Nasal Cavity and Paranasal Sinus Cancer Early Detection, Diagnosis, and Staging

Detection and Diagnosis

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

- Can Nasal Cavity and Paranasal Sinus Cancers Be Found Early?
- Signs and Symptoms of Nasal and Paranasal Sinus Cancers
- Tests for Nasal Cavity and Paranasal Sinus Cancers

Stages and Outlook (Prognosis)

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

- Nasal Cavity and Paranasal Sinus Cancer Stages
- Survival Rates for Nasal Cavity and Paranasal Sinus Cancers

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.

- Questions To Ask About Nasal Cavity or Paranasal Sinus Cancer
Can Nasal Cavity and Paranasal Sinus Cancers Be Found Early?

Small cancers of the nasal cavity (nose) and paranasal sinuses usually do not cause any specific symptoms that help doctors find them at an early stage (when they’re small and easier to treat). Many of the symptoms of nasal cavity and paranasal sinus cancers can also be caused by benign (non-cancer) conditions like infections. Because of this, many of these cancers aren't found until they have grown large enough to block the nasal airway or sinuses, or until they've spread to nearby tissues or even to distant parts of the body.

Still, some nasal cavity and paranasal sinus cancers can be found early. Talk to your doctor if you have symptoms such as those described in Signs and Symptoms of Nasal Cavity and Paranasal Sinus Cancers. Most of these symptoms are much more likely to be caused by less serious problems. Still, it’s important to see a doctor so that the cause can be found and treated\(^1\), if needed.

Screening

Screening\(^2\) refers to tests and exams to find a disease, such as cancer or pre-cancer, in people who don't have any symptoms. Screening can find some types of cancer early, when treatment tends to work best. But at this time there's no simple screening test that can find nasal cavity and paranasal sinus cancers early. These cancers are also quite rare. Because of this, neither the American Cancer Society nor any other group recommends routine screening for these cancers at this time.

Hyperlinks


References


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**Signs and Symptoms of Nasal and Paranasal Sinus Cancers**

In most cases, nasal cavity and paranasal sinus cancers are found because of problems they cause. Finding these cancers in people without symptoms is rare and usually accidental (while doing tests to check for other medical problems). Possible signs and symptoms of these cancers (often only on one side) include:

- Nasal congestion and stuffiness that doesn’t get better or even worsens
- Pain above or below the eyes
- Blockage of one side of the nose
- Post-nasal drip (nasal drainage in the back of the nose and throat)
- Nosebleeds
- Pus draining from the nose
- Problems with your sense of smell
- Numbness or pain in parts of the face
- Loosening or numbness of teeth
- A lump or mass on the face, palate (top of the mouth), or inside the nose
- Constant watery eyes
- Bulging of one eye
- Loss or change in vision
• Pain or pressure in one of the ears
• Hearing loss
• Headache
• Trouble opening the mouth
• Enlarging lymph nodes in the neck (seen or felt as lumps under the skin)

Having one or more of these symptoms doesn't mean you have nasal cavity or paranasal sinus cancer. In fact, many of these symptoms are more likely to be caused by other conditions. Still, if you have any of these symptoms, it's important to have them checked by a doctor so that the cause can be found and treated, if needed. If treatment (like with an antibiotic) doesn't work, be sure to go back to your doctor for more testing.

References


Last Revised: April 19, 2021
Tests for Nasal Cavity and Paranasal Sinus Cancers

Nasal cavity and paranasal sinus cancers are usually found because of signs or symptoms a person is having. If cancer is suspected, tests will be done, sometimes by specialists, to confirm the diagnosis.

Medical history and physical exam

You will be asked about your medical history, any problems you've been having, and possible risk factors such as where you work and what chemicals you work with. The doctor will physically examine you to look for signs of nasal cavity or paranasal sinus cancer, as well as other health problems.

During the exam, the doctor will carefully check your head and neck area, including the nose and sinuses, for numbness, pain, swelling, and/or firmness in your face and the lymph nodes in your neck. The doctor will look for changes in the symmetry of your eyes and face (both sides should be about the same), vision changes, and any other problems.

Exam by a specialist

If your doctor thinks you might have cancer of the nasal cavity or paranasal sinuses, you'll be sent to see an otolaryngologist (a doctor who specializes in diseases of the ear, nose, and throat; also called an ENT doctor). This doctor will carefully check your nasal passages and the rest of your head and neck.

They might also examine your nose, throat, tongue, and mouth areas which can be done with a headlamp and small mirrors (indirect endoscopy) or with a nasal endoscope (a thin, flexible, lighted tube that's put in through your nose). A biopsy (a piece of tissue) may be removed during the endoscopy if an abnormal area is seen.

People with nasal cavity or paranasal sinus cancer also have a higher risk for other cancers in the head and neck region. So all areas of the head and neck will be looked at carefully for signs of 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 nasal cavity or paranasal sinus cancers, but they might be done for a number of reasons both before and after a cancer diagnosis, including:

- To help look for a cancer if one is suspected
- To see if a tumor can be safely biopsied without causing a lot of bleeding (see below)
- To learn how far the cancer might have spread (metastasized)
- To see if the cancer can be removed with surgery
- To help determine if treatment is working
- To look for signs that the cancer has come back after treatment (recurred)

**X-rays**

X-rays of the head area, mainly of the sinuses, can show if there’s any fluid or masses in the sinuses (normal sinuses should be filled with air). This would suggest that something is wrong, but it may not be a tumor. Most of the time, an abnormal-looking sinus x-ray means there’s an infection. Sinus x-rays are not often done because many doctors prefer to do a computed tomography (CT) scan instead which gives a more detailed picture than an x-ray.

If you’ve been diagnosed with nasal cavity or paranasal sinus cancer, an x-ray of the chest might be done to find out if the cancer has spread to your lungs, which is the most common site of spread other than lymph nodes in the neck.

**Computed tomography (CT) scan**

A CT scan (or CAT scan) uses x-rays to make detailed cross-sectional images of the inside of your body. This test is very useful in finding cancers of the nasal cavity and paranasal sinuses, measuring the size of the tumor, showing if it is growing into nearby tissues, and if it has spread to the lymph nodes in the neck. Bone details show up well on a CT scan and it can show if a tumor has damaged the bone around it. A chest CT might also be used to see if the cancer has spread to the lungs.

**Magnetic resonance imaging (MRI) scan**

Like CT scans, MRI scans show detailed images of the body. But MRI scans use radio waves and strong magnets instead of x-rays. MRI scans are very helpful in looking at
cancers of the nasal cavities and paranasal sinuses. They are better than CT scans in telling whether a change is fluid or a tumor. Sometimes they can help the doctor tell the difference between a lump that is cancer and one that is not. They can also show if a tumor has spread into nearby soft tissues, like the eyeball, brain, or blood vessels.

**Positron emission tomography (PET) scan**

A PET scan uses a slightly radioactive form of sugar (known as fluorodeoxyglucose or FDG) that's injected into your blood and collects mainly in cancer cells. A special scanner is then used to create pictures of the places where the radioactivity collected in your body.

A PET scan may be used to look for possible areas of cancer spread, or if a CT or MRI scan does not show an obvious tumor. This test also can be used to help see if a change seen on another imaging test is cancer or not.

**PET/CT scan:** A PET scan is often done along with a CT scan using a machine that can do both scans at the same time. This lets the doctor compare areas of higher radioactivity on the PET scan with the detailed pictures from the CT scan.

**Bone scan**

For a bone scan, a small amount of low-level radioactive material is injected into the blood and collects mainly in abnormal areas of bone. A bone scan can help show if a cancer has spread to the bones. This test isn’t needed very often because PET scans can usually show if cancer has spread to the bones.

**Biopsy**

In a biopsy, a doctor takes out a small piece of tissue (a sample) from the suspicious area to be checked closely in the lab. It’s the only way to know for sure if you have nasal cavity or paranasal sinus cancer. If cancer is found, testing in the lab can also show what kind of cancer it is and how aggressive it is (how fast it will grow and spread). This information is needed to help plan the best treatment.

Doctors look closely at where the tumor is and the blood vessels around it when deciding where and how to do the biopsy.

Often, biopsies are done in the doctor’s office or clinic. Drugs are used to numb the area. If the tumor is in a place that is hard to get to or may bleed a lot, the biopsy will be done in an operating room. Many types of biopsies can be used to diagnose nasal
cavity or paranasal sinus cancer and are described below. See Testing Biopsy and Cytology Specimens for Cancer\textsuperscript{13} for added information.

**Fine needle aspiration (FNA) biopsy**

In this type of biopsy, the doctor puts a thin, hollow needle right into a tumor or lymph node\textsuperscript{14} to take out cells and/or a few drops of fluid. The doctor may repeat this to take several samples. The cells can then be checked closely in the lab to see if they are cancer.

An FNA biopsy is often used in patients with swollen lymph nodes in the neck. In these patients, An FNA biopsy can show if the lymph node swelling is from cancer or if it's from an infection. If the FNA does not show 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 nasal cavity or paranasal sinus cancer, you could still need other tests to find the cause of the symptoms.

FNA biopsies might also be useful in some patients already diagnosed with nasal cavity or paranasal sinus cancer. If the person has a lump in the neck, an FNA can show if the mass is cancer. FNA might also be used in patients whose cancer has been treated by surgery and/or radiation therapy, to help find out if a neck mass in the treated area is scar tissue or if it is the cancer that has come back (recurrence).

**Incisional and excisional biopsies**

These types of biopsies remove more of the tumor using minor surgery. They're the more common types of biopsies done for nasal and paranasal sinus tumors. Biopsies of tumors in the nose may be done using special tools that are put into the nose. Biopsies of tumors that are deeper within the skull may require a more involved procedure (see below).

For an incisional biopsy, the surgeon cuts out a small piece of the tumor. For an excisional biopsy, the entire tumor is removed. In either case, the biopsy sample is then sent to the lab for testing.

**Endoscopic versus open biopsy**

For tumors deeper within the skull, how the biopsy is done depends on where it is and how big it is.

**Endoscopic biopsy:** Some tumors that are deep in the nasal passages may be
reached using an endoscope – a thin, flexible lighted tube. Long, thin surgical tools can be passed through the endoscope to get a biopsy sample.

**Open (surgical) biopsy:** Fortumors inside the sinuses, the doctor may have to cut through the skin next to the nose and through the underlying bones to reach them. These operations are covered in more detail in *Surgery for Nasal Cavity and Paranasal Sinus Cancer*\(^{15}\).

### Lab tests of biopsy samples

Biopsy samples (from endoscopy or surgery) are sent to a lab where they are looked at closely. If cancer is found, more lab tests may be done on the biopsy samples to help better classify the cancer and possibly find specific treatment options.

**Tests for certain proteins on tumor cells:** If the cancer has spread (metastasized) or come back, doctors will probably look for certain proteins on the cancer cells. For example, cancer cells might be tested for the PD-L1 protein, which may predict if the cancer is more likely to respond to treatment with certain immunotherapy\(^{16}\) drugs.

### Other pre-treatment tests

Other tests may be done in people diagnosed with nasal cavity or paranasal sinus cancer. These tests are not used to diagnose the cancer, but they might be done to see if a person is healthy enough for certain treatments, like surgery or chemotherapy.

**Quit smoking:** It is very important to quit smoking before any treatment for nasal cavity or paranasal sinus cancer. If you quit smoking cigarettes before being diagnosed, it is important to not start during treatment. Smoking during treatment can cause a poor response to radiation treatment, poor wound healing, poor tolerance to chemotherapy, and a higher chance of dying.

**Blood tests:** A complete blood count (CBC) looks at whether your blood has normal numbers of different types of blood cells. For example, it can show if you are anemic (have a low number of red blood cells), if you could have trouble with bleeding (from a low number of blood platelets), or if you are at increased risk for infections (because of a low number of white blood cells). This test could be repeated regularly during treatment, as many cancer drugs can lower the number of blood cells produced by the bone marrow. Blood chemistry test results can help show how well your liver or kidneys are working.

**Pre-surgery:** If surgery is planned, you might also be given an electrocardiogram
(ECG) to make sure your heart is working well. Some people having surgery also may need lung tests known as pulmonary function tests (PFTs).

**Dental exam:** Your cancer care team might have you see your dentist before any radiation is given since it can damage the saliva (spit) glands and cause dry mouth. This can raise the chance of cavities, infection, and breakdown of the jawbone. The dentist might also pull some teeth before radiation that they think might cause problems during treatment.

**Hearing test:** The most commonly used chemotherapy drug in treating nasal cavity and paranasal sinus cancer, cisplatin, can affect your hearing. Your hearing will most likely be checked (with an audiogram) before starting treatment. Your doctor may also change your chemotherapy plan if you already have difficulty hearing.

**Nutrition and speech tests:** If you have lost a lot of weight because of the cancer, you might have a nutritionist who will evaluate your nutrition status before, during, and after your treatment to try and keep your body weight and protein levels as normal as possible. You might also visit with a speech therapist who will test your ability to swallow and speak depending on the location of the cancer. They might give you exercises to do during treatment to help strengthen the muscles in the head and neck area so that you can eat and talk normally after cancer treatment.

**Hyperlinks**

2. [www.cancer.org/treatment/understanding-your-diagnosis/tests/endoscopy.html](http://www.cancer.org/treatment/understanding-your-diagnosis/tests/endoscopy.html)
8. [www.cancer.org/treatment/understanding-your-diagnosis/tests/mri-for-cancer.html](http://www.cancer.org/treatment/understanding-your-diagnosis/tests/mri-for-cancer.html)

References


Nasal Cavity and Paranasal Sinus Cancer Stages

After someone is diagnosed with a nasal cavity or paranasal sinus 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. Doctors also use a cancer’s stage when talking about survival statistics.

The earliest stage of nasal cavity and paranasal sinus cancers is stage 0, also known as carcinoma in situ (CIS). The other 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 nasal cavity and paranasal sinus cancers 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 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, are they on the same side where the cancer started, and how large are they?
- The spread (**metastasis**) to distant sites **(M)**: Has the cancer spread to distant parts of the body, such as the lungs 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](#).

Nasal cavity and paranasal sinus cancers are typically given a **clinical stage** based on the results of any exams, biopsies, and imaging tests that might have been done (as described in [Tests for Nasal Cavity and Paranasal Sinus Cancers](#)). If surgery has been done, the **pathologic stage** (also called the **surgical stage**) can be determined. The stages descriptions below use the pathologic (surgical) definitions.

The stages of nasal cavity and paranasal sinus cancers are slightly different, based on where the cancer starts. They are grouped together as:

- Cancers that start in the **nasal cavity** or **ethmoid sinus**
- Cancers that start in the **maxillary sinus**

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

Nasal cavity and paranasal sinus cancer staging can be complex. If you have questions about the stage of your cancer and what it might mean for you, ask your doctor to
explain it to you in a way you understand.

Explore the 3D interactive model to learn more about the nasal cavity and paranasal sinuses.

### Stages of nasal cavity or ethmoid sinus cancer

<table>
<thead>
<tr>
<th>AJCC stage</th>
<th>Stage grouping</th>
<th>Stage description*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Tis N0 M0</td>
<td>The tumor is only in the top layer of cells lining the inside of the nasal cavity or ethmoid sinus, 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).</td>
</tr>
<tr>
<td>I</td>
<td>T1 N0 M0</td>
<td>The tumor has grown deeper, but it is only in one part of the nasal cavity or ethmoid sinus (although it might have grown into the bone) (T1). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>II</td>
<td>T2 N0 M0</td>
<td>The tumor has grown into more than one part of the nasal cavity or ethmoid sinus, or it is in both the nasal cavity and the ethmoid sinus (T2). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>III</td>
<td>T3 N0 M0</td>
<td>The tumor has grown into the side or bottom of the eye socket, the roof of the mouth (palate), the cribriform plate (the bone that separates the nose from the brain), and/or the maxillary sinus (T3). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>OR</td>
<td>T1 to T3</td>
<td>The tumor might or might not have grown outside of the nasal...</td>
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<tr>
<td>Stage</td>
<td>Tumor Spread &amp; Node Spread</td>
<td>Description</td>
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</tr>
<tr>
<td>N1 M0</td>
<td>T1 to T3</td>
<td>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 cm across (N1). The cancer has not spread to distant parts of the body (M0).</td>
</tr>
<tr>
<td>T4a N0 or N1 M0</td>
<td></td>
<td>The tumor has grown into the front part of the eye socket, the skin of the nose or cheek, the sphenoid sinus, the frontal sinus, or certain bones in the face (pterygoid plates). This is also known as <strong>moderately advanced local disease</strong> (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 cm across (N1). The cancer has not spread to distant parts of the body (M0).</td>
</tr>
<tr>
<td>OR</td>
<td>T1-T4a N2 M0</td>
<td>The tumor might or might not have grown into structures outside the nasal cavity or ethmoid sinus (as far as moderately advanced disease) (T1 to T4a). The cancer is N2:</td>
</tr>
<tr>
<td></td>
<td>- It has spread to a single lymph node on the same side of the neck as the tumor, which is larger than 3 cm but no larger than 6 cm across, OR</td>
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<tr>
<td></td>
<td>- 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</td>
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<tr>
<td></td>
<td>- 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 OR</td>
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<tr>
<td></td>
<td>- It has spread to a single lymph node on the same side of the neck as the tumor, which is 3 cm or smaller, and is growing outside of the lymph node (extranodal extension).</td>
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<td></td>
<td>The cancer has not spread to distant parts of the body (M0).</td>
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</tr>
<tr>
<td>IVB</td>
<td>T4b Any N M0</td>
<td>The tumor is growing into the back of the eye socket, the brain, the dura (the tissue covering the brain), some parts of the skull (the clivus or the middle cranial fossa), certain cranial nerves, or the nasopharynx (throat behind the nasal cavity). This is also known as <strong>very advanced local disease</strong> (T4b).</td>
</tr>
</tbody>
</table>
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).

OR

The tumor might or might not have grown into structures outside the nasal cavity or ethmoid sinus (any T). The cancer is N3:

- It has spread to at least one lymph node that is larger than 6 cm across, OR
- It has spread to a single lymph node on the same side as the tumor, which is larger than 3 cm and is growing outside of the lymph node, OR
- It is growing in many lymph nodes (on the same side or the other side of the tumor).

It has not spread to distant parts of the body (M0).

<table>
<thead>
<tr>
<th>IVC</th>
<th>Any T</th>
<th>Any N</th>
<th>M1</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

The tumor might or might not have grown into structures outside the nasal cavity or ethmoid sinus (any T). 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).

*The following additional categories are not listed in 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 maxillary sinus cancer

<table>
<thead>
<tr>
<th>AJCC stage grouping</th>
<th>Stage description*</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 Tis N0 M0</td>
<td>The tumor is only in the top layer of cells lining the inside of the maxillary sinus and has not grown any deeper (Tis).</td>
</tr>
</tbody>
</table>

3 cm = just over 1 inch; 6 cm = just over 2 inches
<table>
<thead>
<tr>
<th>Stage</th>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>T1 N0 M0</td>
<td>The tumor has grown deeper, but it is only in the tissue lining the sinus (the mucosa) and does not grow into the bone. (T1). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>II</td>
<td>T2 N0 M0</td>
<td>The tumor has begun to grow into some of the bones of the sinus, other than into the bone of the back part of the sinus (T2). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td>III</td>
<td>T3 N0 M0</td>
<td>The tumor has grown into the bone at the back of the sinus (called the posteriorwall) or into the ethmoid sinus, the tissues under the skin, or the side or bottom of the eye socket (T3). The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</td>
</tr>
<tr>
<td></td>
<td>OR</td>
<td>The tumor might or might not have grown into structures just outside the maxillary sinus (T1 to T3).</td>
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<tr>
<td></td>
<td>T1 to T3 N1 M0</td>
<td>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 cm across (N1). The cancer has not spread to distant parts of the body (M0).</td>
</tr>
<tr>
<td>IVA</td>
<td>T4a N0 or N1 M0</td>
<td>The tumor is growing into the skin of the cheek, the front part of the eye socket, the bone at the top of the nose (cribriform plate), the sphenoid sinus, the frontal sinus, or certain parts of the face (the pterygoid plates or the infratemporal fossa). This is also known as <em>moderately advanced local disease</em> (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 cm across (N1). The cancer has not spread to distant parts of the body (M0).</td>
</tr>
<tr>
<td>Stage</td>
<td>Tumor Spread</td>
<td>Lymph Node Spread</td>
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</tr>
<tr>
<td>T1-T4a N2 M0</td>
<td>The tumor might or might not have grown into structures outside the maxillary sinus (as far as moderately advanced disease) (T1 to T4a). The cancer is N2:</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• It has spread to a single lymph node on the same side of the neck as the tumor, which is larger than 3 cm but no larger than 6 cm across, OR</td>
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<tr>
<td></td>
<td>• 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</td>
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<td></td>
<td>• 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, OR</td>
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<tr>
<td></td>
<td>• It has spread to a single lymph node on the same side of the neck as the tumor, which is 3 cm or smaller, and is growing outside of the lymph node (extranodal extension). The cancer has not spread to distant parts of the body (M0).</td>
<td></td>
</tr>
<tr>
<td>T4b Any N M0</td>
<td>The tumor is growing into the throat behind the nasal cavity (the nasopharynx), the back of the eye socket, the brain, the tissue covering the brain (the dura), some parts of the base of the skull (middle cranial fossa or clivus), or certain cranial nerves. This is also known as <strong>very advanced local disease</strong> (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).</td>
<td></td>
</tr>
<tr>
<td>Any T N3 M0</td>
<td>The tumor might or might not have grown into structures outside the maxillary sinus (any T). The cancer is N3:</td>
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<tr>
<td>IVC</td>
<td>Any T Any N M1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The tumor might or might not have grown into structures outside the maxillary sinus, and it might or might not have affected a vocal cord (any T).</td>
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<tr>
<td></td>
<td>The cancer might or might not have spread to nearby lymph nodes (any N).</td>
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<tr>
<td></td>
<td>The cancer has spread to distant parts of the body (M1).</td>
<td></td>
</tr>
</tbody>
</table>

*The following additional categories are not listed in 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/treatment/understanding-your-diagnosis/staging.html](http://www.cancer.org/treatment/understanding-your-diagnosis/staging.html)

### References


Last Revised: April 19, 2021
Survival Rates for Nasal Cavity and Paranasal Sinus 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 nasal cavity (nose) or paranasal sinus 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 survival rate numbers come from?

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

The SEER database tracks 5-year relative survival rates for nasal cavity and paranasal sinus cancer in the United States, based on how far the cancer has spread. The SEER database, however, does not group cancers by AJCC TNM stages (stages I to IV). Instead, it groups cancers into localized, regional, and distant stages:

- **Localized**: There is no sign that the cancer has spread outside of the nasal cavity (or paranasal sinus).
- **Regional**: The cancer has spread outside the nasal cavity (or paranasal sinus) to nearby structures or lymph nodes.
- **Distant**: The cancer has spread to distant parts of the body, such as the lungs.
What are the 5-year relative survival rates for nasal cavity and paranasal sinus cancers

These numbers are based on people diagnosed with cancers of the nasal cavity or paranasal sinus between 2011 and 2017.

<table>
<thead>
<tr>
<th>SEER stage</th>
<th>5-year relative survival rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Localized</td>
<td>85%</td>
</tr>
<tr>
<td>Regional</td>
<td>52%</td>
</tr>
<tr>
<td>Distant</td>
<td>42%</td>
</tr>
<tr>
<td>All SEER stages combined</td>
<td>58%</td>
</tr>
</tbody>
</table>

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, the type of nasal cavity or paranasal sinus cancer you have, and how well the cancer responds to treatment, can also affect your outlook.
- People now being diagnosed with nasal cavity or paranasal sinus 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.

Hyperlinks


References
Questions To Ask About Nasal Cavity and Paranasal Sinus Cancers

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

When you’re told you have nasal cavity (nose) or paranasal sinus cancer

- Where is my cancer located?
- What kind of nasal cavity or paranasal sinus cancer do I have?
- If I’m concerned about the costs and insurance coverage for my diagnosis and treatment, who can help me?
- Has my cancer spread beyond where it started?
- What is the stage (extent) of my cancer, and what does that mean?
- Will I need other tests before we can decide on treatment?
- Will I need to see other doctors or specialists?

When deciding on a treatment plan for nasal cavity or paranasal sinus cancer
• How much experience do you have treating this type of cancer?
• What are my treatment choices?
• What do you recommend and why?
• If surgery is part of my treatment, what kind are you recommending? Will I need reconstruction surgery also? What options for reconstruction do I have?
• Will surgery make it hard for me to eat, talk, or see?
• What is the goal of the treatment?
• What are the chances that I can be cured of this cancer with these treatment options?
• How fast do I need to decide on treatment?
• What can I do to be ready for treatment?
• How long will treatment last? What will be done?
• Where will I get treatment?
• Will treatment affect my daily activities? Can I still work fulltime?
• What risks or side effects are there to the treatments you suggest? How long will they last?
• What can I do to prevent or reduce the side effects?
• Should I get a second opinion? How do I do that? Can you recommend someone?
• Will this treatment change the way I look?
• What other choices will I have if the treatment doesn’t work or if the cancer comes back (recurs) after treatment?
• What if I have problems getting to and from treatment?
• Do you know of any clinical trials I might be eligible for?

During treatment for nasal cavity or paranasal sinus cancer

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

• How will I know if the treatment is working?
• Is there anything I can do to help manage side effects?
• What symptoms or side effects should I tell you about right away?
• How can I reach you on nights, holidays, or weekends?
• Do I need to change what I eat during treatment?
• Are there any limits on what I can do or what I can eat?
• Can I exercise during treatment? If so, what kind should I do, and how often?
• Can you suggest a mental health professional if I start to feel overwhelmed,
depressed, or distressed?
- What social support is available during treatment if my family is far away?

After treatment for nasal cavity or paranasal sinus cancer

- Will I need a special diet after treatment?
- Will I need to see a specialist to evaluate how I speak and swallow?
- Are there any limits on what I can do?
- What symptoms should I watch for?
- What kind of exercise should I do now?
- How often will I need to have follow-up exams and imaging tests?
- When should my next tests be done?
- Will I need any blood tests?
- How will we know if the cancer has come back? What should I watch for?
- What will my options be if the cancer comes back?

Along with these examples, 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.

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

Hyperlinks


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