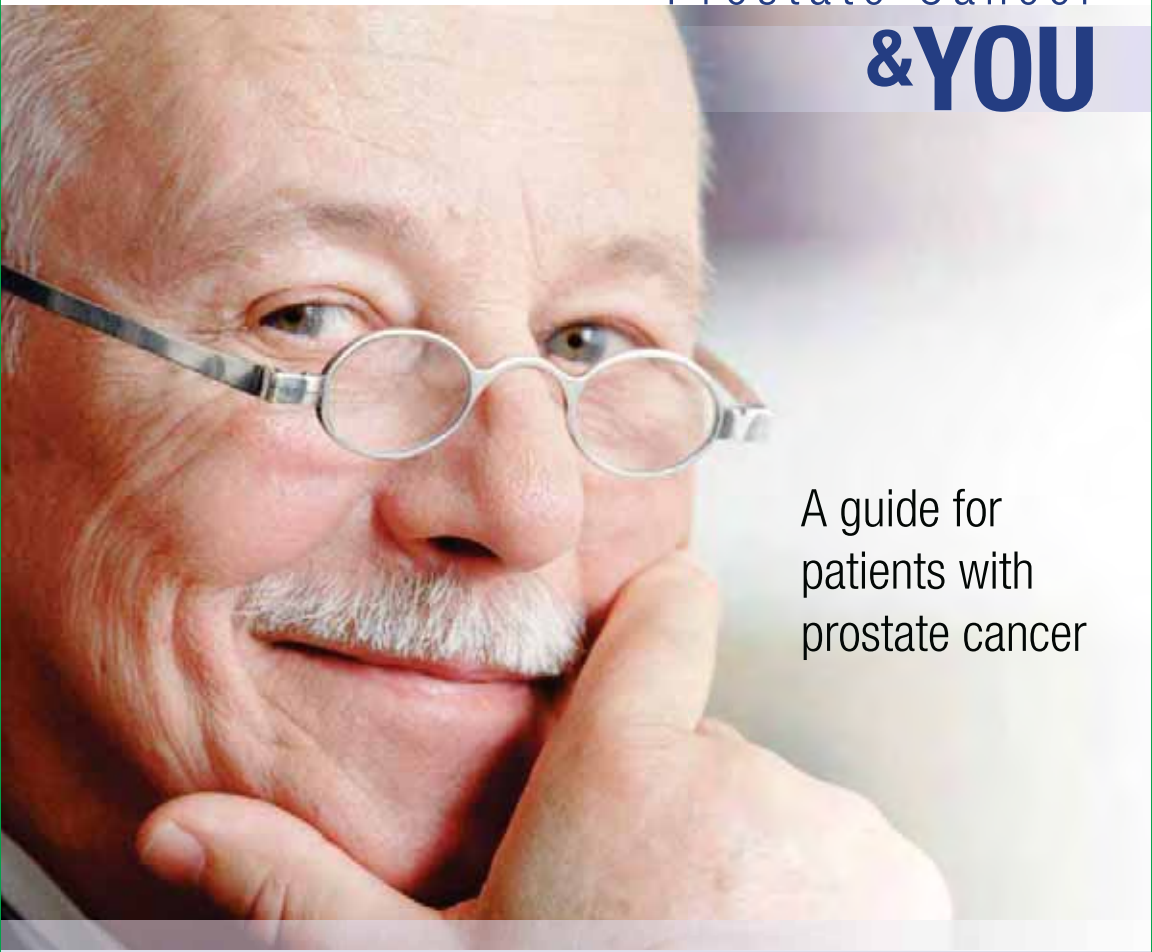
Prostate Cancer &YOU



A guide for patients with prostate cancer

Reviewed and endorsed by the Canadian Urological Association, 2010.

AMGEN® Oncology

Introduction

From the range of emotions you felt when you received your diagnosis, to the new medical terms you suddenly had to absorb, finding out you have prostate cancer may have been overwhelming.

Prostate Cancer & You was designed to help.

The aim of this book is to give you an understanding of what to expect in the treatment of prostate cancer, and how to manage its effect on your everyday life. But in order to understand what to *expect,* you first have to understand the various symptoms, tests and treatments involved. This book provides the information you need in a simple and straightforward way, without using complicated jargon or overloading you with details.

Being informed about the various tests and treatments for prostate cancer will help give you a sense of control over your condition, and empower you to play an active role in treatment decisions. ***Prostate Cancer & You*** includes practical information and tips to help you be as prepared as you can. At the back, you'll find a list of additional resources. Be sure to talk to your healthcare team about any questions or concerns you have along the way.

NOTE: The highlighted words are defined in the glossary at the back of this book.

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Table of Contents

Understanding prostate cancer

Learning more about the prostate and its functions can help you understand the symptoms you may have been experiencing. This section will give you a general overview of the prostate, and the nature of prostate cancer.

Prostate cancer: Fast facts

Prostate cancer is the most common cancer affecting Canadian men.

1 in 6 men will be diagnosed with prostate cancer during his lifetime.

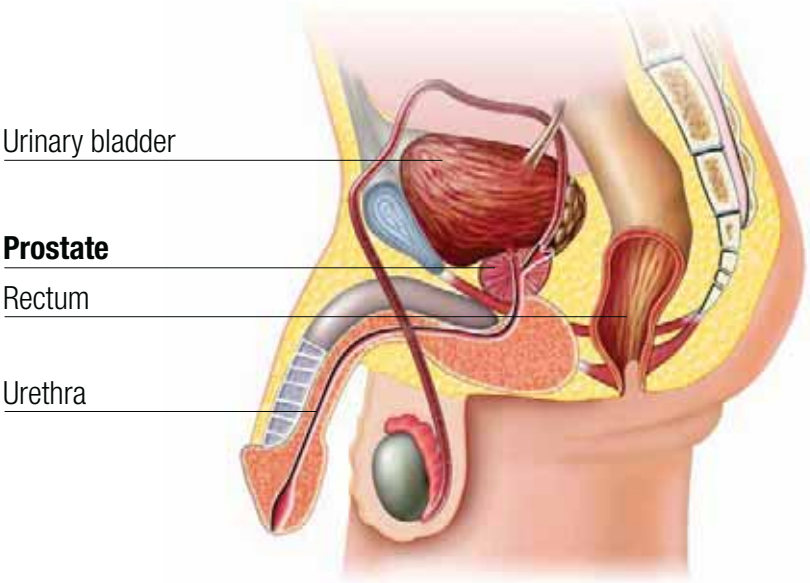
Men at greater risk for the disease include those with a family history of prostate cancer, and those of African or Caribbean descent.

Due to the aging of the population, the incidence of prostate cancer is on the rise.

Over 90% of prostate cancer cases are curable if they are caught and treated in their earliest stages.

What is the prostate, and what does it do?

First, a little anatomy review. The prostate is a walnut-sized gland located at the base of the bladder, in front of the rectum. It surrounds the urethra, the tube that passes from the bladder to the penis that carries urine and semen. A healthy prostate feels soft and spongy to the touch, like a small, ripe plum.



Gland cells and muscle fibres inside the prostate perform two main functions.

The functions of the prostate are:

1) Making the fluid in semen
The prostate gland is important in fertility, because it creates part of the fluid in semen that nourishes and protects sperm. It also makes a protein called PSA (Prostate-Specific Antigen) that helps semen stay in liquid form after ejaculation. PSA can be found in semen and blood, and may be useful in detecting prostate conditions.

2) Controlling urine flow and ejaculation
The muscle fibres of the prostate are wrapped around the urethra to help keep urine in the bladder. When you urinate, the muscle fibres relax, enabling an uninterrupted stream. To slow and stop the flow of urine, they shorten, or contract. During orgasm, these fibres also contract to help propel semen out.

What is prostate cancer?

Simply put, prostate cancer is a disease in which some of the prostate's cells become cancerous. What does this mean?

Cancerous cells share three characteristics:

1) They grow uncontrollably.
The abnormal genes inside cancerous cells cause them to develop, grow and multiply in an uncontrolled way.
A tumour is a group of abnormal cells that grows uncontrollably. However, it's important to note that not every tumour is cancerous. Tumours that stay in one place in the body are benign, or non-cancerous. Tumours that invade other tissues and spread to other parts of the body are cancerous (see #3).

2) They have an abnormal structure.
The abnormal genes inside cancerous cells change the cells' structure. That means, prostate cancer cells (especially fast-growing ones) start to look less and less like normal prostate cells as time goes on. Your doctor may describe them as "poorly differentiated" or "high grade". As this happens, the cells become less able to perform their normal functions.

3) They can spread to other parts of the body.
The abnormal genes inside cancerous cells change the cells' location. That means, it's possible for the cells to metastasize, or spread to other parts of the body. Cancerous cells can do this by:

- Growing into nearby tissues and organs
- Travelling to parts of the body that are further away through the bloodstream or lymphatic system

The most common place for prostate cancer to spread is the bones. It can also spread to the lymph nodes or other areas.

What does this mean for me?

Fortunately, prostate tumours usually grow slowly. It often takes years for them to grow large enough to be detectable, and even longer for them to spread outside of the prostate. If the cancer is caught before it spreads, it can actually be cured with certain treatments or managed with careful monitoring.

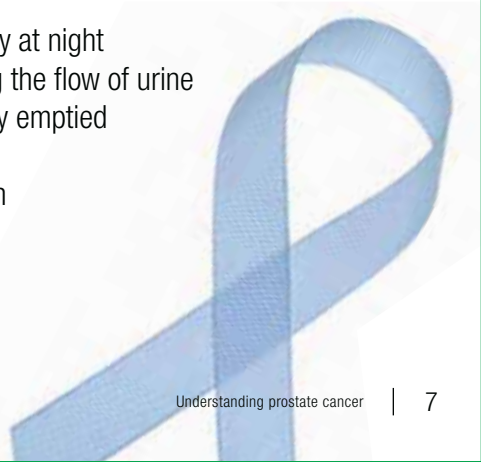
However, in a small number of cases, the prostate cancer is aggressive and can spread quickly. This is hard to predict when you get your diagnosis and can make treatment decisions challenging. ***Prostate Cancer & You*** was designed to help you understand the options available.

Symptoms of prostate cancer

The truth is, prostate cancer **does not usually cause any symptoms** in its early stages. Your doctor may have spotted a sign of a possible problem during a check-up, or by looking at your blood test results (see the next section for details). At this early stage, the cancer is at its most treatable.
If the tumour grows and starts to press on the urethra, it may cause certain symptoms. However, these same symptoms can be caused by non-cancerous prostate conditions (including a benign enlarged prostate, called BPH).

Possible signs and symptoms of prostate cancer include:

- Changes in your bladder habits
  - Needing to urinate often, especially at night
  - Having trouble starting or stopping the flow of urine
  - Feeling like you haven't completely emptied your bladder
  - Having pain or a burning sensation when urinating
  - Being unable to urinate



- Having pain when you reach orgasm
- Seeing blood in your urine or semen

As prostate tumours grow bigger or spread to different areas, you may notice other symptoms.

Late signs and symptoms include:

- Bone pain – especially in the back, pelvis, hips, thighs or neck. You may notice a tender area or have persistent pain.
- Swelling of the scrotum, penis, legs and feet
- Weight loss
- Fatigue

Note:

Since a number of other conditions share these symptoms, various tests are needed to diagnose prostate cancer. To learn more, please see the next section ("How your diagnosis was made") and talk to your doctor for more information.

How your diagnosis was made

When you were first diagnosed, you might not have asked many questions about the tests you had or even known what to ask. This section will briefly describe the tests doctors use to make a prostate cancer diagnosis, and the roles of the members of your healthcare team.

Rectal exam

A rectal exam is a 15-second test where the doctor feels the prostate by placing a gloved finger into the rectum. While a normal prostate feels smooth and rubbery, prostate cancer can feel like a hard lump of plastic or wood. It can also make the prostate feel unevenly-shaped. Rectal exams can be important in detecting prostate cancer because for some men, blood tests may not pick up on the problem.

Did you know?

Most prostate cancers occur in the back of the prostate, which is the area that can be easily felt by a doctor during a rectal exam.

PSA test

PSA (Prostate-Specific Antigen) is a protein made by the prostate. Most PSA is found in semen, but some can be found in blood. A PSA test is simply a blood test that checks your PSA level.

PSA tests may be used for two reasons:

1) To help detect prostate cancer

High PSA levels provide a **clue** that a man *might* have prostate cancer, but it doesn't say for sure. That's because high levels can be caused by cancer **and** non-cancer conditions, like an enlarged prostate. It's not a perfect test, but it can alert the doctor to a possible problem early on that may need further testing or treatment.

2) To find out if your cancer treatment is working, or if the cancer has come back

After you've been treated, your doctor may continue to monitor your PSA levels over time.

Tip:

Make sure to tell your doctor about all the medications you take, as some can decrease your PSA levels.

Transrectal ultrasound (TRUS)

During a TRUS, a probe is placed into the rectum to take an ultrasound of the prostate. This gives doctors a picture, which can help them see how big the prostate is and whether there are any abnormal areas. A TRUS usually takes about 15-20 minutes.

To confirm that the abnormal areas are cancerous, a sample of cells (called a biopsy) is taken during a TRUS.

Importantly, a TRUS is used to:

- Guide biopsy needles to the prostate
- Help deliver certain prostate cancer treatments

Biopsy

A biopsy is a test in which a thin needle is used to take small samples of cells from the prostate. The cells are then sent to a lab to check for cancer. Usually, between 6 and 12 samples are taken from different areas of the prostate.

For the biopsy:

- **You'll have to set aside a morning or afternoon,** although the test only takes about 20-30 minutes. You'll need to stay for a while afterwards so the doctor can monitor you.
- **The area is usually frozen** using a local anaesthetic. You may feel the same brief discomfort you'd feel while getting an injection.
- **You will be prescribed antibiotics** to take before and after the biopsy to reduce the risk of infection.

Afterwards:

- **Most men can go back to their usual activities on the same day,** but your body will tell you when you're ready. Ask your doctor about when you can resume sexual activity.
- **You can take acetaminophen** if the area feels a bit sore. Be sure to follow the directions on the label. Ask your healthcare team for more information about medications you can take, and the ones you should avoid.
- **You may have minor bleeding from the rectum** for a day or so. Very rarely, this bleeding can be severe – let your doctor know right away if this happens.
- **You may notice some blood in your urine or sperm;** about half of men do. This usually stops within a week, but may last up to six weeks.
- **Watch for signs of infection**. After a biopsy, about one in 50 men develops an infection. While most are minor and treatable with antibiotics, some can be worrisome. If you notice any signs of infection such as fever, chills, or symptoms of a urinary tract infection (e.g. painful urination) shortly after your biopsy, call your doctor immediately or go to your local emergency ward.

Other tests

Your doctor may do other tests to see if the cancer has spread to other parts of your body. These tests may include:

- **A bone scan** – Since the most common place for prostate cancer to spread is your bones, you may have a bone scan. Before the scan, you'll be injected with a substance that can show possible cancer spots on your bones.
- **A CT scan or MRI** – These tests use special machines to make pictures of the areas around your prostate, to see if the cancer has spread to your lymph nodes or other parts of your body.

Your healthcare team

There will likely be a number of different doctors and other professionals involved in your care. Some perform the tests described in this section, while others help treat prostate cancer in different ways. Together, they form your healthcare team. This group will share information, coordinate your tests and treatment, and monitor you over time.

Along with your family doctor, the following are some of the healthcare providers you may see:

A urologist – a surgeon specializing in treating problems in the urinary or male sex organs. Urologists can perform prostate cancer surgeries.

An oncologist – a specialist who treats cancer. There are different types of oncologists, and each is trained in a different treatment method. For example:

Medical oncologists use various drugs (e.g. chemotherapy medications) to treat cancer.

Radiation oncologists specialize in treating cancer using radiation therapy.

A radiologist – a specialist trained to interpret X-rays and other scans, who may also perform biopsies.

An oncology pharmacist – a pharmacist who prepares cancer medications, and can help teach you about them.

An oncology nurse – a nurse who has special training in caring for people with cancer. Oncology nurses may work in various treatment settings and can give you valuable information and support.

The truth is, *you* are a very important member of your healthcare team, too. After all, you know your situation best. Once your doctors inform you about your options, you'll be able to play an active role in making decisions about your treatment. You can also give your team valuable feedback on what's working for you, and what you're experiencing.

Tip:

Choose one member of your team to be your "healthcare leader" who will help answer any questions or concerns you may have along the way. Urologists fulfill this role for many men with prostate cancer.

Understanding your cancer's grade and stage

Your test results will give your doctor a good idea of the cancer's future outcome, and the best way to treat it. Your doctor will give the cancer a particular grade and stage in order to come up with a plan of action.

What does the grade mean?

The grade describes how abnormal the cancer cells look.

- **Low-grade** prostate cancer cells look a lot like normal cells.
- **Intermediate-grade** cancer cells still resemble prostate cells, but look disorganized and irregular.
- **High-grade** cancer cells are barely recognizable as prostate cells.

Your grade can be very important in making treatment decisions because we now know that high-grade cancers are more likely to grow quickly and spread than low-grade cancers.

The Gleason score

In 1966, a doctor named Donald Gleason invented a now commonly-used grading scale from 1 to 5. Grade 1 cancers are closest to normal cells, while Grade 5 cancers are very unusual-looking. The most common grade found in prostate tumour samples is Grade 3.
To get your Gleason score, your doctor will take the two most common grades found in your biopsy, and add them up. This score can help predict how the cancer will grow.

Here's how it works:

Grade	Gleason score	What it usually means
Low	2-6	Slow-growing
Intermediate	7	Growing at a medium speed
High	8-10	Fast-growing

Remember, the members of your healthcare team are your best source of information about your prostate cancer outcome, because only they know your personal medical history and current situation.

What does the stage mean?

The stage of your cancer describes how big the tumour is and whether it has spread to your lymph nodes or beyond. Along with your grade, your stage will be very important in deciding on your best treatment options.

The most common system for staging your cancer is the **TNM system.**

T stands for Tumour. This rating describes how big the tumour is, how much of the prostate it takes up, and how far beyond the prostate it has spread.

- You'll get a number from T1 (the tumour can't be felt or seen on an ultrasound) to T4 (the tumour has attached itself to other nearby areas, such as your rectum or bladder).

N stands for Nodes. This rating describes whether the cancer has spread to any lymph nodes in the area.

- Your number will be an N0 (not in the nodes) or N1 (in the nodes).

M stands for metastasis. This rating describes whether the cancer has metastasized (spread) to far away areas such as your bones.

- You'll get a number from M0 (the cancer hasn't spread beyond the lymph nodes) to M1b or M1c (the cancer has spread to the bone or other areas).

You may also hear your prostate cancer described as **Stage 1, 2, 3** or **4**. These "overall" stages are a combination of your T, N and M numbers. Stage 1 cancers are the least advanced, while Stage 4 refers to cancer that has spread to other organs.

Predictions about your cancer's future outcome are largely based on three factors:

- The stage of your tumour
- Your Gleason score
- Your PSA level when you're diagnosed

Treatments for prostate cancer

There are many treatments for prostate cancer, and new ones are being investigated all the time. The treatment that's right for you will depend on various factors, including the stage and grade of your cancer, your age and overall health, potential side effects, and others. Your urologist will go over all your options with you, and you'll decide on a plan of action together. Learning more about what's involved in each treatment can help you develop a partnership with your healthcare team, and play an active role in making decisions.

Be sure to talk to your doctor about any treatment concerns you may have. The list of questions at the back of this section can help.

Active surveillance ("Watchful waiting")

The truth is, not all prostate cancers need to be treated as soon as they're diagnosed. This strategy involves careful monitoring of your cancer to make sure it hasn't spread. While this approach may sound surprising, it makes sense for many men, including those with low-grade, slow-growing cancers.

Active surveillance can allow you to avoid the potential side effects of other treatments (such as erectile dysfunction or loss of bladder control) until those treatments are necessary.

What to expect:

- **Regular tests** – You'll have PSA tests and rectal exams every 3 to 6 months to monitor your cancer. You may also have regular transrectal ultrasounds, biopsies, X-rays and bone scans (see "How your diagnosis was made" for details).
- **Treatment if necessary** – You'll start treatment (such as surgery or radiation) if the cancer appears to be progressing, or if your PSA level and Gleason score rise consistently over time.

What you may experience:

- It's natural to feel anxious about the rare chance that the cancer could grow or spread faster than expected. Talk to your doctor about any concerns you may have.

Surgery

If your cancer is only in the prostate and hasn't spread, having surgery to remove the prostate can be one of your best chances for a cure. This common option is usually offered to men who:

- Are under age 70 and in good health
- Have stage T1 or T2 cancer, or a small T3 cancer tumour

What to expect:

The surgery

- **A 2- to 5-day hospital stay** – You'll be admitted to the hospital on the day of the surgery or the day before.
- **Surgery prep** – You may be given a laxative or enema before the surgery. You'll then be given a general or spinal anaesthetic so you won't feel a thing. A catheter will be inserted through your penis to drain urine from your bladder.

- **A 2- to 4-hour surgery** – The surgery can be performed in a number of ways, including open surgery, laparoscopic surgery, and robotic-assisted laparoscopic surgery. Talk to your doctor about the types of surgeries available in your area.
    - In open surgery, the surgeon makes an incision under your navel and removes the prostate and surrounding tissues.
    - In laparoscopic surgery, several small incisions are made in your abdomen. A scope is inserted to give the surgeons a picture of the area around the prostate, and tiny surgical instruments are used to perform the surgery.
    - Robotic-assisted laparoscopic surgery is similar to laparoscopic surgery, but the surgeon guides robotic arms which perform the operation using micro-movements.

NOTE: Special techniques used during the surgery can help spare the nerves involved in maintaining erections, if the cancer's not too close to them.

During the surgery, some lymph nodes around the prostate may also be removed to see if the cancer has spread.

Afterwards

- **Pain in your incision or bladder** right after surgery – This can be managed well with pain medication.
- **4 to 6 weeks' recovery time at home** – You'll have the catheter for 1 to 3 weeks while the area heals, and should avoid heavy lifting or vigorous exercise until you recover.
- **Loss of fertility** – After the surgery, your orgasms won't release fluid or sperm. That means, you won't be able to father a child through sexual intercourse. If there's a chance that you may want to have children after your surgery, there are clinics that can preserve your sperm before the operation.

What you may experience:

- **Loss of bladder control** – For most men, this common problem is completely resolved within 3 to 6 months. To be prepared, wear absorbent pads and do Kegel exercises to strengthen your pelvic muscles before surgery and after your catheter is removed.
- About 10% of men will continue to leak urine when they sneeze, cough or exert themselves. Even fewer will not regain bladder control and may need another operation to implant a device that can help.
- **Erectile dysfunction (ED)** – Right after surgery, you will be unable to have an erection, because the nerves need time to heal. Depending on how many of the nerves were spared, this will usually improve within 6 months to a year, but may take 2-3 years. Talk to your doctor if ED is a concern.
- **Narrowing of the urethra** – About 10% of men experience this problem, which can make urinating difficult. Fortunately, minor surgery can usually correct it.
- **Severe bleeding or infection** – These complications are rare but possible.

Tip:

Follow your doctor's advice about diet and exercise after your surgery, as well as how to care for your incision.

External beam radiation

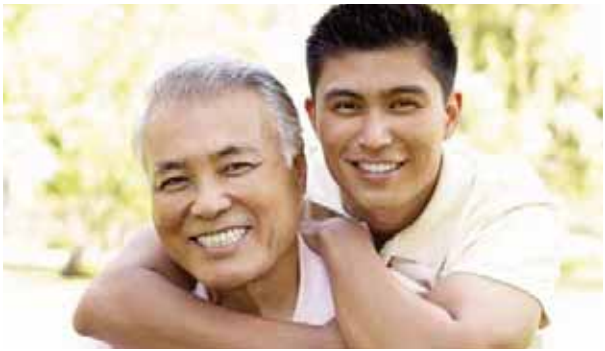
In this treatment, high-energy X-ray beams are directed at your prostate tumours to destroy them. While the radiation only targets the cancer cells, some healthy cells around the prostate may be affected as well.

If your cancer hasn't spread beyond the prostate, this treatment may offer a cure. It can also be used:

- In younger men with low or medium-grade cancer who aren't candidates for surgery due to other health problems.
- With other treatments such as surgery, hormone therapy or chemotherapy. For instance, some men may have radiation treatment before or after having surgery, while others will receive hormone therapy during and after radiation.
- In men with more advanced cases, as a way to help control the cancer.

What to expect:

- **Quick appointments, 5 days a week for 7-8 weeks** – External beam radiation is given in short bursts so that normal cells have a chance to recover. You'll have the appointments at a radiation clinic. Each session is painless and only takes about 10-30 minutes in total.
- **Regular meetings with your radiation oncologist** during your treatment – He/she will check your progress and ask about any side effects you may be experiencing.
- **Follow-up visits with your doctor** – These are very important as the benefits of radiation happen gradually, over the months following your treatments. You'll need to see your doctor 2 or 3 times for the first year, and once or twice a year after that.



What you may experience:

- **Erectile dysfunction (ED)** – This usually develops gradually, up to a year or two after your treatment ends. Overall, 25-50% of men will have ED after radiation; however, it can improve with time. There are a number of commonly-used treatment options available; ask your doctor for more information. As stress can play a role as well, be open with your partner about what you're going through.
- **Loss of fertility** – Radiation "dries out" the prostate, so your orgasms will not release fluid or sperm. Most men lose the ability to father a child through sexual intercourse. If you're planning to have children in the future, there are clinics that can preserve your sperm before you start radiation.
- **Short-term fatigue and skin reactions** – These may develop a few weeks into your treatment, and disappear a few weeks after treatment ends. If you feel fatigued, try to conserve your energy by delegating what you can and making tasks easier (e.g. sitting down to prepare food). To manage red, dry or itchy skin, do not scrub or scratch the area and ask your doctor about lotions you can use.

- **Urination problems or rectal pain and/or bleeding** – There is a 10-15% chance that these may occur after radiation. Urinary problems can include experiencing a burning sensation while urinating, or needing to urinate more often. These issues usually go away a month or two after radiation ends, and there are treatments that can help in the meantime.
- **Loss of bladder control or urgent (sometimes loose) bowel movements** – These are rare long-term side effects that could occur 6 months after radiation or even later. They may be caused by a build-up of scar tissue which can be treated. Ask your doctor for more information.

Tip:

Don't hesitate to talk to your urologist about ED (erectile dysfunction) – it's a common problem that can be treated. Urologists discuss it all the time, so there's no need to feel embarrassed.

Brachytherapy

"Brachytherapy" comes from the Greek word "brachys", which means "short" or "short-distance". Whereas external beam radiation destroys cancer cells from the *outside*, brachytherapy puts tiny radioactive seeds into or near the tumour to destroy the cancer from the *inside*.

This treatment may be available to men who have early-stage prostate cancer with small prostates. Some men with larger prostates may receive hormone therapy first to shrink the prostate, then have brachytherapy.

What to expect:

- **A 1- or 2-day hospital stay** – Usually, brachytherapy uses thin needles or catheters to implant permanent seeds which destroy cancer cells slowly, over several weeks or months. The radiation is eventually used up. In some cases, temporary implants are put in for a few minutes at a time and removed.
- **The procedure takes an hour or two.** You won't feel it because you'll be given general or spinal anaesthetic.
- **Most men return to their normal activities in 1-2 days.** You'll probably have some follow-up tests a month after the procedure.

What you may experience:

- **Erectile dysfunction (ED)** – This usually develops gradually, up to a year or two after your treatment ends. Overall, 25-50% of men will have ED after radiation; however, it can improve with time. There are a number of commonly-used treatment options available; ask your doctor for more information. As stress can play a role as well, be open with your partner about what you're going through.
- **Loss of fertility** – Radiation "dries out" the prostate, so your orgasms will not release fluid or sperm. Most men lose the ability to father a child through sexual intercourse. If you're planning to have children in the future, there are clinics that can preserve your sperm before you start radiation.
- **Urination problems or rectal pain and/or bleeding** – There is a 10-15% chance that these may occur after radiation. Urinary problems can include experiencing a burning sensation while urinating, or needing to urinate more often. These issues usually go away a month or two after radiation ends, and there are treatments that can help in the meantime.
- **Loss of bladder control and bowel problems** – These are rare long-term side effects that could occur 6 months after radiation or even later. They may be caused by a build-up of scar tissue, which can be treated. Ask your doctor for more information.

Hormone therapy

Hormones called androgens (which include testosterone) help prostate cancer cells grow. Hormone therapy works by preventing your body from making these hormones, to keep the cancer from growing and spreading. Unlike the previous treatments you've read about, hormone therapy treats the *whole body* rather than just the prostate. For this reason, it's used most often in:

- Men whose cancer has spread outside the prostate (N1 or M1 cancer)
- Men whose cancer has returned after another treatment (e.g. radiation or surgery) or who are at high risk of having the cancer return after these treatments
- Elderly men who are not suitable candidates for surgery or radiation.

The different types of hormone therapy are:

1) Surgery to remove the testicles, which produce most of the testosterone in your body (artificial implants can be inserted during the surgery to maintain their appearance)
2) Medications that cause the testicles to stop making testosterone
3) Medications that reduce the amount of testosterone that the prostate cancer can use to grow

While these therapies can help relieve your symptoms, they are not a cure. However, because they work on the whole body, they can help slow the growth of prostate cancer cells no matter where the cells have spread.

What to expect:

- **Treatment may be provided in various ways** – Some involve taking oral medication, while others involve surgical procedures. Ask your doctor for more information on the options available to you.

What you may experience:

- **Sweating, hot flushes and swelling/tenderness** of the breasts – These can happen right after treatment or a few weeks later, and can be managed.

- **Loss of sex drive and erections** – There are a number of potential treatments; talk through them with your doctor and partner.
- **Lack of energy or mood swings** – While these are common, most men see their energy level and mood improve in the months after hormone therapy ends.
- **Loss of bone density** (osteopenia or osteoporosis) – This can make bone fractures more likely. In fact, painful bone fractures in your hip, spine or wrist can sometimes be the first sign of low bone density. Talk to your doctor about available treatments and the benefits of taking calcium and vitamin D supplements. Weight-bearing exercise and eating well can also help.
- **A temporary worsening of symptoms** such as bone pain or urination problems. Your doctor can prescribe other medications to help reduce your symptoms.
- **Anemia** – This is the medical term for a low red blood cell count. Anemia can cause fatigue, dizziness or shortness of breath. There are treatments available that can help; ask your doctor for more information.

Make sure to tell your doctor promptly about any side effects you experience. In general, many of them can be managed.

Chemotherapy

Chemotherapy uses medication to destroy cancer cells, or help prevent them from growing. Healthy cells may also be affected, but they can repair themselves.

Because chemotherapy generally targets fast-growing cancer cells, it's not recommended for men with early-stage prostate cancer who have slow-growing tumours. In the case of prostate cancer, chemotherapy is most often used to treat men whose cancer has returned, or has spread to another area of the body after hormone therapy.

In men with prostate cancer, chemotherapy may help:

- Slow the spread of the prostate cancer
- Prolong life
- Relieve the pain that may occur in later stages

What to expect:

- **Regular blood tests before chemotherapy** to check for low blood counts – This is because chemotherapy can lower your white blood cell, red blood cell, and/or platelet count.
- **Medication given by intravenous (IV) infusion or pills** – New therapies are being researched every day. Talk to your doctor about the treatments available.
- **Different doses and schedules depending on the treatment** – Work with your healthcare team to create a plan just for you.

If you're starting chemotherapy, visit **www.chemoready.ca** for helpful information on how you can prepare.

What you may experience:

- **An increased risk of infection** – You'll be asked to check your temperature regularly and tell your doctor about any sores you notice that don't heal.
- **Being more likely to bleed and bruise**
- **Fatigue and anemia** – If you feel fatigued, take care of yourself emotionally and physically. Limit visitors or the length of visits, and take rests throughout the day. Try to conserve your energy by delegating what you can and making tasks easier (e.g. sitting down to prepare food).
- **Thinning or loss of hair**
- **Nausea, vomiting or cramps** – There are medications that can help many men prevent this.
- **Food tasting "different"**
- **Mouth sores** – Special mouthwashes can help minimize them.

Many of these side effects may disappear when chemotherapy ends.

Bone-targeted therapy

As mentioned earlier, the most common place for prostate cancer to spread is the bones. In particular, prostate cancer cells may spread to the spine, pelvis, ribs, arm and/or thigh bones. These occurrences are known as bone metastases.

Prostate cancer that has spread to the bones can:

- **Make your bones more prone to fractures** – Ask your doctor about medications that can help keep your bones strong, and reduce the risk of fractures and pain.
- **Cause significant pain** – There are a number of options that can help manage breakthrough pain, and prevent pain in the future. Don't hesitate to ask your healthcare team for help.

There are a number of bone-targeted therapies used to slow the growth of cancer in the bones, and help keep it from spreading further. These include:

For more information on bone-targeted therapies, talk to your healthcare team.

- **Radiation therapy** – In this treatment, high-energy X-ray beams are directed at the tumours in your bones. The radiation may be focused on a few small areas, or throughout your body. Overall, the radiation used is less intense than radiation used to treat a tumour inside the prostate. While this treatment hasn't been shown to prolong life, most men find that it does help to relieve their pain.
- **Radioactive medications** – These medications are given by IV and help relieve pain. They are known to be good at targeting cancer cells throughout your bones.
- **Systemic bone-targeted therapies** – *Systemic* means "affecting the whole body". These medications can help reduce or delay the complications of cancer that has spread to the bones, such as fractures and severe pain.

New developments in treatment

Many new treatments for prostate cancer are studied every year. Your doctor may tell you about some of the clinical trials that are currently underway to investigate these new treatments. Depending on your age, general health, cancer stage and other factors, you may be a candidate for one of them. Make sure to talk over all your options with the members of your healthcare team; after all, they are the best sources of information about the treatments that may be right for you.

Some new developments in the treatment of prostate cancer include:

- **Cryotherapy (cryosurgery)** – In this treatment, thin needles are inserted into the prostate to destroy cancer cells using extremely cold gases. Men who have this treatment may experience similar side effects to those who have surgery to remove the prostate (including erectile dysfunction and loss of bladder control).
- **HIFU (High-Intensity Focused Ultrasound) therapy** – This treatment does the opposite of cryotherapy; it delivers high-intensity ultrasound waves to destroy prostate cancer cells using intense heat.
- **Gene therapy** aims at changing the genes within cancer cells so they can be destroyed more easily by other treatments or your own immune system.
- **Trans-perineal microwave therapy** – Microwave energy is used to destroy prostate cancer cells.

Discuss all your options with the members of your healthcare team, as they are the best sources of information about treatments that may be right for you.

Complementary therapies

There are some therapies focused on increasing your general health that can *complement* the ones we've already discussed. Different complementary therapies can be used in different situations. For instance, they can be used by:

- Men taking hormone therapies who want to reduce their risk of heart disease, diabetes and bone loss
- Men taking chemotherapy who want to reduce pain or nausea
- Men who need help to reduce their side effects (e.g. loss of bladder control) after having surgery or radiation

As an example, **relaxation techniques** such as massage therapy, acupuncture, meditation, and even laughter can be very beneficial. They can boost your immune system, reduce pain and stress hormones, and lower blood pressure.

Remember to discuss any therapies you use with your doctor, to make sure they won't affect any other treatments you're taking.

Nutrition

Making certain changes to what you eat may help you improve your overall health, including eating a low-fat, high-fibre diet.

For instance, researchers are studying a link between prostate health and heart health. Choose low-fat dairy products, whole grains, nuts, beans and fish, and lower-fat meats such as turkey and chicken. Avoid red meat, hot dogs and baloney.

Exercise

As discussed in the “Hormone therapy” section, men taking this type of treatment can experience a loss of bone density, which can make bone fractures more likely.

Fortunately, getting regular exercise through walking, jogging or lifting weights can help strengthen your bones and prevent fractures.

Questions to ask your healthcare team

The following list of questions can help you get the information you need most about the treatments available to you. Feel free to bring this list to your next doctor’s appointment. You can also write down some of your own questions in the space provided.

Questions:

1) Considering my particular type of cancer, age and lifestyle, what treatment options are available to me? Which one do you recommend?

2) Can you please explain what's involved in that treatment?

3) What's the goal of the treatment (e.g. cure, prolong life, reduce pain)?

4) What are the risks?

5) What are the chances that the treatment will be successful? When and how will you know?

6) Where and when will I have the treatment? How long will it take?

7) What can I do to prepare for it?

8) What's the recovery like? How can I make plans to get help at home if I need it?

9) Will the treatment affect my urination, sex life or emotions? What can I do to manage these effects?

10) What will my quality of life be like after the treatment?

Additional questions:

Contact information and medication list

Use this section to keep track of the phone numbers of your healthcare team (doctors, nurse and/or pharmacist). You can also note any medications you are currently taking.

Name _____ Phone Number _____

Address _____

Name _____ Phone Number _____

Address _____

Name _____ Phone Number _____

Address _____

Name

Phone Number

Address

Name

Phone Number

Address

Name

Phone Number

Address

Name

Phone Number

Address

Medication list:

Name	Dose	How often?

With/without food?	Additional details

Living with prostate cancer: Helpful tips

This section outlines a few quick tips to help you manage the impact of prostate cancer on your everyday life.

Your medical appointments:

- **Bring someone along** – Especially early on, having someone with you at your doctor's appointments can help you remember the questions you wanted to ask or the information you're given.
- **Carry a pen and paper** – Writing down the answers to questions will help you remember them later. Your notes can also be helpful when another healthcare professional gets involved.

- **Designate a healthcare "leader"** – Over the course of your treatment, you may see many specialists. It can be helpful to choose one healthcare professional on your team who can answer any questions or concerns you may have.
- **Take an active role in your treatment decisions** – Certainly, your healthcare team will give you all the details you need as well as perspective on the big picture. At the same time, you know yourself and your situation better than anyone else.
- **Keep your appointment times and test results in one handy place,** along with your doctors' phone numbers – This will help you keep track of your treatment and progress.

Your relationship:

- **Keep the lines of communication open** – Talk to your partner about the challenges you may face such as erectile dysfunction or a decreased sex drive, and be honest about how you're feeling. You may be surprised to learn that many men feel their relationships with their partners are made stronger by going through the experience together.
- **Get some expert advice** – Seeing a counselor with your partner can often be a good "check-up" for your relationship.

Your emotions:

- **Talk to someone who's been there** – There are many support groups for men with prostate cancer where you can talk to others going through similar experiences. This kind of understanding can help a lot. Ask your healthcare team about the groups in your area.

Useful resources

The following are some of the many resources that can give you detailed information about the various aspects of prostate cancer:

Websites

- Canadian Cancer Society – www.cancer.ca
- Prostate Cancer Canada – www.prostatecancer.ca
- Procure Alliance – www.procure.ca
- Canadian Urological Association – Patient Information Site – www.uroinfo.ca
- Amgen Canada – www.amgen.ca

Books

The Intelligent Patient Guide to Prostate Cancer, 3rd ed. by Dr. S. Larry Goldenberg and Dr. Ian M. Thompson.

Dr. Peter Scardino's Prostate Book: The Complete Guide to Overcoming Prostate Cancer, Prostatitis, and BPH by Dr. Peter T. Scardino and Judith Kelman.

Glossary

Androgens: Male sex hormones (e.g. testosterone).

Benign: Non-cancerous.

Biopsy: A procedure that uses thin needles to remove a sample of cells that are sent to a lab to check for cancer.

Bone-targeted therapies: Treatments used to slow the growth of cancer in the bones, and reduce pain.

BPH: Benign Prostatic Hyperplasia, a common, non-cancerous condition where the prostate becomes enlarged and blocks the urethra or bladder; BPH may cause symptoms similar to those caused by prostate cancer.

Brachytherapy: A treatment that places tiny radioactive seeds into or near the tumour to destroy the cancer.

Catheter: A tube that's inserted into the opening of the penis to drain urine from the bladder, used during prostate surgery or other procedures.

Cryotherapy (cryosurgery): A new form of prostate cancer treatment in which thin needles are inserted into the prostate to destroy cancer cells using extremely cold gases.

CT scan: Computed Tomography scan, a test that uses a computerized machine to take a picture of a certain area of the body.

Gland: An organ that produces fluid.

Gleason score: The sum of the two most common grades of prostate cancer found in a biopsy, which is used to help predict the cancer's growth.

Grade: A classification that describes how closely prostate cancer cells resemble normal prostate cells.

IV: Intravenous infusion, a method of delivering medication via a needle in a vein.

Kegel exercises: Exercises to strengthen the pelvic muscles used in urination.

Laparoscopic surgery: A form of surgery in which a small probe is inserted into the body to create a picture of a specific area.

Lymphatic system: A system of vessels, nodes and other organs that fights infection, brings nourishment to cells and gets rid of cell waste.

Lymph nodes: Small masses of tissue located along the lymphatic vessels of the body (e.g. the groin, armpits and neck) that act as filters to help fight infections.

Metastasis (or metastasized): Cancer that has spread to a different part of the body than the one in which it started.

MRI: Magnetic Resonance Imaging, a test which uses a magnetic field and radio waves to create detailed images of the body.

Prostate: A gland at the base of the bladder that helps control urine flow and ejaculation, produces part of the fluid in semen, and makes PSA, a protein that may indicate potential prostate cancer at high levels.

PSA: Prostate-Specific Antigen, a protein made by the prostate that may indicate potential prostate cancer at high levels.

Radiation: Treatment where high-energy rays (such as x-rays) are directed at a tumour to destroy cancer cells.

Robotic-assisted laparoscopic surgery: A type of laparoscopic surgery in which the surgeon guides robotic arms which utilize the instruments using micro-movements.

Stage: A classification of prostate cancer that describes the size of the prostate and how far a tumour has spread.

TRUS: Trans-rectal ultrasound, a procedure that uses an ultrasound probe to create a picture of the prostate.

Tumour: A group of cancer cells.

Urethra: The tube that passes from the bladder to the penis and carries urine and semen.

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