Radiotherapy to the prostate
Information for patients
This leaflet aims to help you and your family understand more about your radiotherapy treatment to your prostate gland.

This leaflet will be given in addition to the information you will receive from your Clinical Oncologist (who is a specialist doctor in cancer treatment). Their team will be caring for you during your treatment. This team may include radiographers, nurses, social workers, physiotherapists, occupational therapist and dietitians.

The leaflet describes radiotherapy planning and treatment. It also explains the side-effects which you may experience during and after treatment.

Each person’s treatment will vary, so the information given is a general guide. The healthcare team looking after you will explain your treatment and the side-effects in detail. If you hear any words or phrases that you do not understand, please ask your doctor or a member of your healthcare team what it means. It does not matter how many times you ask.

Staff will make every effort to meet your individual needs or will direct you to the person who can help.

All your radiotherapy planning and treatment will take place in the Radiotherapy Department on Level -2, Bexley Wing, Leeds Cancer Centre, St James’s University Hospital (LS9 7TF).

**Radiotherapy reception Tel: 0113 206 8940**

Please do not bring any valuables into hospital with you as the Trust cannot accept liability for loss or theft.
What is radiotherapy?

Radiotherapy is the use of high energy X-rays and other types of radiation to treat cancer. The organs and tissues of the body are made up of tiny building blocks called cells. Radiotherapy causes damage to the cancer cells in the treated area. Although normal cells are also affected, they can repair themselves and are able to recover. Radiotherapy is a local treatment. This means it only affects the part of the body that is being treated. You do not feel anything during your treatment and radiotherapy and does not make you radioactive. It is perfectly safe for you to be with other people, including children, throughout your treatment. You will have your radiotherapy on a treatment machine called a Linear Accelerator as shown here.

You will see your radiographers at each treatment session, and they will be happy to answer any questions you may have.
How often is it given?
A course of treatment may last from 3 - 7½ weeks. The most common schedule is four weeks. Treatment is usually given daily, Monday to Friday however your treatment may not start on a Monday.

You may need to be treated on a weekend during the day due to a bank holiday and we will let you know if this is the case. Your radiographer will be able to explain the details of your individual radiotherapy appointments. Your treatment will usually be given as an outpatient.

Visiting us before your treatment
If you would like to visit the radiotherapy department before starting treatment, please call 0113 206 7603. This visit can be very useful as you can find out more information about radiotherapy, visit the hospital, tour the simulators and treatment areas and ask questions.

‘I was so pleased to see the machines before my treatment and the staff were so helpful and really put my mind at rest.’
Who will I meet?

*Therapeutic radiographers*

Radiotherapy is given by male and female therapeutic radiographers who are highly trained in the accurate planning and delivery of radiotherapy treatment.

You will see your radiographers at each treatment session and they will be happy to answer any questions you may have.

*Student radiographers*

The radiotherapy department is a training centre for male and female therapeutic radiographers. They are supervised at all times. If you do not wish students to be present, please speak to a member of staff. This will not affect your treatment or care.

Planning your treatment

Your first appointment for radiotherapy will be a planning appointment. This will be used to gather all the information we need to accurately plan your treatment. We will contact you by phone, with an appointment for your radiotherapy planning session. Directions to the hospital and transport arrangements will be discussed with you at this point.

You may also be contacted shortly before you attend with some advice to prepare you for your planning scan. Some tests and scans may be needed to help plan your treatment. We will explain which of these you will need when your appointment is made.
Your planning visit could take up to 1-2 hours to complete. The treatment is carefully planned to your own prostate shape, a technique called ‘conformal radiotherapy’. In order to plan your treatment it is important to open your bowels on a regular basis. Irregular bowel movements may result in you having to return for a further scan.

You may see your clinical oncologist (or a member of their team) at this appointment. This is an ideal opportunity for you to ask questions. If you wish to go ahead with the treatment and you have not consented for your radiotherapy treatment in another hospital, this will be completed at this visit.

**What to bring with you:**

- a list of all questions you may have;
- an up-to-date list of all the medications you are taking (including inhalers, sprays, vitamins or herbal products);
- any medication that you may need during your visit;
- something to eat or drink and something to occupy yourself with, as this first visit can be quite lengthy (up to two hours).
Your planning scan

In order to plan your treatment you will have a planning CT scan. This is done on a machine called a CT Simulator, shown here in the photograph.

This is a CT scanner that allows the images to be sent to the radiotherapy computer planning system. There will be several members of staff present at your scan.

Before your planning scan a radiographer will talk to you about bowel and bladder preparation. This usually involves the use of a ‘micro enema’. You will be given a leaflet to explain this.

Planning scans are not diagnostic examinations and will not be reported on as such.

It is important to have an empty back passage and a comfortably full bladder, both for your planning scan and during treatment. This is to ensure the accuracy of the treatment planning and delivery. If you struggle to keep your bladder full please tell the radiographer.
Important information about taking your Microenemas

Only use the microenemas on the days you are having radiotherapy. You do not need to use the microenemas on a weekend unless you are having a treatment session.

Please tell your radiographer if you are having frequent or loose bowel movements.

If you are taking laxatives for constipation please tell the radiographers when you come for your planning scan.

You will be asked to remove your clothes from the waist down but you will be given a gown to wear. The scan will be taken with you lying in the same position as for your treatment. The radiographers will draw some marks, on you, to be used as a reference for your treatment.

You will then be scanned, which will only take a few minutes and at the end of the scan these marks will be replaced by permanent marks.

These marks will be used each day for your treatment. These permanent marks help us to reproduce your treatment with accuracy each day. It also means that you can wash without worrying about your marks coming off.

You will be able to drive your car or go to work after your scan.
When your treatment planning is completed you will be able to start your treatment, this is usually 2 - 3 weeks after your planning scan.

Treatment is usually given daily, Monday to Friday however your treatment may start on any day of the week. Whenever possible you will be treated at the time of day that suits you, but this cannot always be arranged or guaranteed. There may be occasions when you may have a longer stay in the department or be asked to attend at a different time, for example to see your oncologist.

**Having your treatment**

When you arrive for your treatment you should go to the main reception of the radiotherapy department. You will be given directions to your treatment machine. The radiographers there will explain what will happen, including your bowel and bladder preparation and answer any questions that you may have. You will be given a full list of all your treatment and clinic appointments.
You may need to undress and put on a gown, the radiographers discuss this with you when you first attend the department. The radiographers will position you, and adjust the treatment couch and machine to the correct positions. For the first few treatments and also intermittently during treatment we will also take images to check the accuracy of the treatment which will take a few more minutes.

These images do not monitor your condition but are purely for treatment accuracy.

You will be asked to stay as still as possible during the treatment but you should breathe and swallow normally. Once you are in the correct position the radiographers will leave the room to switch on the machine. You will only be alone for a few moments at a time. The radiographers will be watching you on a closed circuit TV (CCTV) monitor during treatment. The CCTV camera is not recording or saving any images. There is also an intercom system so the radiographers can talk to you.

The treatment only takes a few minutes but you will be in the treatment room for about 5-10 minutes. The machine stops automatically after your prescribed dose of treatment has been given. The radiographers can stop the machine at any time if needed. The treatment machine makes a buzzing sound when switched on. You do not feel anything.

The radiographers may need to come in and out part way through each treatment.

After the treatment is complete the radiographers will come back into the room and help you off the couch.
On some days the radiotherapy department may be busy and there may be a delay before your treatment. We will keep you informed of any delays, please see the information screens in the waiting areas. It may be a good idea to bring something to eat and drink with you, including any supplement drinks you have been asked to have and any medication you may need. There is a restaurant and café available on Level 0.

Your treatments will generally be on the same machine, although there may be days when this machine is being serviced and your treatment will be in a different room.

It is very important that you do not miss treatment days as it may make your treatment less effective. If you feel you are unable to attend for any reason please telephone us so that we can discuss this with you. If you have any queries about your appointment times please discuss these with the radiotherapy co-ordinators on your treatment unit.

For appointment queries please telephone the radiotherapy reception desk 0113 206 8940 for further advice.

What if I have any problems?
During your course of treatment, please tell the radiographers how you are feeling. If you have any problems or questions, please let them know. Your clinical oncologist, nurse specialist or a member of their team will see you during your treatment in the Princess Royal Suite. They will monitor any side-effects you may be experiencing. You can expect to be in the department longer than usual on this day.
Diet information

In order to improve treatment accuracy, it is important that your bowels are opened on a regular basis. If you suffer from an irregular bowel habit it is important to let your radiographer or nurse know.

Occasionally people develop the urge to have their bowels opened without passing anything (tenesmus), whilst others may find opening their bowels becomes painful. If you experience any difficulties please inform your radiographer, doctor or nurse. It is also helpful during your treatment to try and reduce any wind or gas in your bowel.

*The following suggestions can help:*

- Eat foods slowly and chew foods well, with your mouth closed.
- Don’t talk whilst you are eating.
- Drink slowly – sip drinks rather than gulping them, especially when you are taking tablets.
- Avoid using straws or drinking directly from a bottle.
- Avoid carbonated drinks such as soda water, cola, lemonade.
- Eat in a relaxed atmosphere.
- Avoid chewing gum or smoking.
- Light physical activity each day for example. Walking, may help.
- Avoid those foods which you know have a tendency to produce wind.
Fluid

Why is fluid important?
Water is essential for life. We need water to get rid of waste products from the body, keep our skin healthy and replace water lost through breathing and sweating.

Drinking the recommended amount of fluid each day will help to keep your bladder healthy.

What happens if I don’t drink enough?
If you do not drink enough fluid each day you can become dehydrated.

This can cause:
- Tiredness
- Nausea
- Light-headedness
- Irritability
- Constipation
- Headaches
- Dry skin and mouth
- Your urine will also become concentrated, dark in colour and have a strong smell.

How much fluid should I drink each day?
During your treatment you will need to drink about two litres of fluid each day. This is the same as 3½ pints or about eight glasses.
If you have a kidney problem and drinking this amount of fluid would be difficult for you please inform your radiographer, nurse or doctor.

Your doctor, nurse or radiographer may advise you to drink more as your treatment progresses. They will talk to you individually about this.

**What types of fluid are best to drink?**

The best types of fluid to drink during your treatment are water, milk, squash, decaffeinated tea and decaffeinated coffee. All alcoholic drinks irritate the bladder during treatment so try and avoid drinking these. Caffeine also irritates the bladder during treatment. Try and cut down on tea and coffee and replace with decaffeinated varieties, squash, water etc.

Occasionally fruit juices can interfere with the way some medicines work so please discuss this with your doctor or pharmacist before starting to drink cranberry juice.

Fluid is particularly important during your radiotherapy treatment to help prevent constipation, keep your bowels opening regularly and maintain the position of your prostate.
**Fibre**

What is fibre?
Fibre is the part of food that the body cannot break down. As fibre passes through the bowels it absorbs water, like a sponge and makes the contents of your bowels soft and bulky. This helps the muscles in the walls of your bowel work better and helps food to pass through your gut.

When the diet is low in fibre, the gut struggles to work well and this can lead to constipation. A diet containing fibre can help your bowels empty more regularly.

*Fibre comes from three main sources:*
- Fruit
- Vegetables
- Wholegrain Cereals

Should I eat fibre during my treatment?
Yes! It is important to eat foods containing fibre as part of your diet during your treatment, in order to keep your bowels opening regularly. Fibre also has other health benefits including reducing the risk of heart disease and colon cancer, keeping the inside of your bowel healthy and preventing constipation.
### Foods containing fibre

<table>
<thead>
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<th>Lower fibre</th>
<th>Higher fibre</th>
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| **Breakfast cereals**  
Cornflakes, Rice Krispies, sugar coated cereals.                           | Wholegrain varieties such as,  
Branflakes, Shredded Wheat,  
Weetabix, porridge and muesli.                                             |
| **Bread**  
White bread or brown bread.                                                | Wholemeal or granary bread,  
wholemeal pitta bread or chapattis.                                          |
| **Pasta and Rice**  
White pasta or white rice.                                                   | Wholemeal pasta or wholegrain / brown rice.                                  |
| **Biscuits and Crackers**  
Cream crackers, crispbreads, biscuits made with white flour.                | Wholemeal crackers and crispbreads, oatcakes.                                 |
| **Fruit and Vegetables**  
Mashed / boiled potatoes with skins removed.  
Fruit juice.                                                                | Jacket and new potatoes with skins left on.  
All vegetables.  
All fruit (fresh, canned).                                                   |

It is important to drink plenty of fluid when your diet contains fibre. Drinking too little fluid when your diet contains fibre can lead to constipation. Try and drink at least eight glasses of fluid each day. This is the same as two litres or 3½ pints.

If you develop diarrhoea you will need to drink more fluids to replace those lost. Your doctor or nurse can advise you further on this.
Dietary recommendations may change if you develop significant bowel irritation. Your doctor or nurse specialist will be able to advise you further.

The information about diet in this leaflet provides general guidance and ideas only. If you are experiencing a poor appetite, weight loss or problems eating, please let your doctor, nurse or radiographer know. They will be able to give you further guidance.

Side-effects of treatment

Short term side-effects from radiotherapy
As your treatment progresses you may experience some side-effects. Not everyone will experience all of these reactions. If you do experience any of the following side-effects, do not worry, they are normal reactions to treatment and are temporary. They usually begin about half way through the course of treatment, may last for several weeks after it has finished and then slowly settle down.

You will see your radiographers every day, if you notice any of the following problems please tell them straight away and they will contact the doctor or nurse for you. Treatment to ease these side-effects is often available.

Urinary problems
- You may find you have to pass urine more often than usual. This may be accompanied by a burning sensation (cystitis), which is treatable. Drinking the recommended amount of fluid each day will help to keep your bladder healthy.
• You may notice that you have to get up more frequently during the night to pass urine. Continue to drink the recommended amount through the day but avoid drinking too much during the evening.

• Side-effects usually settle within three to four weeks after treatment. Continuing to follow the recommended advice after treatment will help you cope with your side-effects.

• It is common for people to notice small particles in their urine. This is due to the radiotherapy and is not serious. Please tell us if you notice any blood in your urine.

• On occasion people may experience difficulty passing urine. This may need other treatments.

• Discomfort in the lower abdomen along with only passing a few dribbles of urine or being unable to pass urine at all, may mean you have urinary retention. This is extremely rare.

**IMPORTANT:** If this happens during the evening or at the weekend you should attend your local casualty department as you may need to have a catheter inserted.

**Diarrhoea**

Radiotherapy to the pelvis sometimes irritates the bowel and may cause diarrhoea. You may also experience wind and/or stomach cramps. These symptoms may occur a week or two after starting treatment and may continue for some weeks after radiotherapy is complete.

If you experience diarrhoea during your treatment please tell your radiographers straight away. You will need to stop using your microenemas if you start with diarrhoea.
If you develop diarrhoea you will need to drink more fluids to replace those lost. You should try to maintain a healthy balanced diet throughout your treatment.

**Piles (haemorrhoids)**

For some patients, who have had a history of piles, radiotherapy can cause this problem to flare up again. Please do not use any preparations you may have at home for this problem as certain creams may interfere with your radiotherapy treatment.

**Abdominal pain (colic)**

It is rare to feel abdominal discomfort and colicky pains but you may feel ‘bloated’ and swollen. If you experience any of these side-effects please inform your radiographer, doctor or nurse.

**Skin reactions**

Before you go in for your treatment the radiographer will explain what will happen to your skin and how to look after it. They will also give you a leaflet to take home. The same will happen at the end of your treatment. If you are concerned about your skin reaction please talk to your radiographers or contact the review clinic nursing staff in Princess Royal Suite. **Telephone:** 0113 206 7587.

If you feel you must shave in the treatment area only use an electric razor with extreme care.

**Pubic hair loss**

Radiotherapy may make your pubic hair fall out. The hair may grow back after treatment is completed but it may appear thinner or finer than before treatment.
**Tiredness (fatigue)**

Nearly all patients having radiotherapy will feel tired. Be prepared to take things easy during treatment and allow for extra rests. There is a Macmillan information leaflet available and if you would like a copy, or support with your fatigue please ask a member of staff.

Fatigue usually improves between six months to a year after treatment. Some people find that fatigue can last longer, up to two years or more.

**Things you can do to help include:**

- Gentle exercise can help reduce the symptoms of fatigue.
- Having enough to drink can prevent tiredness from dehydration.
- Small meals or snacks eaten more often than three times a day may be easier to face.
- Try to get a good night’s sleep where possible, a daytime nap may help.
- Try to ‘pace’ yourself, listen to what your body is telling you, rest if you need to.
- Pick out the things that you enjoy, and try to accept help with other tasks.
- Little and often is the rule of thumb.

There is a Macmillan information leaflet available, if you would like a copy, or support with your fatigue please ask a member of staff.
Long term side-effects

The following side-effects are rare, but it is a good idea to know what to look out for. They may occur some months or years after completion of treatment.

Bowel frequency

It is usual to find you have a slight increase in bowel movements over a period of time. Rarely, there may be mucous and/or blood in your motions. It is important to inform your Clinical Oncologist, if this occurs, as further investigations may be required. Inflammation of the lining of the back passage (proctitis) may develop as a result of radiotherapy and needs to be treated.

Bladder problems

Because the prostate gland surrounds the base of the bladder, the dose to this area is the same as in the prostate. This sometimes leads to a thinning of the lining of the bladder and on rare occasions blood appears in the urine. If this happens it may need further investigation please inform your doctor, nurse or GP.

Macmillan toilet card

If you want to go to the toilet more often, or feel that you can’t wait when you do want to go, you can get a card to show to staff in shops, pubs and other places. The card allows you to use their toilet without them asking awkward questions.

You can get the cards from your radiographer.
**Impotence**
For men who are sexually active there is some risk that radiotherapy can make it difficult to get an erection (impotence). If this happens it will be some months after your treatment has finished. If this is a problem for you then you should discuss this with your Clinical Oncologist or Urologist as there are new treatments which may help. You may find your ejaculate (semen) is of smaller volumes or dry.

**Infertility**
Radiotherapy to the prostate is likely to cause infertility, which means you would no longer be able to father a child. Sperm banking may be an option you want to consider, if so you may wish to discuss this further with your doctor or nurse. It is advisable to use contraception when resuming sexual activity in case you remain fertile. Your sperm count can be checked if you prefer not to use contraception but do not wish to father a child.

**Lymphoedema**
If radiotherapy has been given to your lymph glands as well as to your prostate this can cause some swelling of the legs. This is known as lymphoedema. Your Clinical Oncologist or nurse specialist will be able to explain this to you in more detail.

**Risk of further cancer**
Radiation treatment can cause a separate cancer in the years after treatment. These cancers most commonly occur in the organs next to the prostate such as the rectum and bladder. At 10 and more years after treatment the risk of developing a second cancer is approx 1-2% (a cancer will develop in 1-2 men out of a 100). This is more of an issue for men aged under 65 years.
Research at Leeds Cancer Centre

Leeds Cancer Centre is a major centre for cancer research. You may be asked if you would like to take part in clinical studies or trials linked to your condition. You do not have to take part in any trials, unless you wish to do so. If you do not wish to take part in a trial your treatment will not be affected in any way.

If you do take part in a clinical trial you may meet a research nurse or radiographer, helping to run the trial.

Useful Contact numbers

Uro-Oncology Nurse Specialist

Tel: 0113 206 8290 or 0113 206 6792 Monday to Friday 9.00am - 4.00pm.

Your nurse specialist will also be your Key Worker during your treatment.

Your Consultant: ........................................................................................................

Their secretaries’ telephone number:
........................................................................................................................................
Local Support Services

Leeds Cancer Support
Leeds Cancer Support complements care provided by your clinical team. We offer access to information and a wide range of support, in a welcoming environment for you, your family and friends.

We can be found in the information lounges in Bexley Wing and also in the purpose built Sir Robert Ogden Macmillan Centre.

The Sir Robert Ogden Macmillan Centre
The Centre is on the St James’s Hospital site and offers a variety of support services including complementary and supportive therapies. These therapies include Reiki, relaxation and visualisation, hand and foot massage and many others. We also offer a weekly exercise class and a monthly support group. You can just drop in for a coffee and a chat anytime.

Contact numbers for Leeds Cancer Support

**Information Lounge Level -2 Radiotherapy Department**
Open from 8.00am - 6.00pm Tel: (0113) 206 7603

**Information Centre Level 1 Outpatients Department**
Open from 9.00am - 4.00pm. Tel: (0113) 206 8816

**Sir Robert Ogden Macmillan Centre**
Open from 10.00am - 4.00pm. Tel: (0113) 206 6498

All the above services can be emailed on: leedsth-tr.cancersupport@nhs.net
**Maggie’s Centre**

If you or someone you love has cancer you may have lots of questions. Maggie’s is a warm, welcoming place where you can meet people who are experiencing similar things to you. You may also be able to find support groups specific to your needs and get advice and information from their professional staff. You don’t need an appointment and all support is free.

Open Monday to Friday 9.00 am - 5.00pm. Tel: (0113) 427 8364

**Address:** St James’s Hospital (next to the multi storey car park), Alma Street, Leeds LS9 7BE

**Email:** leeds@maggiescentres.org

**Website:** maggiescentres.org

**National Support Organisations**

**Prostate Cancer Charity**

Helpline Tel: 0800 074 8383 (9am-6pm Mon-Fri, Wed 10am-8pm)

[www.prostatecancer.org.uk](http://www.prostatecancer.org.uk)

**Macmillan Cancer Support**

Freephone 0808 808 2020 - 8am to 8pm seven days a week. A textphone service for deaf and hard of hearing people on 18001 0808 808 0000

Website: [www.macmillan.org.uk](http://www.macmillan.org.uk)

**Stopping smoking**

NHS Free Smoking Helpline: 0300 123 1044 Monday to Friday 9am to 8pm, Saturday and Sunday 11am to 4pm.

Website: [www.nhs.uk/smokefree](http://www.nhs.uk/smokefree)
Car Parking
Parking for radiotherapy planning and treatment is free.

- On entering the car park take a ticket and park as usual (disabled parking spaces are on Level 0).
- When exiting use the left hand lane next to the ticket office. Take your parking ticket and appointment letter to the attendant. They will process your ticket so that when you insert it at the barrier no charge will be made.
- If you need assistance or are unable to leave your car please press the button on the barrier.

Hotel Bexley Wing
The hotel is located on the 8th floor of Bexley wing and offers single and double rooms each with an en-suite, tea and coffee making facilities and digital television. Single rooms with wheel chair access are also available.

Patients are able to stay free of charge. There is a charge for relatives if they are staying in their own room.

For further details please contact the Hotel Co-ordinator on 0113 206 7687.
How to find us

St James’s University Hospital

1. Gledhow Wing
2. Lincoln Wing
3. Bexley Wing
4. Chancellors Wing
5. Robert Ogden Centre

Entrances
Visitor parking
Disabled parking
Staff parking
Bus stops
The printing of this leaflet has been funded by Leeds Cares, official charity partner of Leeds Teaching Hospitals.

Leeds Cares fund projects and deliver services, building on the great work our NHS organisations do.

We also invest in prevention to enable people to live healthy and more active lives; delivering healthier futures for us all.

Show you care by visiting: leeds-cares.org

What did you think of your care? Visit bit.ly/nhsleedsfft
Your views matter