

**CANCER CARE**  
OF WESTERN NEW YORK

dedicated to  
**curing cancer today.**

[cancercarewny.com](http://cancercarewny.com)



## our philosophy

Cancer Care of Western New York is dedicated to providing the best cancer care for our patients. Our facilities have the latest technology for the treatment of cancer throughout the region.

Many different types of cancers can be treated successfully with radiation, including the following:

### Prostate Cancer

The cause of prostate cancer remains unknown. The risk of developing prostate cancer increases as a man ages. A family history of prostate cancer in a brother or a father also doubles one's chances of getting prostate cancer. In the very early stages of prostate cancer, there usually are no symptoms.

### Breast Cancer

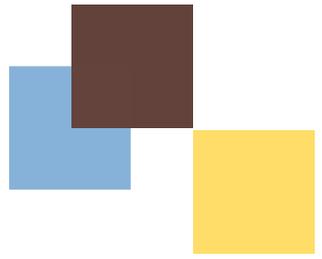
Breast cancer is the most common cancer in women. Some symptoms associated with breast cancer are a new lump in the breast or underarm, thickening or swelling of the breast, irritation/dimpling of the breast, pain in the nipple area, and nipple discharge.

### Lung Cancer

Lung cancer is a disease caused by the rapid growth and division of cells that make up the lungs. Coughing, shortness of breath, wheezing, chest pain, loss of appetite and weight loss are common symptoms experienced with lung cancer.

### Central Nervous System (CNS) Cancer

CNS cancer affects either the brain, spinal cord or both. Signs and symptoms include headache, seizures, and neurological dysfunction affecting speech, memory, and/or vision. Gamma Knife is a radiosurgery technique that has proven very effective in the treatment of CNS cancers.



## Head and Neck Cancer

This type of cancer is one that occurs in the head, nasal cavity, sinuses, lips, mouth, salivary glands, throat or larynx. Common symptoms of cancer of the head and neck include persistent pain in the throat, pain/difficulty swallowing, persistent hoarseness or change in voice, pain in the ear and bleeding in the mouth or throat.

## Bladder Cancer

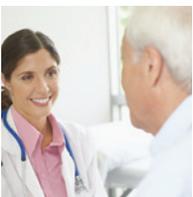
Carcinogens (cancer causing agents) in the urine may lead to the development of bladder cancer. The primary symptom is blood in the urine. Other symptoms may include frequent urination and pain upon urination.

## Gastrointestinal (GI) Cancer

GI cancer can form in the lining of the GI tract, which includes the small intestine, large intestine, stomach, pancreas and liver. Depending on the location of the cancer, causes, risk factors, and symptoms may vary.

## Other cancers successfully treated by radiation include:

- Testicular Cancer
- Colorectal Cancer
- Leukemia
- Thyroid Cancer
- Sarcomas
- Lymphomas (including Hodgkin's & non-Hodgkin's)
- Skin Cancer
- Cervical Cancer
- Ovarian Cancer
- Metastatic Cancers
- And Many Others



Our goal is to cure cancer.

## our team

### Radiation Oncology



**Michael Duff, M.D.** is a board-certified radiation oncologist and graduate of the SUNY at Buffalo School of Medicine. He completed an internship in Internal Medicine in Buffalo, and trained in radiation oncology at the University of Minnesota. Dr. Duff is an active member of the American Society for Therapeutic Radiology and Oncology (ASTRO). He is well versed in various radiation techniques, such as 3D conformal radiation therapy and Intensity Modulated Radiation Therapy (IMRT).



**Dhiren K. Shah, M.D.** is a board-certified radiation oncologist. He graduated with honors from Lehigh University and completed his radiation oncology training at Robert Wood Johnson/Cooper Hospital in New Jersey. He is a member of many clinical societies, including the American Society for Therapeutic Radiology and Oncology, is a fellow of the American College of Radiation Oncology and is the vice chair for the prestigious New York State Board of Medicine.



**Christine Mangovski, RPA-C** graduated with a master's degree in the Physician Assistants Program at LeMoyne College in Syracuse, NY. She is nationally certified by the National Commission on Certification of Physician Assistants and is an active member of the American Academy of Physician Assistants.

### Pathology



**William A. Geary, M.D.** graduated from the University of Virginia School of Medicine, where he also completed his pathology training. Dr. Geary is a board-certified physician and an active member of various professional organizations.



**John E. Schrecengost, M.D.** is a board-certified physician who graduated from the University of Pittsburgh School of Medicine, and completed his pathology training at the University of Virginia Health Sciences Center. Dr. Schrecengost is also an active member of multiple professional organizations.

## patient information

### Affiliations

#### Kaleida Health

Millard Fillmore Gates Circle Hospital  
Millard Fillmore Suburban Hospital  
DeGraff Memorial Hospital

#### Catholic Health System

Kenmore Mercy Hospital  
Mercy Hospital of Buffalo  
Sisters of Charity Hospital  
St. Joseph Hospital

#### Buffalo Ambulatory Surgery Center

#### Erie County Medical Center

#### Gamma Knife Radiosurgery

Dr. Dhiren K. Shah performs this  
specialized service at Roswell Park.

### Insurance

- Blue Cross & Blue Shield of Western New York
- Blue Shield General Motors
- Community Blue
- Empire Plan
- Encompass 65
- Excellus
- Fidelis
- GHI
- Health America/Health Assurance
- Highmark Blue Cross Blue Shield
- Independent Health (IHA)
- Medicaid
- Medicare
- North AmeriCare
- NOVA
- Private Insurances
- Senior Blue
- Senior Choice
- United Healthcare
- Univera
- UPMC
- Workers' Comp/No Fault

*If you don't see your plan listed,  
please call our office.*



Harlem Professional Park | 3085 Harlem Road, Suite 200, Cheektowaga, NY 14225  
PH: 716-844-5500 | FX: 716-844-5550

**Opening August 2009**

Jamestown | 117 Foote Avenue, Jamestown, NY 14701  
PH: 716-338-9500 | FX: 716-338-9550

# about prostate cancer

Cancer of the prostate is the most common type of cancer among American men. It is estimated that 1 out of every 10 American men will develop prostate cancer before the age of 85. The risk of developing prostate cancer greatly increases with age. It rarely occurs in men younger than 40.



## The Prostate

The prostate is a male gland normally the size of a chestnut. It secretes a milky fluid that is part of the semen needed for ejaculation. The prostate gland lies at the base of the penis, just below the urinary bladder and in front of the rectum. It surrounds the first inch of the urethra, the tube that carries urine from the bladder. Its location allows a physician to feel through the rectum to the part of the gland where most tumors occur.

## Prostate Cancer Risk Factors

The cause of prostate cancer remains unknown. However, several factors associated with a higher rate of prostate cancer have been identified. The risk of developing prostate cancer increases as a man ages. A family history of prostate cancer in a brother or a father also doubles one's chances of getting prostate cancer. There is no convincing evidence to date that diet and/or nutrition play a role in developing prostate cancer.

## Signs and Symptoms

In the very early stages of prostate cancer, there usually are no symptoms. When symptoms do develop, they vary according to the size and location of the tumor and are often the same as those for benign prostate conditions. In fact, it is more likely that any of these symptoms indicate prostate enlargement, known as benign prostatic hypertrophy; infection; or other conditions, rather than cancer. Still, any symptom should be checked by a physician. Only a physician conducting the proper tests can determine for sure whether the condition is cancerous or benign. Symptoms of prostate problems include:

- Weak or interrupted urine flow
- Inability to urinate
- Difficulty in starting urination
- Blood in the urine
- Need to urinate frequently, especially at night
- Painful or burning urination
- Continuing pain in the lower back, pelvis, or upper thighs

## Early Detection

Every man over the age of 40 should have a digital rectal examination (DRE) as part of his regular annual physical checkup. Almost all cancers begin in the part of the prostate gland that can be palpated by rectal examination. In addition, it is recommended that relatively healthy men 40 and over who want to be screened have a prostate-specific antigen blood test (PSA).

## Diagnosis of Prostate Cancer

A prostate biopsy is typically performed based on PSA and DRE results. This minimally invasive procedure is usually performed in your doctor's office, and is the only way to definitively confirm the presence of prostate cancer. A urologic pathologist will then carefully examine the biopsy specimen.

## Removal of Prostate by Surgery

A surgical procedure known as prostatectomy can be used to remove the prostate and may help prevent further spread of the cancer. Prostatectomy is most often done during the cancer's early stages, when it is located only within the prostate. If found in its early stages, prostate cancer can be cured by surgery. There are two types of surgeries—conventional, and robotic (laparoscopic); your doctor can help you decide which one is right for you, or you can visit our website to learn more.

## Radiation Therapy

Two types of radiation can be used:

- External beam radiation
- Prostate brachytherapy (seed implantation)

External beam radiation therapy uses high-energy rays to kill cancer cells. Intensity Modulated Radiation Therapy (IMRT) is a new technology that allows a higher dose of radiation to be delivered to the prostate, while limiting the dose to the surrounding healthy tissues, including the bladder and rectum. Image-Guided Radiation Therapy (IGRT) is utilized to track the exact location of the prostate gland immediately prior to every treatment. These two advances in radiation therapy allow a higher dose of radiation with precise delivery while minimizing the possibility of side effects. The treatments are fast, safe, and do not make you radioactive—it is fine for family members and friends to be around you.

Prostate brachytherapy is an operative procedure. This treatment involves the placement of tiny radioactive “seeds” into the prostate to destroy the cancer cells. These seeds will emit low-level radiation for about one year. This outpatient procedure requires anesthesia, but generally does not require an overnight stay in the hospital.

## Hormone Therapy

Prostate Cancer is fueled by male hormones such as testosterone. Starving the cancer of these hormones may slow or stop its growth. This treatment involves getting injections every 30 to 120 days, and is typically used to stop or slow the spread of prostate cancer; it is not a cure.

**Your physician at Cancer Care of Western New York will help guide you and your family through the decision making process.**

# about breast cancer

Breast cancer is the most common cancer in women. The good news is, many breast cancers can be cured. Cancer Care of Western New York offers advanced radiation treatment techniques that maximize your chance of being cured, while minimizing your risk of possible side effects. Our doctors have successfully treated hundreds of women with breast cancer. Now, we want to help you continue to have a healthy, productive life.

## The Breast

In women, the breasts are made of fat, milk glands and connective (fibrous) tissue. They also contain tiny ducts that connect the milk glands to the nipples.

## Signs and Symptoms

Most breast cancers are discovered at an early stage.

Symptoms of breast cancer include:

- An abnormal mammogram
- A new lump in your breast or underarm
- Nipple discharge
- Pain in the nipple area
- Changes in the appearance of the nipple
- Changes in the skin of the breast, including thickening, swelling, irritation or dimpling



## Screening and Diagnosis

Breast cancer is often found through a mammogram, a breast examination by a physician, or a self-breast exam. If your physician thinks you may have breast cancer, you may be sent for ultrasonography, an MRI scan or a breast biopsy, which can offer a definitive diagnosis.

## Surgical Treatment

There are two main surgical techniques for breast cancer—a mastectomy and a lumpectomy. If you have a mastectomy, a surgeon will remove your breast tissue down to the chest wall, including the nipple and area around the nipple. If you have a lumpectomy, the surgeon will only remove the abnormal area of tissue from your breast, along with some of the normal tissue that surrounds it.

## Radiation Therapy Treatment

At Cancer Care of Western New York, we are proud to offer the latest radiation treatment techniques, including advanced High-Dose-Rate (HDR) brachytherapy. Our goal is to deliver a high dose of radiation to the specific area, without harming the surrounding healthy tissues. With state-of-the-art technology, we can maximize the destruction of cancer cells and your potential for a cure, while minimizing your risk of side effects and chance of a recurrence.

The first step is to develop a customized radiation treatment plan just for you. This plan will include either whole breast radiation, or partial breast radiation.

## Whole Breast Radiation

Whole breast radiation involves a machine that directs radiation beams to treat the entire breast, and (in some cases) the nearby lymph node chains. This type of external beam radiation is used for patients who have had a lumpectomy; a similar technique is used for patients who require radiation after a mastectomy, to treat the chest wall and nearby lymph nodes.

Whole breast radiation is safe and painless, with limited side effects, which means you can usually keep up your daily activities. You simply come in for approximately 10 minutes each day, Monday through Friday, for a total of five to seven weeks.

## Partial Breast Radiation

Partial breast radiation may be an option if you plan to have a lumpectomy. The benefit to partial breast radiation is that it may reduce your risk of side effects, and also have a shorter treatment time.

If you choose partial breast radiation after your lumpectomy, your surgeon will insert a small device in your breast with a small tube that will extend from the side of your breast. This device is easily removed in our office once your treatment sessions are complete.

During each treatment session, the tube extending from your breast will be attached to a special HDR radiation machine. This machine will put a radioactive “seed” into the device inside your breast for 10 or 15 minutes, then return it to the machine. The treatment is not painful, and you are not radioactive after the treatment.

Partial breast radiation treatments are delivered twice a day, for five days. Typically, there is a four- to six-hour break between the two daily treatments. You are free to leave the office during these breaks, and you should be able to go to work or do whatever you usually do during the day.

Treatment side effects may include a temporary skin reaction, fatigue, a small risk of infection, and a slight change in the size and shape of the breast (due to scar tissue formation).

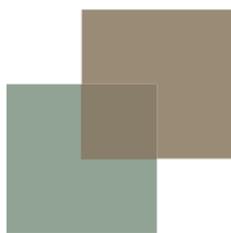
**Your physician and the Patient Advocates at Cancer Care of Western New York can answer any additional questions you may have, and help you determine which treatment is right for you.**

# central nervous system cancer



Central Nervous System cancer—also known as CNS cancer—can affect your brain, your spinal cord, or both. In some cases, CNS cancer has spread to the brain from another part of the body.

Fortunately, not all central nervous system tumors are malignant, or cancerous. Certain tumors are slow-growing, and are easily curable.



## The Central Nervous System

Together, your brain and spinal cord form your central nervous system. Your brain—which consists of soft tissue and nerves—includes your cerebrum, cerebellum and brainstem. Your spinal cord is the collection of nerve fibers (protected by your spine) that connects your brain with the nerves in the rest of your body.

## Signs and Symptoms

If you have CNS cancer, you may be experiencing:

- Headaches
- Mood swings
- Loss of senses
- Numbness
- Disorientation
- Seizures
- Weakness
- Hallucinations
- Confusion
- Problems with your speech, memory or vision

## Screening and Diagnosis

To diagnose Central Nervous System cancer, we will start with a thorough neurological exam, including questions and activities designed to help pinpoint the location of a problem within your central nervous system. We will test your memory, speech, balance, vision, reflexes and muscle function. Following this exam, we may order a CT or MRI scan to get a detailed image of your brain and spinal cord.

Depending on the results of these tests, you may also need a biopsy. During a biopsy, a neurosurgeon collects tissue, which is then reviewed under a microscope to determine which specific CNS tumor is causing the problems. Because cancers from other parts of the body can spread to the brain, we may also check other parts of your body to see if there are any signs of cancer anywhere else.



## Treatment Options

**External Beam Radiation Therapy.** This treatment option uses high-energy rays to destroy cancer cells and shrink tumors. A machine called a linear accelerator creates the radiation beam, which is typically only “on” for a minute or two per treatment. The treatments are fast, safe, and do not make you radioactive—it is fine for family members and friends to be around you. We use Intensity Modulated Radiation Therapy (IMRT) and 3D radiation techniques, both of which allow us to deliver a higher dose of radiation. While side effects are minimized, they may include a temporary worsening of neurological symptoms, and temporary hair loss.

**Gamma Knife Radiation Therapy.** Gamma Knife, which is used to treat brain disorders, also provides a higher dose of radiation with minimal side effects. This non-invasive technique delivers an extremely precise dose of radiation using approximately 200 narrow radiation beams all focused at the same point, which minimizes the risk of damage to the surrounding healthy tissue (side effects may include a temporary worsening of neurological symptoms). Gamma Knife is also known as a radiosurgery technique, or stereotactic radiosurgery, and is designed for the treatment of vascular malformations, benign tumors, metastases and other malignant tumors as well as functional disorders. Dr. Dhiren K. Shah performs this specialized service at Roswell Park.

**Steroids.** Steroids can reduce inflammation and swelling, which may help eliminate some of the symptoms of CNS cancer.

**Chemotherapy Drugs.** Chemotherapy drugs are effective in treating some CNS cancers. These drugs may be delivered through an IV into your veins, or taken in pill form. If you are being treated with chemotherapy, you may also go for radiation therapy, as these two types of treatment work well together to treat certain CNS cancers.

**Surgery.** In some cases, you may need to see a neurosurgeon—a surgeon who specializes in brain surgery and similar procedures. A neurosurgeon may try to remove part or all of the tumor, using special surgical techniques and imaging equipment to avoid damaging critical nerves.

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# about gastrointestinal cancer

Gastrointestinal (GI) cancer is the broad name for a group of cancers that affect the organs of your gastrointestinal (GI) tract. Types of gastrointestinal cancer include esophageal cancer, stomach cancer, liver cancer, pancreatic cancer, colon cancer, gallbladder cancer, gastrointestinal stromal tumors, rectal cancer and anal cancer.

At Cancer Care of Western New York, we are committed to providing the latest in radiation treatment technology. We believe that having state-of-the-art equipment makes a real difference in the quality of care we provide to all of our patients.



## Your Gastrointestinal System

Your GI tract is the series of organs that allow you to take in food, convert it to energy, and expel it as waste. These organs include your mouth, esophagus, stomach, pancreas, liver, intestines and rectum.

## Risk Factors

Your risk for getting GI cancer may be higher if you are a smoker, if you drink excessively, or if your diet includes lots of foods high in animal fat and salt. Being overweight, having chronic pancreatitis, and getting older may also increase your risk, as may your family history.

## Signs and Symptoms

Because GI cancer includes many different organs throughout your body, there are many different signs and symptoms. Some of the more common signs include:

- Pain or discomfort in your abdominal area
- Changes in your bowel habits (including shape, consistency and how often you go)
- Blood in your stool, or rectal bleeding
- Diminished appetite
- Vomiting
- Nausea
- Fatigue
- Unintentional weight loss



## Screening and Diagnosis

Colon cancer screening examines your large intestine and rectum for both cancerous and pre-cancerous lesions. We recommend that most adults start getting screened for colon cancer when they turn 50. If you are at higher risk of getting colon cancer, your doctor may recommend you start getting screened even earlier.

Other types of GI cancer can be diagnosed through a variety of tests, including imaging and laboratory tests, biopsies (collecting a tissue sample), or endoscopy (using a scope to see inside your body).



## Treatment Options

GI cancers are treated differently, depending on the exact diagnosis. In general there are three ways to treat cancer—surgery, radiation and chemotherapy.

**Surgery.** A surgeon will attempt to remove the tumor and margin of normal tissue around the tumor. Some of the lymph nodes near the tumor may also be removed as part of the operation.

**Radiation.** Radiation may be used before or after surgery as a part of a comprehensive treatment plan. Radiation is used to sterilize cancer cells within the treatment field.

**Chemotherapy.** Chemotherapy may be used throughout the treatment course. For most GI cancers chemotherapy is delivered along with radiation.

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# about lung cancer

Lung cancer is one of the most common cancers in the world for both men and women. It can occur in one or both of your lungs, and eventually may affect your breathing.

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## Your Lungs

When you breathe, your lungs fill up with air—including oxygen. Your lungs then transfer this oxygen into your bloodstream, where it travels to cells throughout your body. If you have lung cancer, the tumors in your lungs can interfere with this vital process.

## Risk Factors

Approximately 90% of lung cancer cases are related to smoking. However, there are other risk factors, including exposure to secondhand smoke, asbestos, radon, industrial substances and even air pollution.



## Signs and Symptoms

Because lung cancer often takes years and years to develop, you may not experience any symptoms until the disease is in the advanced stages. Some of the symptoms include:

- Intense or persistent coughing
- Shortness of breath
- Changes in your voice or breath sounds
- Bronchitis, pneumonia and other lung issues that keep reoccurring
- Coughing up blood, phlegm or mucus, or a change in the amount (or color) of phlegm or mucus
- Pain in your shoulder, back or chest
- Fatigue
- Headaches
- Unexplained weight loss, or loss of appetite

## Screening and Diagnosis

There are a variety of different tests your physician can use to determine if you have lung cancer. These include everything from a physical examination and chest X-ray, to advanced imaging scans (such as Spiral CT, PET and MRI) to fully evaluate the disease.

If your physician suspects lung cancer you will likely have a biopsy. There are two main ways to biopsy a lung tumor. One method uses a tube down your windpipe and the other method uses CT imaging and a needle through your chest wall. Anesthesia is used during both procedures so there is minimal discomfort.

## Treatment Options

Lung cancer may be treated with surgery, radiation or chemotherapy. Typically it is treated with a combination of the three.

In early stages lung cancer is easily accessible by surgical techniques. Depending on the size and location of the tumor a chest surgeon may remove one lobe of the lung (a lobectomy) or an entire lung (a pneumonectomy). Lung function tests prior to the operation help determine if you will be able to tolerate the operation. The surgeon may also remove lymph nodes in your chest during the operation. The tissues removed during the operation are studied under a microscope by a pathologist. Depending on the pathologic findings you may need radiation and/or chemotherapy after surgery.

In advanced stages of lung cancer surgery typically is not an option. These patients are treated with radiation and chemotherapy. Radiation is typically delivered five days per week Monday through Friday for a total of 5–7 weeks. The radiation visits last approximately 15 minutes. The chemotherapy is usually delivered through an IV. There are different chemotherapy dosing schedules. You may be in the chemotherapy clinic a few times each month.

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# about bladder cancer

Bladder cancer affects men and women differently. For example, more than three times as many men get bladder cancer, compared with women. However, bladder cancer is often more advanced in women by the time it is diagnosed.

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## The Bladder

Your bladder holds the urine produced by your body until you are ready to urinate. It is part of your urinary tract, along with your kidneys (which produce urine), ureters (which transport it to your bladder), and urethra (which takes urine out of your body).

## Risk Factors

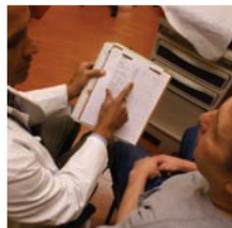
Studies have shown that smokers have twice the risk of getting bladder cancer compared with nonsmokers. Bladder cancer has also been linked to many other risk factors, including exposure to certain chemicals, family history, frequent bladder infections, high-fat diets, birth defects, and even an herb that is used for weight loss.

## Signs and Symptoms

Unfortunately, many people who get bladder cancer do not have any noticeable symptoms until the disease is advanced (and therefore less curable). If you are at high risk for getting bladder cancer, talk with your physician about early screening tests.

The most common signs of bladder cancer include:

- Blood in the urine, also called hematuria (depending on the amount of blood in your urine, you may not be able to see a noticeable difference in color; your physician can use a laboratory test to see if blood is present)
- A burning sensation when you urinate (may also be caused by a urinary tract infection)
- Feeling a strong urge to urinate, but only urinating a small amount
- Urinating more frequently than usual



## Screening and Diagnosis

Bladder cancer may be diagnosed through a biopsy during cystoscopy (in which your physician examines the inside of your bladder through a medical scope). We then use laboratory tests and imaging studies (including imaging the kidneys) to evaluate the extent of the disease.

## Types of Bladder Cancer

There are three different types of bladder cancer—each one is named after one of the types of cells that make up your bladder.

**Urothelial carcinoma**—the most common type of bladder cancer, found in the cells that line the inside of your bladder.

**Squamous cell carcinoma**—this type of cancer often forms due to long-term bladder inflammation or irritation.

**Adenocarcinoma**—found in the cells that make up your glands.

Bladder cancer is also typically classified into either superficial or invasive cancer. Superficial bladder cancer is found in the lining of the bladder, while invasive bladder cancer has spread further.

## Treatment Options

**Superficial Bladder Cancer.** The initial step in treating superficial bladder cancer is surgical removal of the tumor. A cystoscopy places a tube through your urethra so a urologist can visualize your bladder. The tumor is removed through this tube. The procedure is called a TransUrethral Resection of Bladder Tumor (TURBT). Depending on the grade and extent of the tumor your urologist may recommend observation or periodic injections of a medication into your bladder through the urethra.

**Muscle Invasive Bladder Cancer.** There are two ways to treat muscle invasive bladder cancer. One option is surgery and the other option is external beam radiation. If you choose surgery, a urologist will remove your bladder and nearby lymph nodes. The ureters (which connect your kidneys to your bladder) will drain urine into a bag, which will be attached to your abdomen. If you choose external beam radiation a urologist will first remove as much of the tumor as possible using a tube in your urethra—a TURBT. Radiation will be delivered for 15 minutes every day for approximately 7 weeks. Chemotherapy will also be delivered periodically throughout your course of radiation.

As part of your treatment plan, you may have already met some of the specialists at Western New York Urology Associates—a leading group of urologists who can help oversee all aspects of your bladder cancer treatment. This practice group has been around since 1949 and provides care for a wide variety of urological conditions.

**Your physician and the Patient Advocates at Cancer Care of Western New York can answer any additional questions you may have, and help you determine which treatment is right for you.**

# about head and neck cancer

Head and neck cancer is a broad name for any type of cancer that is found in your head or neck region. These areas include your mouth, lips, throat, larynx (voice box), sinuses and nasal cavity.

At Cancer Care of Western New York, we are committed to providing the latest in radiation treatment technology. For example, we have more experience with RapidArc Intensity Modulated Radiation Therapy (IMRT) than any other facility in the area. We believe that having this state-of-the-art equipment makes a real difference in the quality of care we provide to all of our patients.

## Your Head and Neck

These types of cancers can affect your common everyday activities, such as eating, talking and even breathing. At Cancer Care of Western New York, we have experience helping patients and their families adjust to any lifestyle changes resulting from treatment and side effects.

## Types of Head and Neck Cancer

**Laryngeal Cancer**—found in the upper, middle or lower part of your larynx, near your vocal cords.

**Lip and Oral Cavity Cancer**—these types of cancer can affect the inside of your mouth, cheeks, gums, and parts of your tongue.

**Oropharyngeal Cancer**—occurs in your tonsils, on the side and back of your throat, and the back of your tongue.

## Risk Factors

Tobacco and excessive alcohol use can put you at risk for all types of these cancers. Additional risk factors include exposure to sunlight, being infected with HPV (human papillomavirus), being male, not eating enough fruits and vegetables, and chewing or drinking certain stimulants.

## Signs and Symptoms

A sore throat and changes in your voice are two symptoms associated with head and neck cancer. Other sores and lumps—especially ones that do not go away—may also be signs. Additional symptoms include:

### **Laryngeal Cancer**

- Ear pain
- Problems with swallowing

### **Lip and Oral Cavity Cancer**

- Problems with chewing or swallowing
- Red or white patches in your mouth and surrounding areas, or thickening of your mouth, gums or lips
- Pain, numbness, bleeding or swelling
- Loose teeth or dentures
- Previous lip or oral cavity cancer





## Oropharyngeal cancer

- Problems swallowing
- Pain in your ear or behind your breastbone
- Unexplained weight loss
- Coughing

## Screening and Diagnosis

Your physician may start with a physical exam, during which he or she will examine your head and neck for any signs of cancer. Following a physical exam, your doctor may send you for some tests, including an X-ray, an MRI, a CT scan, or a PET scan, all of which can help pinpoint any areas of concern.

Some types of head and neck cancer can also be diagnosed through a variety of additional tests, including biopsies, which involve collecting a tissue sample. Your physician may then perform an endoscopy (using a scope to see inside your body), and a barium swallow (X-rays taken after you swallow a special liquid to further evaluate your condition.).

## Treatment Options

Head and neck cancer is treated differently depending on the site involved and the extent of the disease.

**Surgery.** Surgery may be part of the management of your head and neck cancer. The surgeon will evaluate the extent of disease through imaging studies and a thorough physical examination. The surgery involves removal of the tumor and may involve removal of part or the entire site of disease. For example, patients with larynx cancer (voice box) may have part or all of their larynx removed. Head and neck cancers have a tendency to spread to the lymph nodes on either side of your neck. The surgeon may do a neck dissection, which removes these lymph nodes.

**Radiation.** Radiation is part of a curative approach for several head and neck cancers. It may be used alone or in combination with chemotherapy. Sometimes radiation is used before or after surgery. The head and neck region is a complex area involving several organs. Your radiation may involve sophisticated IMRT techniques to spare these normal structures from unnecessary radiation exposure. We highly recommend that you quit smoking before you start radiation therapy, as radiation for head and neck cancers has been shown to be more effective in patients who do not smoke.

**Chemotherapy.** Chemotherapy may be used along with radiation. A medical oncologist will help evaluate if you are an appropriate candidate for chemotherapy. If you are a candidate, the chemotherapy may be given through the veins or in pill form.

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