

# Nasopharyngeal Cancer

## Patient information

### *What is cancer?*

The human body is made up of billions of cells. In healthy people, cells grow, divide and die. New cells constantly replace old ones in an orderly way. This process ensures each part of the body has the right number and kinds of cells for good health.

Cancer cells multiply far faster than healthy cells. Also, they do not function like normal cells. They do not serve any useful purpose in the body. In fact, they can sometimes produce toxic substances. Also, they displace normal, healthy cells and compete for the body's resources.

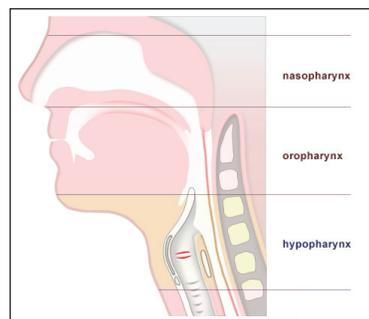
Cells become cancerous when their DNA is damaged. DNA contains the "instructions" cells need to divide and function properly. People can inherit damaged DNA. This is why certain families or groups are at higher risk than others for some cancers. More often, DNA is damaged by exposure to something in the environment, like the toxic chemicals in cigarette smoke.

As the number of cancer cells increases, they often form a mass or lump. This is called a growth or tumor. Eventually, if the cancer cells continue to multiply, they begin to spread through the body. They can invade and damage nearby organs. Also, they can spread to other parts of the body, and start new tumours there. This is called metastasis.

Cancer cells must be killed or removed before they spread (metastasize) through the body. Otherwise, they will damage – and eventually destroy – vital organs.

### *What is the nasopharynx?*

The nasopharynx is located in the far back area of the nose.



### *What is nasopharyngeal cancer?*

Nasopharyngeal cancer occurs when cells in the nasopharynx become cancerous and start to multiply. Often, by the time doctors diagnose the cancer, it has spread to the neck.

### *Risk factors for nasopharyngeal cancer*

Risk factors are things that increase people's chances of developing a disease. Risk factors can be:

- inherited (for example, a damaged gene that makes cancer more likely)
- environmental (for example, living in an area with serious air pollution)
- linked to lifestyle choices (for example, cigarette smoking)

The more risk factors for a certain disease you have, the more likely you are to get that disease.

Nasopharyngeal cancer is linked to a virus called Epstein-Barr virus. This virus invades the back of the nose and causes the cells in this region to start dividing uncontrollably. Not all people infected with the Epstein-Barr virus will develop cancer. The reason for this is not known. The Epstein-Barr virus infects mostly people of Asian descent. As a result, most people with nasopharyngeal cancer are of Asian origin.

### ***Symptoms of nasopharyngeal cancer***

Many symptoms associated with this cancer are nasal, that is, related to the nose. Nasal symptoms might include:

- bleeding from the nose
- blockage of the nose
- increased mucus discharge from the nose

### ***Other symptoms might include:***

- decreased hearing or ringing in the ears
- headaches
- lump(s) in the neck

### ***Diagnosing nasopharyngeal cancer***

A firm diagnosis of cancer must be made before treatment starts. Often, this is done using a procedure called a biopsy. A small piece of tissue is taken from the suspected cancer site and examined under a microscope. This lets doctors be sure that cancer cells are really present.

Doctors may also need to do other tests to see how far the cancer has spread. These might include tests such as CT (computed tomography) or MRI (magnetic resonance imaging) scans. These tests allow doctors to take detailed pictures of structures inside the body and see exactly where the cancer is.

### ***Stages of cancer***

Doctors stage or classify cancers according to how large they are, and how far they have spread from their original locations. Staging systems for different cancers can be complex and detailed. As a general rule however, the higher the stage number, the larger the cancer is, and the more it has spread. For example, a stage one cancer is relatively small, and has not spread far from its original site. A stage four cancer, on the other hand, is quite large, and has spread far away from its original site.

### ***Treatments for cancer: overview***

Most cancers are treated with surgery, radiotherapy (radiation) or chemotherapy – or some combination of these three therapies. Since every patient, and every case is unique, there is no “ideal” course of treatment. Your doctor will prescribe the treatment, or combination of treatments, which is best for you. Your treatment will depend on the stage of your cancer, your level of health and your medical history.

### ***Treatments for nasopharyngeal cancer: surgery***

Often, tumours must be surgically removed. How serious the surgery is, and how much tissue is removed depends on the stage of the cancer, what internal structures are affected and other factors such as your general level of health. Surgery is usually very effective. However, it is often followed by other forms of therapy, to try and ensure all cancer cells have been eliminated.

### ***Treatments for nasopharyngeal cancer: radiotherapy***

In radiotherapy, doctors use tightly focused beams of radiation to kill cancer cells, while sparing as many healthy cells as possible. Radiotherapy is not at all painful. However, because the beams of radiation also kill healthy cells near the tumour, radiotherapy may cause side effects after treatment.

### ***The most common side effect are:***

- 1) ***Skin problems:*** skin may appear red, sunburned or feel irritated. This will go away after treatment ends.
- 2) ***Fatigue:*** many patients will feel extremely tired as a result of treatment.
- 3) ***Loss of appetite:*** radiotherapy, other cancer treatments or stress can result in loss of appetite. However, it is very important to eat well during cancer treatments.

4) **Loss of hair:** radiotherapy sometimes causes hair loss. Ask your doctor if he/she thinks this will happen in your case.

### ***Treatments for nasopharyngeal cancer: chemotherapy***

In chemotherapy, anticancer drugs are injected or taken by mouth. These drugs are specially designed to seek out and kill cancer cells. However, they can also damage normal cells. This causes side effects such as:

- Nausea
- Vomiting
- Loss of appetite
- Hair loss
- Sores in the mouth

Anticancer drugs often affect the bone marrow, where blood cells are made. This decreases the number of cells in your blood and can cause side effects such as:

- Increased risk of infection
- Bruising
- Bleeding due to minor cuts
- Shortness of breath
- Tiredness
- Weakness

Most of these side effects will disappear at the end of treatment.

### ***Where can I get more information?***

Don't hesitate to ask your doctor or any member of your healthcare team about your disorder or its treatment. It's important that you learn as much as you can about your condition. That way, you will know what to expect, and how you can help yourself stay as healthy as possible. Because your doctor knows the details of your case, he or she is the best person to answer your questions.

If you would like to read more about nasopharyngeal cancer, here are some useful websites with reliable information:

Canadian Cancer Society: [www.cancer.ca](http://www.cancer.ca)

National Cancer Institute: [www.cancer.gov](http://www.cancer.gov)

American Cancer Society: [www.cancer.org](http://www.cancer.org)

The American Head and Neck Society: [www.head-andneckcancer.org](http://www.head-andneckcancer.org)

Head and Neck Cancer: [www.hncancer.com](http://www.hncancer.com)

Cancer Care: [www.cancercare.org](http://www.cancercare.org)

### ***A Word from Your Doctor Dr. Anthony Zeitouni***

*Dear Patient,*

*As a healthcare professional, your well-being is very important to me. It is for this very reason that we are offering you this document to better inform you about the cancer you are battling.*

*If after having read this document you still have questions, please do not hesitate to ask them during your next appointment, or contact me at (514) 934-1934, ext. 34971.*



***Together we will beat cancer!***

*Special thanks*

We would like to acknowledge the time and efforts of Dr. Keith Richardson who volunteered to write this document to better inform our patients.

***Thank you Dr. Keith Richardson***



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**IMPORTANT : PLEASE READ**

Information provided in this pamphlet is for educational purposes. It is not intended to replace the advice or instruction of a professional healthcare practitioner, or to substitute medical care. Contact a qualified healthcare practitioner if you have any questions concerning your care.