



Mouth (Oral) Cancer

SANFORD[®]
CANCER CENTER

Oral Cavity Cancer Is a Disease in Which Malignant (Cancer) Cells Form in the Mouth

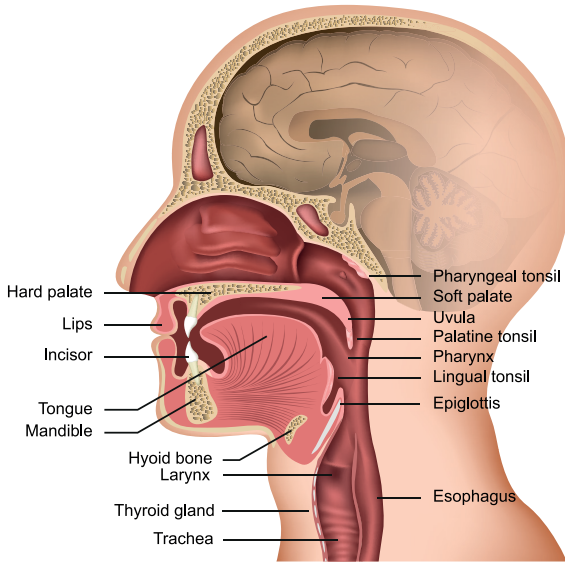
The oral cavity includes the following:

- The front two thirds of the tongue
 - The gingiva (gums)
 - The buccal mucosa (the lining of the inside of the cheeks)
 - The floor (bottom) of the mouth under the tongue
 - The hard palate (the roof of the mouth)
 - The retromolar trigone (the small area behind the wisdom teeth)
- Most oral cavity cancers start in squamous cells, the thin, flat cells that line the oral cavity. These are called squamous cell carcinomas. Cancer cells may spread into deeper tissue as the cancer grows. Squamous cell carcinoma usually develops in areas of leukoplakia (white patches of cells that do not rub off).

Oral cavity cancer is a type of head and neck cancer.

Anything that increases your risk of getting a disease is called a risk factor. Having a risk factor does not mean that you will get cancer; not having risk factors does not mean that you will not get cancer. Risk factors for oral cavity cancer include the following:

- Using tobacco products
- Heavy alcohol use
- Being male



Signs of Oral Cavity Cancer Include a Sore or Lump in the Mouth

These and other signs and symptoms may be caused by oral cavity cancer or by other conditions:

- A sore in the mouth that does not heal
- A lump or thickening in the mouth
- A white or red patch on the gums, tongue, or lining of the mouth
- Bleeding, pain, or numbness in the mouth
- Change in voice
- Loose teeth or dentures that no longer fit well
- Trouble chewing or swallowing or moving the tongue or jaw
- Swelling of jaw
- Sore throat or feeling that something is caught in the throat

Oral cavity cancer may not have any symptoms and is sometimes found during a regular dental exam.

Tests That Examine the Throat Are Used To Detect (Find), Diagnose, and Stage Oral Cavity Cancer

The following tests and procedures may be used:

Physical exam of the oral cavity

Endoscopy: A procedure to look at organs and tissues inside the body to check for abnormal areas. An endoscope is inserted through an incision (cut) in the skin or opening in the body, such as the mouth. An endoscope is a thin, tube-like instrument with a light and a lens for viewing. It may also have a tool to remove tissue or lymph node samples, which are checked under a microscope for signs of disease.

Biopsy: The removal of cells or tissues so they can be viewed under a microscope by a pathologist. If white patches called leukoplakia are found, cells taken from the patches are also checked under the microscope for signs of cancer.

MRI (magnetic resonance imaging): A procedure that uses a magnet, radio waves, and a computer to make a series of detailed pictures of areas inside the body. This procedure is also called nuclear magnetic resonance imaging (NMRI).

CT scan (CAT scan): A procedure that makes a series of detailed pictures of areas inside the body, taken from different angles. The pictures are made by a computer linked to an x-ray machine. A dye may be injected into a vein or swallowed to help the organs or tissues show up more clearly. This procedure is also called computed tomography, computerized tomography, or computerized axial tomography.

Barium swallow: A series of x-rays of the esophagus and stomach. You drink a liquid that contains barium (a silver-white metallic compound). The liquid coats the esophagus and x-rays are taken. This procedure is also called an upper GI series.

PET scan (positron emission tomography scan): A procedure to find malignant tumor cells in the body. A small amount of radioactive glucose (sugar) is injected into a vein. The PET scanner rotates around the body and makes a picture of where glucose is being used in the body. Malignant tumor cells show up brighter in the picture because they are more active and take up more glucose than normal cells do.

Certain Factors Affect Prognosis (Chance of Recovery) And Treatment Options

Prognosis (chance of recovery) depends on the following:

- The stage of the cancer
- Where the tumor is in the oral cavity
- Whether the cancer has spread to blood vessels

For people who smoke, the chance of recovery is better if they stop smoking before beginning radiation therapy.

Treatment options depend on the following:

- The stage of the cancer
- The size of the tumor and where it is in the oral cavity
- Whether your appearance and ability to talk and eat can stay the same
- Your age and general health

People who have had an oral cavity cancer have an increased risk of developing a second cancer in the head or neck. Frequent and careful follow-up is important.

After Oral Cavity Cancer Has Been Diagnosed, Tests Are Done To Find Out if Cancer Cells Have Spread Within the Oral Cavity or To Other Parts of the Body

The process used to find out if cancer has spread within the oral cavity or to other parts of the body is called staging. The information gathered from the staging process determines the stage of the disease. It is important to know the stage in order to plan treatment. The results of the tests used to diagnose oral cavity cancer are also used to stage the disease.

There Are Three Ways That Cancer Spreads in the Body

Cancer can spread through tissue, the lymph system, and the blood:

- **Tissue:** The cancer spreads from where it began by growing into nearby areas.
- **Lymph System:** The cancer spreads from where it began by getting into the lymph system. The cancer travels through the lymph vessels to other parts of the body.
- **Blood:** The cancer spreads from where it began by getting into the blood. The cancer travels through the blood vessels to other parts of the body.

When cancer spreads to another part of the body, it is called metastasis. Cancer cells break away from where they began (the primary tumor) and travel through the lymph system or blood.

The metastatic tumor is the same type of cancer as the primary tumor. For example, if oral cancer spreads to the lung, the cancer cells in the lung are actually oral cancer cells. The disease is metastatic oral cancer, not lung cancer.

The Following Stages Are Used for Oral Cavity Cancer

Stage 0 (carcinoma in situ)

In stage 0, abnormal cells are found in the lining of the oral cavity. These abnormal cells may become cancer and spread into nearby normal tissue. Stage 0 is also called carcinoma in situ.

Stage I (1) – Stage IV (4)

Oral cavity cancer can be staged either Stage I (1) through Stage IV (4), Stage I being the least advanced and Stage IV the most advanced.

People With Oral Cavity Cancer Should Have Their Treatment Planned by a Team of Doctors Who Are Expert in Treating Head and Neck Cancer

Depending on the stage of the cancer and treatment needs, a number of health professionals may provide care:

- Head and neck surgeon
- Medical Oncologist
- Radiation oncologist
- Dentist
- Speech therapist
- Dietitian
- Psychologist
- Rehabilitation specialist
- Plastic surgeon

Two Types of Standard Treatment Are Used

Surgery

Surgery (removing the cancer in an operation) is a common treatment for all stages of oral cavity cancer. Surgery may include the following:

Wide local excision: Removal of the cancer and some of the healthy tissue around it. If cancer has spread into bone, surgery may include removal of the involved bone tissue.

Neck dissection: Removal of lymph nodes and other tissues in the neck. This is done when cancer may have spread from the oral cavity.

Reconstructive surgery: An operation that restores or improves the appearance of parts of the body. Dental implants, a skin graft, or other plastic surgery may be needed to repair parts of the mouth, throat, or neck after removal of large tumors.

After the doctor removes all the cancer that can be seen at the time of the surgery, some people may be given chemotherapy or radiation therapy after surgery to kill any cancer cells that are left. Treatment given after the surgery, to lower the risk that the cancer will come back, is called adjuvant therapy

Radiation Therapy

Radiation therapy is a cancer treatment that uses high-energy x-rays or other types of radiation to kill cancer cells or keep them from growing. The way the radiation therapy is given depends on the type and stage of the cancer being treated. External and internal radiation therapy are used to treat oral cavity cancer.

Radiation therapy may work better in those who have stopped smoking before beginning treatment. It is also important to have a dental exam before radiation therapy begins, so that existing problems can be treated.

Chemotherapy

Chemotherapy is a cancer treatment that uses drugs to stop the growth of cancer cells, either by killing the cells or by stopping the cells from dividing. When chemotherapy is taken by mouth or injected into a vein or muscle, the drugs enter the bloodstream and can reach cancer cells throughout the body (systemic chemotherapy). The way the chemotherapy is given depends on the type and stage of the cancer being treated.

Follow-up tests may be needed

Some of the tests that were done to diagnose the cancer or to find out the stage of the cancer may be repeated. Some tests will be repeated in order to see how well the treatment is working. Decisions about whether to continue, change, or stop treatment may be based on the results of these tests.

Support is available for coping with changes that may have happened as a result of cancer treatment. Your healthcare team can offer ideas as well as a plan of care for long-term follow-up.

Clinical Trials

Clinical trials are done to find out if new cancer treatments are safe and effective or better than the standard treatment.

People who take part in a clinical trial may receive:

- The standard drugs alone or
- The standard drugs plus the new treatment being studied

Taking part in a clinical trial helps improve the way cancer will be treated in the future. Even when clinical trials do not lead to effective new treatments, they often answer important questions and help move research forward.

Some clinical trials only include people who have not yet received treatment. Other trials test treatments for those whose cancer has not gotten better. There are also clinical trials that test new ways to stop cancer from coming back or reduce the side effects of cancer treatment.

Many of today's standard treatments for cancer are based on earlier clinical trials.

Ask if there is a clinical trial right for you.

To Learn More About Oral Cavity Cancer

American Cancer Society

<https://www.cancer.org/>

National Cancer Institute

<https://www.cancer.gov/>

National Comprehensive Cancer Network Guidelines for Patients

<https://www.nccn.org/patients/guidelines/cancers.aspx>

MedlinePlus

<https://medlineplus.gov/>

Common Questions

What does the pathology report say?

What is the stage of my cancer?

What are my goals for treatment?

What are my treatment choices?

What kind of support services are available for me about finances, emotions, spiritual questions, etc.?

My Health Care Team	Contact Information
Surgeon	
Medical Oncologist:	
Radiation Oncologist:	
Primary Care Doctor:	
Navigator:	
Nurse:	
Registered Dietitian Nutritionist:	
Other	

Adapted with permission from: PDQ Lip and Oral Cavity Cancer Treatment (Adult). Bethesda, MD: National Cancer Institute.

Notes

SANFORD[®]
CANCER CENTER