

Radiation Therapy and Prostate Cancer

The following information is based on the general experiences of many prostate cancer patients. Your experience may be different. If you have any questions about what prostate cancer treatment services are covered by your health insurance, please contact your health care provider or health insurance provider.

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Please feel free to read only those parts of the booklet you need now. You don't need to read everything right now. You can always read more later.

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What Will I Learn By Reading This Booklet?

You and your doctor may be talking about using **radiation therapy** to treat your prostate cancer. Deciding on the best treatment for your prostate cancer is a challenge. It is important for you to learn about radiation therapy so that you can choose the type of radiation therapy that will work best for you. In this booklet, you will learn about the following:

- What radiation therapy is
- What the different kinds of radiation therapy are
- Possible **side effects** (unwanted changes in your body) of radiation therapy
- How you can take care of yourself during, and after radiation therapy
- What follow-up care you will need once your radiation therapy is over

It is important to think about these things if you and your doctor decide that radiation therapy is the best way to treat your prostate cancer.

Words that appear in **bold** (dark text) can be found in the “Key Words” section at the end of this booklet.

What Is Radiation Therapy?

Radiation therapy is a cancer treatment that uses high energy beams, such as x-rays, to kill cancer cells in your prostate and stop them from spreading.

Many years ago doctors learned how to use these energy beams to "see" inside your body to find out if you are sick. You may have seen a chest **x-ray** or x-ray pictures of your teeth or your bones. These x-rays use small amounts of radiation. At high **doses** (or amounts), radiation can be used to treat your prostate cancer.

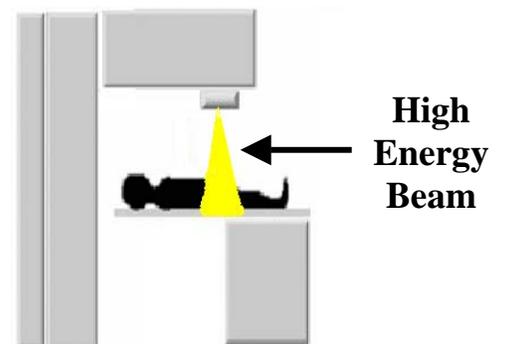
Picture of a chest x-ray



The radiation used for your prostate cancer treatment comes from:

1. Special machines that send set doses (or amounts) of the radiation at your prostate cancer. Or,
2. Small **radioactive** (ray-de-oh-ak-tiv) pellets that send set doses (or amounts) of radiation at your prostate cancer from inside your body.

Picture of machine used in radiation therapy



Radiation can kill your cancer cells or keep them from growing. Radiation therapy is used to:

1. Treat cancer: Radiation can cure, stop, or slow the growth of your prostate cancer. It can be used with success to treat your prostate cancer.
2. Reduce Symptoms. When a cure for your cancer is not possible, radiation may be used to shrink your cancer tumors. Radiation used this way can lower the amount of pain you may have. **(See IMPACT Brochure, “Palliative Radiation,” for more information).**

How Is Radiation Therapy Given?

Radiation therapy can be given to you by **external beam** or **internal** radiation.

Most men who get radiation therapy for their prostate cancer have **external beam radiation**.

With external beam radiation therapy, a machine directs the high-energy rays at your prostate cancer and a small amount of healthy tissue around it. The

most common type of machine used to give you external radiation therapy is called a **linear (li-ne-**

her) accelerator (ak-sel-ah-ra-ter). External

radiation therapy is usually given to you during

outpatient visits to a hospital or treatment center.

Outpatient visits are when you do not need to stay

overnight in the hospital or treatment center. (See

IMPACT Brochure, “IMRT and You,” for more information.)

A man getting radiation therapy from a linear accelerator for his prostate cancer



There are many kinds of external radiation therapy:

- **3D-Conformal Radiation Therapy** aims high energy x-rays in the area of your prostate where your cancer is located.
- **IMRT (intensity modulated radiation therapy)**. With IMRT your doctor uses a computer to plan the exact dose (or amount) of radiation that is aimed at your prostate cancer. The computer uses information about the size, shape, and location of your prostate cancer to figure out how much radiation is needed to kill your prostate cancer cells.
- **IGRT (image-guided radiation therapy)**. With IGRT, small gold seeds are placed near your prostate before you begin treatment. Your doctor uses the gold seeds to guide and aim the radiation at your prostate cancer.

It may help you to think about radiation therapy as a game of darts. Your prostate cancer is the bull's eye in the center of the game board. The darts are the beams of radiation used to kill your prostate cancer cells. The area around the bull's eye stands for the healthy cells surrounding your prostate cancer. With external beam radiation therapy, your doctors carefully plan to have the darts hit the bull's eye each time you are treated.



Sometimes despite the careful planning, the darts hit the area surrounding the bull's eye. This can cause you to have side effects. Over the years, external radiation therapy has become more focused. Doctors are now able to plan radiation therapy so that they hit the bull's eye almost every time. By protecting the area around the bull's eye, you may have fewer side effects.

Size of Seeds Placed in Your Prostate



Size of Seed Implant

When internal radiation therapy is used to treat your prostate cancer, the radiation source is placed inside your body. This method of radiation treatment is called **brachytherapy (bray-key-thair-a-pee)** or **seed implant**. When you get brachytherapy, small seeds or pellets are placed in your prostate during an operation. These seeds or pellets are smaller than a grain of sand and are made out of a radioactive (ray-de-oh-ak-tiv) material. The seeds give a strong dose of radiation to your prostate cancer. This radiation kills your prostate cancer cells. The radiation from the seeds will get weaker each day and will be gone after one year. Brachytherapy is usually done during an outpatient visit. (See **IMPACT Brochure, “Brachytherapy and You” for more information.**)

Does Radiation Therapy Hurt?

No. Radiation therapy does not hurt when it is given to you. But, the side effects you may have from your radiation therapy, can cause pain or make you feel uncomfortable. The good news is that there are many things you and your health care team can do to help you manage any side effects you have from your prostate cancer treatment.

Can Radiation Therapy Be Used With Other Prostate Cancer Treatments?

Yes, radiation therapy can be used with other kinds of prostate cancer treatment.

Radiation treatment is a local treatment. This means that the radiation will only kill the cancer cells in your prostate. Using radiation therapy with another prostate cancer treatment is known as **adjuvant (add-ju-vent) therapy** (or a cancer treatment that is added to, and given after, your first prostate cancer treatment).

Radiation therapy is often used with surgery to treat cancer. Radiation therapy may be used after surgery to stop the growth of any prostate cancer cells that may remain.

In some cases, doctors use radiation along with **hormone therapy**. Hormone therapy works by starving the cancer cells of the male hormones it needs to grow. This may make your radiation therapy treatments work better. Hormone therapy

may be used with radiation therapy or before radiation to shrink your prostate cancer.

Radiation therapy can also be used to lower the amount of pain a person has when prostate cancer has spread to the bones. This is called **palliative (pal-ee-ah-tiv) radiation therapy**. Palliative radiation therapy does not cure prostate cancer but is very helpful as a treatment to make you more comfortable. Palliative radiation therapy can be used to shrink tumors and reduce pressure, pain, and other **symptoms** (signs of being sick) of your prostate cancer. When prostate cancer cells are killed or made to grow more slowly by radiation, the pain will get better. This can help lower the amount of pain medication you need to take. Many cancer patients find that they have a better **quality of life** when radiation is used for this purpose (See **IMPACT Brochure called, “Palliative Radiation,” for more information**).

What Is A Radiation Oncologist?

A **radiation oncologist** is a doctor who specializes in the treatment of people with cancer. They use radiation as the main way of treating cancer. Radiation oncologists work closely with other doctors, such as urologists and primary care physicians, to make sure that patients with cancer get the most effective treatment.

Your radiation oncologist:

- Will decide how much radiation you get for your prostate cancer treatment
- Plans how your prostate cancer treatment will be given
- Closely follows you during your prostate cancer treatment
- Directs any care you need to help manage any side effects you may have during and after your prostate cancer treatment

After your treatment is over, your radiation oncologist will see you for follow-up visits. At these visits, your radiation oncologist will find out how well the radiation worked to treat your prostate cancer and will help you with any side effects (unwanted changes in your body) you may have.

How Does My Radiation Oncologist Plan My Treatment?

After giving you a physical exam and reviewing your medical history, your radiation oncologist will plan your treatment. Your radiation oncologist will let you know:

- Whether external beam or internal radiation therapy would be the best way for you to treat your prostate cancer
- The dose of radiation you need to treat your prostate cancer, and
- How long your treatment will last

Working with Your Doctor to Plan Your Treatment

It is important for your doctor to know about your urinary function. This will help your doctor to:

- Deal with any problems you are having before your treatment, and
- Plan on how to help you during and after your treatment.

Please answer the following questions and take this page with you when you go to your next doctor's appointment.

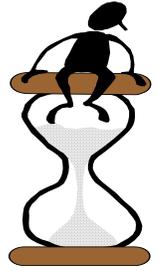
	Never	Less than 1 time in 5	Less than half the time	About half the time	More than half the time	Almost always
1. Over the past month or so, how often have you had a sensation of not emptying your bladder completely after you finished urinating?	<input type="checkbox"/>					
2. Over the past month or so, how often have you had to urinate again less than two hours after you finished urinating?	<input type="checkbox"/>					
3. Over the past month or so, how often have you found you stopped and started again several times when you urinated?	<input type="checkbox"/>					
4. Over the past month or so, how often have you found it difficult to postpone urination?	<input type="checkbox"/>					
5. Over the past month or so, how often have you had a weak urinary stream?	<input type="checkbox"/>					
6. Over the past month or so, how often have you had to push or strain to begin urination?	<input type="checkbox"/>					
7. Over the last month, how many times did you usually get up to urinate from the time you went to bed at night until the time you got up in the morning?	<input type="checkbox"/>					

Remember, it is important for you to speak with your doctor or health care team about any symptoms you have. This will help them plan the best treatment for you.

What Are The Risks Of Radiation Therapy?

The quick doses (or amounts) of radiation that damage or kill your prostate cancer cells may also hurt or kill your healthy cells. When healthy cells are killed by the radiation, you may have side effects. Most side effects of radiation treatment are well known and can be treated by your doctor and health care team.

How Long Does Radiation Treatment Take?



External Beam Radiation Therapy

External beam radiation therapy is given to you five days a week for four to eight weeks. The total dose of radiation and the number of treatments you need depends on the size of your prostate cancer, your general health, and other medical treatments you have had or need to have.

Using many small doses (or amounts) of radiation each day rather than a few large doses (or amounts) helps protect the healthy cells in the **treatment area** (the exact place in your body where radiation will be aimed). Weekend rest breaks let your healthy cells get better.



It is very important that you have all of your scheduled radiation treatments. If you miss or put off your radiation treatments, your radiation therapy might not work as well.

Internal Radiation Therapy

If you have internal radiation, your radiation oncologist will choose the best type of seed implant to treat your prostate cancer. Your radiation oncologist may choose a **low dose-rate** (LDR) or **high dose-rate** (HDR). Low dose-rate seed implants are placed in your body in and around your prostate cancer. The seed implants give off a dose (or amount) of radiation. The low-dose-rate seed implants become less radioactive each day. High dose-rate implants are placed in and around your prostate cancer for only a few minutes. The seed implants are then taken out. The type of seed implant you have and how long it stays in your body will depend on the dose of radiation you need to have the most effective treatment.

How Can I Help Myself During Radiation Therapy?

All men who get radiation therapy for their prostate cancer need to take special care of themselves during their treatment. There are many easy things you can do to help yourself during radiation therapy. What you do can help you to:

- Feel better
- Work out any problems that may come up
- Work with your doctor and health care team to help you get better

Your doctor and health care team will talk to you about things you can do to take care of yourself during and after your treatment. Things like: Telling your health care team what medications are you taking.

- It is important for you to let your doctor know about any medicines that you are taking, even over-the-counter medicine (medicines you buy without a prescription from your doctor) like vitamins, herbs, or aspirin that you are taking before you start your treatment. Make a list of all the medicines you are taking and how often you take them. Your doctor can tell you if you should stop taking any of these medicines before you start your radiation therapy. Call your doctor or health care team if you have any questions about the medicine you are taking. Talk to your doctor or health care team

before you start taking any new medicines. Let your doctor know about any **allergies** you have.

Getting enough rest and sleep

- **Fatigue** (tiredness) is very common side effect of radiation therapy. Your body will use a lot of extra energy during your treatment, and you may feel very tired. Be sure to get plenty of rest and sleep as often as you need. Plan for rest periods during the day. It's common for fatigue to last for several weeks or longer after your treatment is over.



Eating healthy

- Try to eat a healthy diet during your radiation therapy.
- Be kind to your skin in your treatment area:
 - Ask your doctor or health care team if you may use soaps, lotions, medicines, or talcum powder on the treated area.
 - Wear loose, soft cotton clothing over the treated area.
 - Do not scratch, rub, or scrub treated skin.
 - Do not put heat or cold (heating pad, ice pack, etc.) on your treatment area. Use only lukewarm water when you take a shower or bath.
- Remember, if you have any questions, ask your doctor or health care team.

Planning Before You Start Radiation Therapy

- What medications are you taking? List them here so you can speak about them with your doctor.

- What type of radiation therapy will you have?

- If you are having external beam radiation, where do you need to go? Write down the place and your appointment times.

Appointment Date	Appointment Time	Place

- If you are having internal radiation (brachytherapy or seed implant), where do you need to go? Write down the place and your appointment time.

Are There Side Effects With Radiation Therapy?

Yes, there can be side effects when you have radiation therapy. Side effects are different from person to person, and may be different from one treatment to the next. Some people have no or very mild side effects. The good news is that there are ways to deal with most of the side effects.

The side effects that you have depend on:

- The radiation dose you get during your prostate cancer treatment, and
- Your general health

Before beginning your treatment, your doctor and health care team will talk with you about the side effects you might have, how long they might last, and what you can do to help make them better.

Side effects may be acute or chronic. **Acute side effects** are sometimes called "early side effects." This type of side effect happens soon after the treatment begins and are usually gone a few weeks of you finish your radiation therapy. **Chronic**

side effects, sometimes called "late side effects," may take months or years to show up after your radiation therapy ends. These side effects will not go away.

The most common early side effects of external beam radiation therapy are fatigue (tiredness) and skin changes. Your skin may become red, warm, and sensitive to touch like a sunburn. Other side effects include hair loss in your **pubic** (groin) area and a loss of appetite. With internal radiation therapy, the most common side effects are fatigue (tiredness) and problems urinating (peeing). You may have burning when you urinate (pee) or have trouble urinating.

The good news is that most early side effects will go away in time. If you do have any side effects, there are ways to make you feel better. If you have a side effect that is really bad, your doctor may stop your radiation therapy for a short time or change your treatment in some way.

Be sure to tell your doctor or health care team about any side effects that you have. They can help you treat the problems and tell you how to lower the chances that the side effects will come back.

Will Side Effects Limit What I Can Do?

What you are able to do will depend on which side effects you have and how bad they are. Many men are able to work, cook meals, and enjoy their usual daily activities while they have radiation therapy for their prostate cancer. Other men find that they need more rest than before they started radiation therapy so they can't do as much. Your doctor may tell you to limit activities that might irritate your pubic (groin) area. You should try to keep doing the things you enjoy as long as you don't get too tired.

How Might I Feel During Radiation Therapy?

Nearly all men being treated for prostate cancer say that they feel emotionally upset at different times during their radiation therapy. It's not unusual to feel anxious, depressed, afraid, angry, frustrated, alone, or helpless. Radiation therapy may affect your emotions because you are very tired or have other side effects.

Some men find it helps to learn about their disease and treatment because it makes them less afraid of their treatment. Find out as much as you want to know. Do not be afraid to ask questions. Your emotional health is as important as your physical health.

Talking with an understanding friend, relative, minister or another patient may be helpful. Your doctor's office may be able to give you a list of local prostate cancer support groups. There will be men in the support group who have had radiation therapy. You may also contact the American Cancer Society at 1-800-227-2345 or the National Cancer Institute's Cancer Information Line at 1-800-422-6237 to find out about cancer resources in your local community.

Many people don't understand prostate cancer or its treatment. They may stay away from you because they're not sure what to say or how to help. Try to be open when you talk to other people about your illness, treatment, needs, and feelings. People will often be willing to lend their support. If you get tired easily, limit your activities and do only the things that mean the most to you.

It is ok if you want to find out about other prostate cancer treatments or ways to help manage the side effects from your treatment besides what your doctor tells you to do. You might like to try new methods to help you deal with treatment and its side effects, such as meditation or relaxation exercises. Make sure that you tell your doctor about other treatments, vitamins or herbal medications you may take.

Remember everyone needs some support during difficult times. Don't be afraid to ask for help from your doctor or health care team, during or after your treatment.

What Does "Follow-up Care" Mean?

It is normal for you to worry about your future after your prostate cancer treatment is over. You may be worried about how you feel or what you can do to keep your prostate cancer from **recurring** (coming back). You will want to know which doctor will take care of you, how often you need to see the doctor for follow-up appointments, and what tests you should have. Understanding what to expect after your prostate cancer treatment can help you and your loved ones plan for follow-up care, make changes to your daily life, and make important health decisions.

Follow-up cancer care means that you will have regular medical checkups. During these checkups your doctor will look at your medical history and give you a physical exam. Follow-up care may include blood tests and additional **imaging tests** of your pubic (groin) area. Imaging studies are ways used by doctors to take pictures of the inside of your body, such as x-rays or a **CT Scan (also known as a CAT Scan)**.

Follow-up care is important because it helps your doctor find any changes in your health. The main reason for your follow-up care is to check for **recurrence** (the return of your prostate cancer), or **metastasis** (muh-tas-tuh-sis), which is when

your prostate cancer moves to another part of your body. Follow-up care visits are also important to help you deal with any side effects from your radiation therapy.

All men who have treatment for their prostate cancer should have follow-up care.

What Doctor Will Handle My Follow-up Care?

Most men see their radiation oncologist for regular follow-up visits. Others are sent back to their urologist or regular doctor. Your follow-up care will depend on other treatments that you had or may need.

What Should I Tell My Doctor During My Follow-up Visits?



During each visit, you should tell your doctor about any:

- Symptoms (signs of being sick) that you have
- Pain that bothers you
- Problems that keep you from doing your daily activities, such as **fatigue** (tiredness); problems with your **bladder**, **bowel**, or ability to have sex; trouble sleeping; and weight gain or loss
- Medicines, vitamins, or herbs you are taking and any other treatments you may use
- Emotional worries you may have, such as **anxiety** or **depression**

It is important for you to be look out for changes in your health and to tell your doctor about these changes. Your doctor will let you know whether these changes are caused by your prostate cancer, your radiation therapy, or another health problem.

What Other Care Might I Need After My Radiation Therapy?

Just as every patient is different, each man's follow-up care is also different. Your doctor will schedule your appointments and order any tests you need to make sure you have the best follow-up care possible. Don't be afraid to ask about any tests or treatments that your doctor may order. Try to learn about the things you need to do to take good care of yourself.



The following are some questions that you may want to ask your doctor after you have finished your radiation therapy:

- How often do I need to return for checkups?
- Why do I need more x-rays, **CT scans**, blood tests, and so on?
- What will these tests tell us?
- How and when will you know if I'm cured of my prostate cancer?
- What are the chances that my prostate cancer will come back?
- How soon can I go back to my regular activities? Work? Sexual activity?
Sports?
- Do I need to eat a special diet?
- Should I exercise?

How Often Do I Need To See My Doctor After My Radiation

Therapy Has Ended?

In general, men undergoing radiation therapy for their prostate cancer go back to their doctor for follow-up visits every three to four months for two to three years after their treatment has ended. After that, they go back to their doctor one or two times a year.

How Can I Help Myself After My Radiation Therapy Is Over?

Until your side effects are gone, you need to keep following the instructions your doctor and health care team gave you to take care of yourself. For example, you may have skin problems for several weeks after your prostate cancer treatment ends. Keep being gentle with your skin in your pubic (groin) area until it is healed. Don't try to scrub off the marks in your treatment area. Your doctor or health care team can answer any questions you have about skin care and help you with other concerns you may have after your treatment has been completed.

You may find that you still need extra rest after your radiation therapy is over. This is because your healthy tissues are getting better and rebuilding. Try to get as much rest as you can. It may take some time for you to get your strength back. Start doing your normal daily activities slowly. If you feel that you need emotional or social support, ask your doctor or health care team about support groups or other ways to express your feelings and concerns. You may also contact the American Cancer Society at 1-800-227-2345 or the National Cancer Institute's Cancer Information Line at 1-800-422-6237 to find out about cancer resources in your local community.

Hints for Talking with Your Doctor

These tips may help you keep track of the information you and your doctor talk about during your visits:

- Make a list of questions you want to ask your doctor before your appointment.
- Bring a friend or family member to sit with you while you talk with your doctor. Some people get very nervous when they visit their doctor. Sometimes you can't remember everything that you talk about with your doctor. A friend or family member can help you remember what you and your doctor talked about.
- You, or the person who goes with you, may want to take notes during your appointment.
- Ask your doctor to slow down if you need more time to write down your notes.
- You may want to ask your doctor if you can use a tape recorder during your visit. Take notes from the tape after your visit is over. This way, you can review your talk with your doctor as many times as you want.

What Kinds Of Medical Information Should I Keep?

It is important for you to keep a copy of your prostate cancer treatment records.

You may not always see the same doctor for your follow-up care, so having this information to share with another doctor can be very helpful. The following is a list of medical information you may want to keep.

- The results of any tests you have taken such as your **prostate-specific antigen (PSA) test**. A PSA test is a blood test, which shows if you have cancer.
- When you found out you had prostate cancer.
- Information on the kinds of treatment you have had for your prostate cancer including:
 - The places and dates where you had your treatment, such as the dates and places where you went for your radiation therapy.
 - What type of treatment you had, such as external beam or internal radiation therapy. And,
 - Any medicines you took before, during, and after your prostate cancer treatment.
- Contact information for all your doctors and the other members of your health care team who helped with your prostate cancer treatment and follow-up care.

- Any side effects or problems you had during and after your prostate cancer treatment.
- Any **supportive care** you got during your treatment. Supportive care is treatment given to keep, control, or make your side effects better and to make your life better. For example, pain or **nausea** (an unpleasant feeling in the back of your throat and stomach that may cause you to vomit) medicine, emotional support, and nutritional supplements.

Remember, you have the right to copies of all your medical paperwork and the actual slides, x-rays and any other information about your health care and treatment. A good idea would be to create two copies of your medical information and keep them in folders. Keep one folder at home and take the other one with you to your doctor's appointments.

Whenever you see a new doctor, it is important for you to let them know about your prostate cancer and any treatment that you have had.

What Have I Learned By Reading This Booklet?

In this booklet, you learned about:

- Radiation therapy
- The kinds of radiation therapy
- Possible **side effects** of radiation therapy,
- How you can take care of yourself during, and after radiation therapy
- And, what follow-up care you will need once your radiation therapy is over

If you have any questions, please talk to your doctor or health care team. It is important that you understand what is going on with your treatment. This knowledge will help you take better care of yourself and feel more in control so that you can get the most from your treatment.

Key Words

3D-Conformal Radiation Therapy: a type of external beam radiation therapy that aims high energy x-rays in the area of your prostate where your cancer is located.

Acute side effects (or early side effects): side effects that happen soon after your treatment starts and are usually gone within a few weeks of finishing your treatment.

Adjuvant (add-ju-vent) therapy: a cancer treatment that is added to, and given after, your first prostate cancer treatment.

Allergy: when your body reacts to something in a bad way to something that is normally harmless such as medicines, certain foods, plants or animals.

Anxiety: state of worry and nervousness.

Bladder: the organ in your body that holds your urine until you urinate (pee).

Bowel: your intestines.

Brachytherapy (bray-key-thair-a-pee) (or seed implant): a type of radiation treatment that works from inside your body to kill prostate cancer cells.

CAT Scan (also known as a CT Scan): a special kind of X-ray machine that takes pictures of your body from many different views at one time.

Chemotherapy (key-mo-ther-a-pee): a prostate cancer treatment that treats your whole body with powerful anticancer medicines to kill your prostate cancer cells.

Chronic side effects (or late side effects): side effects that happen months or years after your treatment ends and are usually permanent.

CT Scan (also known as a CAT Scan or Computerize Axial Tomography scan): a special kind of x-ray machine that takes pictures of your body from many different views at one time.

Depression: a state of sadness or low spirits.

Dose: amount of medicine.

Early side effects (acute side effects): side effects that happen soon after your treatment starts and are usually gone within a few weeks of finishing your treatment.

External beam radiation: radiation given from outside your body to treat prostate cancer.

Fatigue: mental or physical tiredness.

High dose-rate (HDR): a type of brachytherapy or seed implant that gives a large amount of radiation to your prostate cancer but does not stay in your body.

IGRT (image-guided radiation therapy): a type of external beam radiation therapy, where small gold seeds are placed near your prostate so that the radiation can be aimed at your prostate cancer.

Imaging test: ways used by doctors to take pictures of the inside of the body.

Some ways to take these pictures are x-rays and CT scans.

IMRT (intensity modulated radiation therapy): a type of external beam radiation therapy where doctors use a computer to plan the exact dose (or amount) of radiation that is aimed at your prostate cancer.

Internal radiation: radiation given from inside your body to treat prostate cancer.

Late side effects (or chronic side effects): side effects that happen months or years after your treatment ends and are usually permanent.

Linear (li-ne-her) accelerator (ak-sel-ah-ra-ter): a machine that directs high energy x-rays at your prostate cancer in external beam radiation therapy.

Loss of appetite: when you do not feel hungry, do not want to eat, or have no taste for food.

Low dose-rate (LDR): a type of brachytherapy or seed implant that gives a small amount of radiation to your prostate cancer and stays in your body.

Metastasis (muh-tas-tuh-sis): when prostate cancer cells spread to other parts of your body.

Nausea: an unpleasant feeling in the back of your throat and stomach that may cause you to vomit.

Outpatient: visits to the hospital or treatment center where you do not need to stay overnight.

Over-the-counter: medicines you buy without a prescription from your doctor.

Palliative (pal-ee-ah-tiv) radiation therapy: a treatment used to shrink tumors and reduce pressure, pain, and other symptoms of your prostate cancer.

Prostate-specific antigen (PSA) test: a blood test used to measure a protein made by the prostate gland, which shows if there is cancer.

Pubic: groin area.

Quality of life: your personal satisfaction with the conditions under which you live.

Radiation oncologist: a doctor who specialized in the treatment of people with cancer.

Radiation therapy: a cancer treatment that uses high energy beams, such as x-rays, to kill cancer cells and to stop them from spreading.

Radioactive (ray-de-oh-ak-tiv): a material that gives off high or low energy rays, such as x-rays.

Recur: to come back

Recurrence: when your cancer comes back.

Seed implant: a type of radiation treatment that works from inside your body to kill prostate cancer cells.

Side effects: unwanted changes that may occur in your body during or after prostate cancer treatment.

Supportive care: Treatment given to keep, control, or make better the side effects a person has from his/her cancer treatment and to make the life of this person better.

Symptoms: a sign of being sick.

Tiredness: mental or physical fatigue.

X-ray: an imaging test that uses radiation to take a picture of the inside of your body.