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# Nasal Cavity and Paranasal Sinus 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 Nasal Cavity and Paranasal Sinus Cancers Be Found Early?](#)
- [Signs and Symptoms of Nasal and Paranasal Sinus Cancers](#)
- [How Are Nasal Cavity and Paranasal Sinus Cancers Diagnosed?](#)

## 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.

- [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.

- [What Should You Ask Your Doctor About Nasal Cavity or Paranasal Sinus Cancer?](#)
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# Can Nasal Cavity and Paranasal Sinus Cancers Be Found Early?

Small cancers of the nasal cavity and paranasal sinuses usually do not cause any specific symptoms that help doctors find them early (when they're small and easier to [treat](#)<sup>1</sup>). 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, if needed.

## Screening

[Screening](#)<sup>2</sup> refers to tests and exams used to detect a disease, such as 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.

## Hyperlinks

1. [www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating.html)
2. [www.cancer.org/healthy/find-cancer-early.html](http://www.cancer.org/healthy/find-cancer-early.html)

## References

See all references for Nasal Cavity and Paranasal Sinus Cancers  
([www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/references.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/references.html))

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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. Diagnosis in people without symptoms is rare and usually accidental (found while doing tests to check for other medical problems). Possible 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
- Decreased or loss of sense of smell
- Numbness or pain in parts of the face
- Loosening or numbness of the teeth
- Growth or mass of the face, nose, or palate (top of the mouth)
- 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

See all references for Nasal Cavity and Paranasal Sinus Cancers

[www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/references.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/references.html)

Banuchi V, Mallen J, Kraus D. Cancers of the nose, sinus, and skull base. *Surg Oncol Clin N Am*. 2015;24(3):563-577.

Bossi P, Farina D, Gatta G, et al. Paranasal sinus cancer. *Crit Rev Oncol Hematol*. 2016;98:45-61.

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National Cancer Institute. Paranasal Sinus and Nasal Cavity Cancer Treatment (PDQ®)—Patient Version. August 19, 2016. Accessed at [www.cancer.gov/types/head-and-neck/patient/paranasal-sinus-treatment-pdq](http://www.cancer.gov/types/head-and-neck/patient/paranasal-sinus-treatment-pdq) on November 13, 2017.

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## Tests for Nasal Cavity and Paranasal Sinus Cancers

[Nasal cavity and paranasal sinus](#)<sup>1</sup> cancers are usually found because of [signs or symptoms](#) a person is having. The doctor will take a history and examine the patient. If cancer is suspected, the patient will be sent to see a specialist and tests will be done to be sure of the diagnosis.

### Medical history and physical exam

Your doctor will ask questions about your medical history and the problems you've been having. A physical exam will be done so the doctor can look for signs of nasal cavity or paranasal sinus cancer, as well as other health problems.

During the exam, the doctor will carefully check the parts of your nose and sinuses that are causing problems. He or she will also check for numbness, pain, swelling, and/or firmness in your face and the [lymph nodes](#)<sup>2</sup> in your neck. The doctor will look for changes in the symmetry of your eyes and face (both sides should be much the same), vision changes, and any other problems.

The doctor might also examine your nasal cavity with a headlight and small mirrors or even look inside your nose with a special tool called a **nasal endoscope**<sup>3</sup>. (This is a thin, flexible tube that allows the doctor to see into your nasal passages.)

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 examine your nasal passages and the rest of your head and neck. This might include an exam of your throat, tongue, and mouth which can be done with small mirrors and a light or with a fiber-optic scope – a thin, flexible, lighted tube that's put in through your mouth or nose.

## Imaging tests

Imaging tests use x-rays, magnetic fields, or other means to create pictures of the inside of your body. Imaging tests are not used to diagnose nasal cavity or paranasal sinus 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 see if a tumor can be safely biopsied without causing a lot of bleeding (covered below)
- To learn how far cancer may have spread (metastasized)
- To see if the cancer can be removed with [surgery](#)<sup>4</sup>
- To help see if treatment is working
- To look for signs that the cancer has [come back](#)<sup>5</sup> after treatment (recurred)

## X-rays

[X-rays](#)<sup>6</sup> can show if there's any fluid or masses in the sinuses. (They 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.

If you've been diagnosed with nasal cavity or paranasal sinus cancer, a chest x-ray 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.

### **CT (computed tomography) scan**

A [CT scan](#)<sup>7</sup> uses x-rays to make detailed 3-D cross-sectional images of the inside of your body. This test is very useful in identifying cancers of the nasal cavity and paranasal sinuses. Bony details show up well on a CT scan and it can show if a tumor has destroyed the bone around it. A chest CT might also be used to see if the cancer has spread to the lungs.

Unlike a regular x-ray, a CT scan creates detailed images of the soft tissues and organs in the body.

### **MRI (magnetic resonance imaging) scan**

[MRI scans](#)<sup>8</sup> use radio waves and strong magnets instead of x-rays to make pictures of your insides. 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 tumor that's not cancer and one that is. They can also show if a tumor has spread into nearby soft tissues, like the eyeball, brain, or blood vessels.

Both CT and MRI scans help find cancers of the nasal cavities and paranasal sinuses and learn more about them. For instance, a CT scan can tell if the cancer is growing into bone, and an MRI can show the size and type of cancer. Both can show if it has spread to lymph nodes in the neck.

### **PET (positron emission tomography) scan**

A [PET scan](#)<sup>9</sup> uses a form of radioactive sugar that's injected into your blood. (Because cancer cells use glucose at a higher rate than normal cells, they will absorb more of the radioactive sugar.) A special scanner is then used to create pictures of the places where the radioactivity collected in your body. A PET scan is often done along with a CT scan using a machine that can do both scans at the same time (called a PET/CT scan). This lets the doctor compare areas of higher radioactivity on the PET with the detailed images from the CT scan. Though these cancers rarely spread, a PET scan gives helpful information about your whole body.

A PET scan may be used to look for possible areas of cancer spread, especially if there's a good chance that the cancer is more advanced. (Meaning it's bigger and more likely to have spread.) This test also can be used to help see if a change seen on another imaging test is or isn't cancer.

## Biopsy

A [biopsy](#)<sup>10</sup> is a procedure in which a doctor takes out a small piece of tissue (a sample) to be checked with a microscope. 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 will it grow and spread). This information is needed to help plan the best [treatment](#)<sup>11</sup>.

Doctors look closely at where the tumor is and the blood vessels around it when deciding where and how to do a 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 hard-to-reach place or may bleed a lot, the biopsy will be done in the operating room. Many types of biopsies can be used to diagnose nasal cavity or paranasal sinus cancer.

### Fine needle aspiration (FNA) biopsy

In this type of biopsy, the doctor puts a thin, hollow needle right into a tumor or [lymph node](#)<sup>12</sup> to take out cells and/or a few drops of fluid. The doctor may repeat this 2 or 3 times to take several samples. The cells can then be checked under a microscope to see if they look like cancer.

An FNA biopsy is often used in patients with swollen lymph nodes in the neck. In these patients, FNA biopsy can show if the lymph node swelling is from cancer or if it's a response to an infection. If someone who has already been diagnosed with nasal cavity or paranasal sinus cancer has enlarged neck lymph nodes, a fine needle biopsy can tell if the lymph node swelling is caused by the spread of cancer.

### 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:** For tumors 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](#)<sup>13</sup>.

### Anesthesia for biopsies

Anesthesia is the use of drugs to help control pain during medical procedures. The type of anesthesia used depends on how the biopsy will be done.

Local anesthesia (numbing medicine) is often used for an incisional biopsy or needle biopsy. The drug can be injected into the skin and nearby tissues or even put right on the inside of the nose to numb the area while the biopsy is done.

Sedation (where you are made very drowsy) or general anesthesia (where you are in a deep sleep) may be needed for endoscopic biopsies. General anesthesia is needed for procedures that cut through the sinus bones.

See [Testing Biopsy and Cytology Specimens for Cancer](#)<sup>14</sup> to learn more about different types of biopsies, how the tissue sample is used in the lab to diagnose diseases, and what the results will tell you.

### Hyperlinks

1. [www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/about/what-is-nasal-paranasal.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/about/what-is-nasal-paranasal.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/tests/endoscopy.html](http://www.cancer.org/treatment/understanding-your-diagnosis/tests/endoscopy.html)



4. [www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating/surgery.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating/surgery.html)
5. [www.cancer.org/treatment/survivorship-during-and-after-treatment/understanding-recurrence.html](http://www.cancer.org/treatment/survivorship-during-and-after-treatment/understanding-recurrence.html)
6. [www.cancer.org/treatment/understanding-your-diagnosis/tests/x-rays-and-other-radiographic-tests.html](http://www.cancer.org/treatment/understanding-your-diagnosis/tests/x-rays-and-other-radiographic-tests.html)
7. [www.cancer.org/treatment/understanding-your-diagnosis/tests/ct-scan-for-cancer.html](http://www.cancer.org/treatment/understanding-your-diagnosis/tests/ct-scan-for-cancer.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)
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10. [www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer.html](http://www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer.html)
11. [www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating.html)
12. [www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html](http://www.cancer.org/cancer/cancer-basics/lymph-nodes-and-cancer.html)
13. [www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating/surgery.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating/surgery.html)
14. [www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer.html](http://www.cancer.org/treatment/understanding-your-diagnosis/tests/testing-biopsy-and-cytology-specimens-for-cancer.html)

## References

See all references for Nasal Cavity and Paranasal Sinus Cancers

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## Nasal Cavity and Paranasal Sinus Cancer Staging

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](#)<sup>1</sup> 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, and how large are they?
- The spread (**metastasis**) to distant sites (**M**): Has the cancer spread to distant parts of the body? (The lungs are the most common site of spread, although it can also spread to other organs, such as the 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](#)<sup>2</sup>.

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

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 [How Are Nasal Cavity and Paranasal Sinus Cancers Diagnosed?](#)). If surgery has been done, the **pathologic stage** (also called the **surgical stage**) can be determined.

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**

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.

## Stages of nasal cavity or ethmoid sinus cancer

AJCC stage	Stage grouping	Stage description*
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<b>0</b>	<b>Tis N0 M0</b>	<p>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).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p>
<b>I</b>	<b>T1 N0 M0</b>	<p>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).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p>
<b>II</b>	<b>T2 N0 M0</b>	<p>The tumor has grown into more than one part of the nasal cavity or ethmoid sinus, or it is in both nasal cavity and the ethmoid sinus (T2).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p>
<b>III</b>	<b>T3 N0 M0</b>	<p>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).</p> <p>The cancer has not spread to nearby lymph nodes (N0) or to distant parts of the body (M0).</p>
	OR	
	<b>T1 to T3 N1 M0</b>	<p>The tumor might or might not have grown outside of the nasal cavity or ethmoid sinus and into nearby structures (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).</p> <p>The cancer has not spread to distant parts of the body (M0).</p>
<b>IVA</b>	<b>T4a N0 or N1 M0</b>	<p>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 <b>moderately advanced local disease</b> (T4a). The cancer has not spread to nearby lymph nodes (N0), or it has</p>

		<p>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).</p> <p>The cancer has not spread to distant parts of the body (M0).</p>
	OR	
	<b>T1-T4a N2 M0</b>	<p>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:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• 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</li> <li>• 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.</li> </ul> <p>The cancer has not spread to distant parts of the body (M0).</p>
<b>IVB</b>	<b>T4b Any N M0</b>	<p>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 <b>very advanced local disease</b> (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	
	<b>Any T N3 M0</b>	<p>The tumor might or might not have grown into structures outside the nasal cavity or ethmoid sinus (any T). 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).</p> <p>It has not spread to distant parts of the body (M0).</p>
<b>IVC</b>	<b>Any T</b>	The tumor might or might not have grown into structures

	<b>Any N M1</b>	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).
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\*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

AJCC stage	Stage grouping	Stage description*
<b>0</b>	<b>Tis N0 M0</b>	The tumor is only in the top layer of cells lining the inside of the maxillary 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).
<b>I</b>	<b>T1 N0 M0</b>	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).
<b>II</b>	<b>T2 N0 M0</b>	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).
<b>III</b>	<b>T3 N0 M0</b>	The tumor has grown into the bone at the back of the sinus (called the posterior wall) 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).

	OR	
	<b>T1 to T3 N1 M0</b>	<p>The tumor might or might not have grown into structures just outside the maxillary sinus (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).</p> <p>The cancer has not spread to distant parts of the body (M0).</p>
IVA	<b>T4a N0 or N1 M0</b>	<p>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 <b>moderately advanced local disease</b> (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).</p> <p>The cancer has not spread to distant parts of the body (M0).</p>
	OR	
	<b>T1-T4a N2 M0</b>	<p>The tumor might or might not have grown into structures outside the maxillary sinus (as far as moderately advanced disease) (T1 to T4a).</p> <p>The cancer is N2:</p> <ul style="list-style-type: none"> <li>• 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</li> <li>• 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</li> <li>• 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.</li> </ul> <p>The cancer has not spread to distant parts of the body (M0).</p>
	<b>T4b Any</b>	The tumor is growing into the throat behind the nasal cavity

IVB	<b>N M0</b>	(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 <b>very advanced local disease</b> (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).
	OR	
IVC	<b>Any T N3 M0</b>	The tumor might or might not have grown into structures outside the maxillary sinus (any T).  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).
	<b>Any T Any N M1</b>	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).  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.

## Hyperlinks

1. [www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating.html)
2. [www.cancer.org/treatment/understanding-your-diagnosis/staging.html](http://www.cancer.org/treatment/understanding-your-diagnosis/staging.html)

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# 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 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 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 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](#) (stage 1, stage 2, stage 3, etc.). 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). This would include AJCC stage I (1) and stage II (2) cancers.
- **Regional:** The cancer has spread outside the nasal cavity (or paranasal sinus) to nearby structures or lymph nodes. This would include stage III (3), IVA (4A), and IVB (4B) cancers in the AJCC system.
- **Distant:** The cancer has spread to distant parts of the body, such as the lungs.

This would include stage IVC (4C) cancers.

### 5-year relative survival rates for nasal cavity and paranasal sinus cancer

(Based on people diagnosed with cancers of the nasal cavity or paranasal sinus between 2008 and 2014.)

SEER stage	5-year relative survival rate
Localized	85%
Regional	50%
Distant	44%
All SEER stages combined	58%

### 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 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.

\*SEER = Surveillance, Epidemiology, and End Results

### 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/), based on November 2017 SEER data submission, posted to the SEER web site, April 2018.

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## Questions To Ask About Nasal Cavity and Paranasal Sinus 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. Here are some questions you might want to ask. Nurses, social workers, and other members of the treatment team may also be able to answer many of your questions.

- What [kind of nasal cavity or paranasal sinus cancer](#)<sup>1</sup> do I have?
- Where is my cancer located?
- Has my cancer spread beyond the primary site?
- What is the [stage](#) 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?
- How much experience do you have treating this type of cancer?
- What [treatment choices](#)<sup>2</sup> do I have?
- 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 be done? Where will it be done?
- How will treatment affect my daily activities?
- What risks or side effects should I expect? How long are they likely to last?
- How will this treatment affect my appearance?
- What options for reconstruction of the defects do I have?

- What if the treatment doesn't work or if the cancer recurs?
- What type of [follow-up](#)<sup>3</sup> will I need after treatment?
- Where can I find more information and [support](#)<sup>4</sup>?

In addition to 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 or about [clinical trials](#)<sup>5</sup> for which you may qualify.

## Hyperlinks

1. [www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/about/what-is-nasal-paranasal.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/about/what-is-nasal-paranasal.html)
2. [www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/treating.html)
3. [www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/after-treatment.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/after-treatment.html)
4. [www.cancer.org/treatment/support-programs-and-services.html](http://www.cancer.org/treatment/support-programs-and-services.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)

## References

See all references for Nasal Cavity and Paranasal Sinus Cancers  
([www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/references.html](http://www.cancer.org/cancer/nasal-cavity-and-paranasal-sinus-cancer/references.html))

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