with special training (called a prosthodontist) might be asked to evaluate you. This dentist can make replacements for missing teeth or other structures of the oral cavity to help restore your appearance; comfort; and ability to chew, swallow, and speak after treatment. If part of the jaw or roof of the mouth (palate) will be removed with the tumor, the prosthodontist will work to ensure that the replacement artificial teeth and the remaining natural teeth fit together correctly. This can be done with dentures, other types of prostheses, or dental implants.

## Hyperlinks

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3. [www.cancer.org/treatment/understanding-your-diagnosis/tests/endoscopy.html](http://www.cancer.org/treatment/understanding-your-diagnosis/tests/endoscopy.html)
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# Oral Cavity and Oropharyngeal Cancer Stages

After someone is diagnosed with oral cavity or oropharyngeal 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 it](#)<sup>1</sup>. Doctors also use a cancer's stage when talking about survival statistics.

The earliest stage oral cavity or oropharyngeal cancers are called stage 0 (carcinoma in situ), and then range from stages I (1) through IV (4). As a rule, the lower the number, the less the cancer has spread. A higher number, such as stage IV, means cancer has spread more. And within a stage, an earlier letter means a lower stage. Although each person's cancer experience is unique, cancers with similar stages tend to have a similar outlook and are often treated in much the same way.

## How is the stage determined?

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

- The extent of the **tumor (T)**: How large is the main (primary) **tumor** and which, if any, tissues of the oral cavity or oropharynx it has spread to?
- The spread to nearby lymph **nodes (N)**: Has the cancer spread to nearby [lymph nodes](#)<sup>2</sup>?
- The spread (**metastasis**) to distant sites (**M**): Has the cancer spread to distant organs such as the lungs?

Numbers or letters after T, N, and M provide more details about each of these factors. Higher numbers mean the cancer is more advanced. Once a person's T, N, and M categories have been determined, this information is combined in a process called *stage grouping* to assign an overall stage. For more information see [Cancer Staging](#)<sup>3</sup>.

The staging system in the table below is based on the most recent AJCC system, effective January 2018. It uses the *pathologic stage* (also called the *surgical stage*). It's determined by examining the tissue removed during an operation. Sometimes, if surgery isn't possible right away or at all, the cancer will be given a *clinical stage* instead (which is not shown below). This is based on the results of a physical exam, endoscopy exam, biopsy, and imaging tests. The clinical stage will be used to help plan treatment. Sometimes, though, the cancer has spread further than the clinical stage estimates, and it may not predict the patient's outlook as accurately as a pathologic stage.

Oropharyngeal cancers that contain HPV DNA (called p16 positive) tend to have a

better outlook than those without HPV (p16 negative). Because p16 positive cancers have a better prognosis than p16 negative oropharyngeal cancers, separate staging systems are used. Both systems are described below.

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

### Lip, oral cavity, and p16 negative oropharynx stages

AJCC stage	Stage grouping	Lip, oral cavity and p16 negative oropharynx stage description*
0	Tis	The cancer is still within the epithelium (the top layer of cells lining the oral cavity and oropharynx) and has not yet grown into deeper layers.  It has not spread to nearby lymph nodes (N0) or distant sites (M0). This stage is also known as carcinoma in situ (Tis).
	N0	
	M0	
I	T1	The cancer is 2 cm (about ¾ inch) or smaller. It's not growing into nearby tissues (T1). It has not spread to nearby lymph nodes (N0) or to distant sites (M0).
	N0	
	M0	
II	T2	The cancer is larger than 2 cm but no larger than 4 cm (about 1½ inch). It's not growing into nearby tissues (T2). It has not spread to nearby lymph nodes (N0) or to distant sites (M0).
	N0	
	M0	
III	T3	The cancer is larger than 4 cm (T3). For cancers of the oropharynx, T3 also includes tumors that are growing into the epiglottis (the base of the tongue). It has not spread to nearby lymph nodes (N0) or to distant sites (M0).
	N0	
	M0	
	OR	
	T1, T2, T3	The cancer is any size and may have grown into nearby structures if oropharynx cancer(T1-T3) <b>AND</b> has spread to 1 lymph node on the same side as the primary tumor. The cancer has not grown outside of the lymph node and the lymph node is no larger than 3 cm (about 1¼ inch) (N1). It has not spread to
N1		
M0		

		distant sites (M0).
IVA	<p><b>T4a</b></p> <p><b>N0 or N1</b></p> <p><b>M0</b></p>	<p>The cancer is any size and is growing into nearby structures such as:</p> <ul style="list-style-type: none"> <li>• For lip cancers: nearby bone, the inferior alveolar nerve (the nerve to the jawbone), the floor of the mouth, or the skin of the chin or nose (T4a)</li> <li>• For oral cavity cancers: the bones of the jaw or face, deep muscle of the tongue, skin of the face, or the maxillary sinus (T4a)</li> <li>• For oropharyngeal cancers: the larynx (voice box), the tongue muscle, or bones such as the medial pterygoid, the hard palate, or the jaw (T4a).</li> </ul> <p>This is known as <i>moderately advanced local disease</i> (T4a).</p> <p><b>AND</b> either of the following:</p> <ul style="list-style-type: none"> <li>• It has not spread to nearby lymph nodes (N0)</li> <li>• It has spread to 1 lymph node on the same side as the primary tumor, but has not grown outside of the lymph node and the lymph node is no larger than 3 cm (about 1¼ inch) (N1).</li> </ul> <p>It has not spread to distant sites (M0).</p>
	OR	
	<p><b>T1, T2, T3 or T4a</b></p> <p><b>N2</b></p> <p><b>M0</b></p>	<p>The cancer is any size and may have grown into nearby structures (T0-T4a). It has not spread to distant organs (M0). It has spread to one of the following:</p> <ul style="list-style-type: none"> <li>• 1 lymph node on the same side as the primary tumor, but it has not grown outside of the lymph node and the lymph node is larger than 3 cm but not larger than 6 cm (about 2½ inches) (N2a) <b>OR</b></li> <li>• It has spread to more than 1 lymph node on the same side as the primary tumor, but it has not grown outside of any of the lymph nodes and none are larger than 6 cm (N2b) <b>OR</b></li> <li>• It has spread to 1 or more lymph nodes either on the opposite</li> </ul>

		side of the primary tumor or on both sides of the neck, but has not grown outside any of the lymph nodes and none are larger than 6 cm (N2c).
IVB	Any T N3 M0	<p>The cancer is any size and may have grown into nearby soft tissues or structures (Any T) <b>AND</b> any of the following:</p> <ul style="list-style-type: none"> <li>• It has spread to 1 lymph node that's larger than 6 cm but has not grown outside of the lymph node (N3a) <b>OR</b></li> <li>• It has spread to 1 lymph node that's larger than 3 cm and has clearly grown outside the lymph node (N3b) <b>OR</b></li> <li>• It has spread to more than 1 lymph node on the same side, the opposite side, or both sides of the primary cancer with growth outside of the lymph node(s) (N3b) <b>OR</b></li> <li>• It has spread to 1 lymph node on the opposite side of the primary cancer that's 3 cm or smaller and has grown outside of the lymph node (N3b).</li> </ul> <p>It has not spread to distant organs (M0).</p>
	OR	
	T4b Any N M0	The cancer is any size and is growing into nearby structures such as the base of the skull or other bones nearby, or it surrounds the carotid artery. This is known as <i>very advanced local disease</i> (T4b). It might or might not have spread to nearby lymph nodes (Any N). It has not spread to distant organs (M0).
IVC	Any T Any N M1	The cancer is any size and may have grown into nearby soft tissues or structures (Any T) <b>AND</b> it might or might not have spread to nearby lymph nodes (Any N). It has spread to distant sites such as the lungs (M1).

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

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

## p16 positive oropharynx stages



AJCC stage	Stage grouping	p16 positive oropharynx stage description*
I	T0, T1 or T2 N0 or N1 M0	The cancer is no larger than 4 cm (about 1 1/2 inches) (T0 to T2) <b>AND</b> any of the following: <ul style="list-style-type: none"> <li>• It has not spread to nearby lymph nodes (N0) <b>OR</b></li> <li>• It has spread to 1 or more lymph nodes on the same side as the primary cancer, and none are larger than 6 cm (N1).</li> </ul> It has not spread to distant sites (M0).
II	T0, T1 or T2 N2 M0	The cancer is no larger than 4 cm (about 1 1/2 inches) (T0 to T2) <b>AND</b> it has spread to 1 or more lymph nodes on the opposite side of the primary cancer or both sides of the neck, and none are larger than 6 cm (N2). It has not spread to distant sites (M0).
	T3 or T4 N0 or N1 M0	The cancer is larger than 4 cm (about 1 1/2 inches) (T3) <b>OR</b> is growing into the epiglottis (the base of the tongue) (T3) <b>OR</b> is growing into the larynx (voice box), the tongue muscle, or bones such as the medial pterygoid plate, the hard palate, or the jaw (T4) <b>AND</b> any of the following: <ul style="list-style-type: none"> <li>• It has not spread to nearby lymph nodes (N0) <b>OR</b></li> <li>• It has spread to 1 or more lymph nodes on the same side as the primary cancer, and none are larger than 6 cm (N1).</li> </ul> It has not spread to distant sites (M0).
III	T3 or T4 N2 M0	The cancer is larger than 4 cm (about 1 1/2 inches) (T3) <b>OR</b> is growing into the epiglottis (the base of the tongue) (T3) <b>OR</b> is growing into the larynx (voice box), the tongue muscle, or bones such as the medial pterygoid plate, the hard palate, or the jaw (T4) <b>AND</b> it has spread to 1 or more lymph nodes on the opposite side of the primary cancer or both sides of the neck, and none are larger than 6 cm (N2). It has not spread to distant sites (M0).
IV	Any T Any N	The cancer is any size and may have grown into nearby structures (Any T) <b>AND</b> it might or might not have spread to nearby lymph nodes (Any N). It has spread to distant sites such as the lungs or bones (M1).

	M1	
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\* The following additional categories are not described in the table above:

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

## Recurrent (relapsed) cancer

This is not an actual stage in the TNM system. Recurrent (relapsed) cancer means that the cancer has come back (recurred) after treatment. Recurrent oral cavity or oropharyngeal cancer may return in the mouth or throat (local recurrence), in nearby lymph nodes (regional recurrence), or in another part of the body, such as the lungs (distant recurrence).

Talk with your doctor if you have any questions about the stage of your cancer or how it affects your treatment.

## Hyperlinks

1. [www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer/treating.html](http://www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer/treating.html)
2. [www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html](http://www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html)
3. [www.cancer.org/treatment/understanding-your-diagnosis/staging.html](http://www.cancer.org/treatment/understanding-your-diagnosis/staging.html)

## References

American Joint Committee on Cancer. Lip and Oral Cavity. In: *AJCC Cancer Staging Manual*. 8<sup>th</sup> ed. New York, NY: Springer; 2017:79.

American Joint Committee on Cancer. HPV-Mediated (p16+) Oropharyngeal Cancer. In: *AJCC Cancer Staging Manual*. 8<sup>th</sup> ed. New York, NY: Springer; 2017:113.

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

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# Survival Rates for Oral Cavity and Oropharyngeal Cancer

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

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

## What is a 5-year relative survival rate?

A **relative survival rate** compares people with the same type and stage of cancer to people in the overall population. For example, if the **5-year relative survival rate** for a specific stage of cancer is 90%, it means that people who have that cancer are, on average, about 90% 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 oral cavity and oropharyngeal cancers in the United States, based on how far the cancer has spread. The SEER database, however, does not group cancers by [AJCC TNM stages](#) (stage 1, stage 2, stage 3, etc.). Instead, it groups cancers into localized, regional, and distant stages:

- **Localized:** There is no sign the cancer has spread outside the organ where it started.
- **Regional:** The cancer has spread 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 oral cavity and oropharyngeal cancer

(Based on people diagnosed with oral cavity or oropharyngeal cancer between 2008 and 2014.)

### Lip

<b>SEER Stage</b>	<b>5-Year Relative Survival Rate</b>
Local	92%
Regional	61%
Distant	24%
All SEER stages combined	88%

### Tongue

<b>SEER Stage</b>	<b>5-Year Relative Survival Rate</b>
Local	81%
Regional	67%
Distant	39%
All SEER stages combined	66%

### Floor of the mouth

<b>SEER Stage</b>	<b>5-Year Relative Survival Rate</b>
Local	78%
Regional	39%
Distant	19%
All SEER stages combined	53%

### Other cancers

For cancers of the oropharynx and tonsil, the relative 5-year survival rate was 69%, but survival by stage is not available.

For cancers of the gums and other parts of the mouth, the relative survival was 59%, but survival by stage is not available.

## Understanding the numbers

- **These numbers apply only to the stage of the cancer when it is first diagnosed.** They do not apply later on if the cancer grows, spreads, or comes back after treatment.
- **These numbers don't take everything into account.** Survival rates are grouped based on how far the cancer has spread, but your age, overall health, how well the cancer responds to treatment, and other factors will also affect your outlook. Currently, these survival rates are not based on if the cancer is [p16 positive or negative](#).
- **People now being diagnosed with oral cavity or oropharyngeal 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

## Hyperlinks

1. [https://seer.cancer.gov/csr/1975\\_2015/](https://seer.cancer.gov/csr/1975_2015/)

## References

Noone AM, Howlader N, Krapcho M, Miller D, Brest A, Yu M, Ruhl J, Tatalovich Z, Mariotto A, Lewis DR, Chen HS, Feuer EJ, Cronin KA (eds). SEER Cancer Statistics Review, 1975-2015, National Cancer Institute. Bethesda, MD, [https://seer.cancer.gov/csr/1975\\_2015/](https://seer.cancer.gov/csr/1975_2015/) ([seer.cancer.gov/csr/1975\\_2015/](https://seer.cancer.gov/csr/1975_2015/))<sup>1</sup>, based on November 2017 SEER data submission, posted to the SEER web site, April 2018.

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# What Should You Ask Your Doctor About Oral Cavity and Oropharyngeal Cancers?

As you cope with cancer and cancer treatment, we encourage you to have honest, open discussions with your doctor. Ask any question, no matter how small it might seem. Nurses, social workers, and other members of your treatment team may also be able to answer many of your questions. Here are some questions to get you started.

- What [kind of oral cavity or oropharyngeal cancer](#)<sup>1</sup> do I have?
- Where is my cancer located?
- Has my cancer spread beyond the main (primary) site?
- What is the [stage](#) of my cancer? What does the stage mean?
- Will 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 are my [treatment choices](#)<sup>2</sup>? Which do you recommend? Why?
- What's the goal of the treatment?
- What are the chances my cancer 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 be like? Where will it be done?
- How would treatment affect my daily activities?
- What risks and side effects can I expect? How long are they likely to last?
- Will this treatment affect the way I look? If so, what are my options for reconstruction?
- What are our options if the treatment doesn't work or if the cancer comes back (recurs)?
- What type of follow-up will I need [after treatment](#)<sup>3</sup>?
- 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 you can plan your work or activity schedule. Or you may want to ask about [second opinions](#)<sup>4</sup> or about [clinical trials](#)<sup>5</sup> for which you may qualify. You can find more information about communicating with your health care team in [The Doctor-Patient Relationship](#)<sup>6</sup>.

## Hyperlinks

1. [www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer/about/what-is-oral-cavity-cancer.html](http://www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer/about/what-is-oral-cavity-cancer.html)
2. [www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer/treating.html](http://www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer/treating.html)
3. [www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer/after-treatment/follow-up.html](http://www.cancer.org/cancer/oral-cavity-and-oropharyngeal-cancer/after-treatment/follow-up.html)
4. [www.cancer.org/treatment/finding-and-paying-for-treatment/choosing-your-treatment-team/seeking-a-second-opinion.html](http://www.cancer.org/treatment/finding-and-paying-for-treatment/choosing-your-treatment-team/seeking-a-second-opinion.html)
5. [www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html](http://www.cancer.org/treatment/treatments-and-side-effects/clinical-trials.html)
6. [www.cancer.org/treatment/understanding-your-diagnosis/talking-about-cancer/the-doctor-patient-relationship.html](http://www.cancer.org/treatment/understanding-your-diagnosis/talking-about-cancer/the-doctor-patient-relationship.html)

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