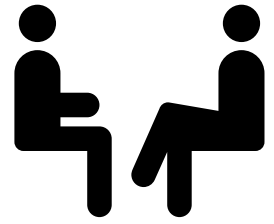


Surgery: radical prostatectomy



In this fact sheet:




- How does surgery treat prostate cancer?
- Who can have surgery?
- What types of surgery are there?
- What are the advantages and disadvantages?
- What does surgery involve?
- Going home
- What happens next?
- What are the side effects?
- Dealing with prostate cancer
- Questions to ask your doctor or nurse
- More information
- About us

This fact sheet is for anyone who is thinking about having surgery to treat their prostate cancer. Your partner, family or friends might also find it helpful. We describe the operation to remove the prostate gland, called a radical prostatectomy, and the possible side effects.

Each hospital will do things slightly differently. Use this fact sheet as a general guide and ask your doctor or nurse for more information. You can also speak to our Specialist Nurses, in confidence, on 0800 074 8383, or chat to them online.

Symbols

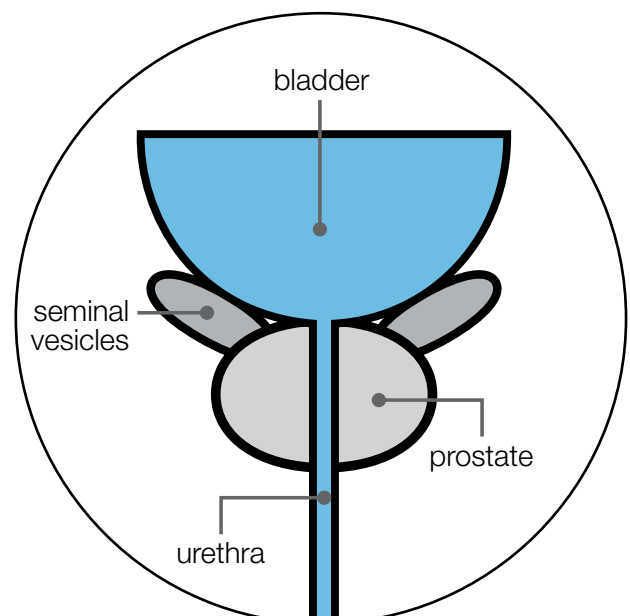
These symbols appear in this fact sheet to guide you to more information:

-  Speak to our Specialist Nurses
-  Read our publications
-  Watch online at [prostatecanceruk.org](https://www.prostatecanceruk.org)

How does surgery treat prostate cancer?

Surgery treats prostate cancer by removing the prostate. You might hear the operation called a prostatectomy or radical prostatectomy. The word 'radical' means the whole prostate is removed, not just part of it.

The aim is to get rid of the cancer completely, while keeping the chances of side effects as low as possible.



Your surgeon will also take out the seminal vesicles. These are two glands that are connected to the prostate and sit just behind it (see diagram on page 1). They produce and store some of the fluid in semen (the fluid that carries sperm).

They may also remove the lymph nodes near your prostate if there is a risk your cancer has spread to them. Lymph nodes are part of your immune system and are found throughout your body.

Removing the lymph nodes (along with any cancer that may have spread to them) is known as a pelvic lymph node dissection. The lymph nodes will be looked at under a microscope to see if the cancer has spread to them. This will help your doctor decide if you need any further treatment (see page 10).

Who can have surgery?

You might be offered surgery if your cancer hasn't spread outside your prostate (localised prostate cancer), and you are generally fit and healthy.

Surgery is also an option for some men whose cancer has spread to the area just outside the prostate (locally advanced prostate cancer). This will depend on how far the cancer has spread. Your surgeon will try to remove any tissue around the prostate that contains cancer cells. If your surgeon doesn't think that surgery would remove all of the cancer, other treatments will be more suitable.

If you have surgery for locally advanced prostate cancer, you will sometimes be offered radiotherapy or hormone therapy straight after your surgery, or sometimes all three treatments together.

If your cancer has spread to other parts of your body (advanced prostate cancer), surgery usually won't be an option. Read more about treatments that may be suitable in our fact sheet, **Advanced prostate cancer**. Surgery is only available for men with advanced prostate cancer as part of a clinical trial. Your doctor can let you know if this is an option for you.

For general information about clinical trials, visit prostatecanceruk.org/clinical-trials

Surgery can sometimes be used to treat cancer that has come back after radiotherapy (recurrent prostate cancer). This isn't very common, as it can increase your risk of having side effects such as leaking urine or erection problems. If surgery isn't possible, there are other treatments available. Read more in our booklet, **If your prostate cancer comes back: A guide to treatment and support**.

A radical prostatectomy is a major operation and, as with all operations, there are risks involved (see page 4). It may not be suitable if you have other health problems that would increase the risks involved with surgery, such as heart disease, lung or bowel problems, or previous major surgery to your abdomen (stomach area). Your doctor will discuss whether surgery is suitable for you.

Overweight men are more likely to have problems during and after surgery. If you are overweight, your doctor may advise you to lose weight before your operation. Our fact sheet, **Diet and physical activity for men with prostate cancer**, has lots of tips.

Other treatment options

If you have localised prostate cancer, other treatment options may include:

- active surveillance – a way of monitoring slow-growing localised prostate cancer
- external beam radiotherapy (sometimes with hormone therapy) – this uses X-ray beams to kill the cancer cells
- brachytherapy – a type of internal radiotherapy
- watchful waiting – a way of monitoring prostate cancer if it's unlikely to cause any problems in your lifetime
- high-intensity focused ultrasound (HIFU) or cryotherapy, but these are less common.

Read more in our fact sheet, **Localised prostate cancer**.



If you have locally advanced prostate cancer, other treatment options may include:

- external beam radiotherapy with hormone therapy (and sometimes with brachytherapy)
- hormone therapy alone
- watchful waiting.



Read more in our fact sheet, **Locally advanced prostate cancer**.

Deciding whether to have treatment for slow-growing, localised prostate cancer

If tests show your localised prostate cancer is likely to grow slowly (low risk prostate cancer), you may be offered active surveillance. This is a way of monitoring prostate cancer with regular tests, instead of having treatment straight away.

The aim is to avoid or delay the side effects of treatment. If there are signs the cancer may be growing, you'll be offered treatment that aims to get rid of the cancer.

If you go on active surveillance, there's a very small chance your cancer could grow or spread before being picked up. But as you'll have regular tests to monitor the cancer, the risk of this happening is very low.

Research involving men with low risk localised prostate cancer has shown that men who go on active surveillance have the same chances of living for 10 years or more as men who choose surgery or external beam radiotherapy.

It's important to think about this when deciding whether to have treatment straight away or go on active surveillance. Read more in our fact sheets, **Localised prostate cancer** and **Active surveillance**.



Unsure about your diagnosis and treatment options?

If you have any questions, ask your doctor or nurse. They can talk you through your test results and your treatment options. Make sure you have all the information you need. You can also speak to our Specialist Nurses.



Surgery in Northern Ireland

At the time of printing (June 2022), some prostate surgery was being done in Northern Ireland, but some men were travelling outside of Northern Ireland to have their surgery. When this happens, the Health and Social Care service covers any extra costs.

What types of surgery are there?

There are three types of surgery to remove the prostate:

- robot-assisted keyhole (laparoscopic) surgery
- keyhole (laparoscopic) surgery by hand
- open surgery.

You can read more about what each of these types of surgery involves on page 5. The type of operation you have will depend on lots of things, including what's available at your hospital, where you're prepared to travel to, and what your surgeon recommends.

Studies have shown that all three techniques are as good as each other for treating prostate cancer, as long as the surgeon is experienced (see page 4). They also have similar rates of side effects such as urinary and erection problems.

The advantages of keyhole surgery, both by hand and robot-assisted, are that you're likely to lose less blood, have less pain, spend less time in hospital, and heal and return to normal activities more quickly than with open surgery.

Some hospitals don't do robot-assisted surgery, as it needs special equipment. If you particularly want robot-assisted surgery and your hospital doesn't offer it, your surgeon may be able to refer you to one that does.

What are the advantages and disadvantages?

What may be important for one person might be less important for someone else. The advantages and disadvantages of surgery may depend on your age, general health and the stage of your cancer.

If you're offered surgery, speak to your doctor or nurse before deciding whether to have it – they can help you decide if it's right for you.

Take time to think about whether you want to have surgery. There's a list of questions on page 14 that may help. You can also ask about any other treatments that might be available.

Advantages

- If the cancer is completely contained inside the prostate, surgery will remove all of the cancer.
- The prostate is looked at under a microscope after the operation. This gives a clearer picture of how aggressive your cancer is, whether it has spread outside the prostate (see page 10) and if you need further treatment.
- Your PSA level should fall to less than 0.1 ng/ml after surgery, giving health professionals a good idea of whether your cancer was completely removed (see page 10).
- If there are signs your cancer has come back or wasn't all removed, you may be able to have radiotherapy afterwards (see page 10).
- Some men find it reassuring to know their prostate has been physically removed, although you will still need to have follow-up tests to make sure no cancer cells have spread outside the prostate (see page 9).

Disadvantages

- There are risks involved in having a radical prostatectomy, as with any major operation (see below).
- You might get side effects such as urinary and erection problems (see page 10).
- You'll need to stay in hospital – usually for between one and five days depending on the type of surgery you are having.
- If the cancer has started to spread outside the prostate, the surgeon may not be able to remove all of the cancer (see page 10), and you might need further treatment.

- You won't be able to have children naturally or ejaculate after surgery as you won't produce semen. But it's possible to store sperm before surgery for fertility treatment (see page 12).

What are the risks of surgery?

A radical prostatectomy is a major operation and, as with all major surgery, there are some risks involved. These include:

- bleeding during or soon after the operation – you might need a blood transfusion, but this is very unlikely if you have keyhole surgery (less than 1 in every 100 men)
- injury to nearby tissue, including the bowel, blood vessels, nerves and pelvic floor muscles
- blood clots in the lower leg that could travel to the lungs (less than two in every 100 men)
- infection (about one to five in every 100 men)
- scarring where the surgeon makes cuts in your abdomen
- problems caused by the anaesthetic (the drugs that stop you feeling anything during the operation), but serious problems are rare.

Things that can affect how your surgery goes, your risk of side effects, and whether or not you will need more treatment include:

- whether your cancer has spread
- how aggressive your cancer is
- your general health
- your surgeon's experience and skill.

Research suggests surgeons who do a lot of prostatectomies each year get better results and patients have fewer side effects. Your surgeon should be able to tell you how many operations they've done, as well as the results of these operations and the rates of side effects.

You can look at information on surgeons and hospitals that do radical prostatectomies online. This information is known as outcomes data. It includes the number of operations they've done, and whether they were open, keyhole or robot-assisted. It also includes rates of complications (such as the risks of surgery listed above), but not side effects. Find out more at www.baus.org.uk/patients/surgical_outcomes

If you decide you want a different surgeon, you could ask to be referred to another surgeon or hospital. You don't have a legal right to this, but most doctors will respect your wishes. It might mean you'll wait longer to have your surgery though, as some hospitals and surgeons are busier than others.

What does surgery involve?

Before the operation

A week or more before your operation you will have a check-up at the hospital, usually with a nurse. This is called a pre-op assessment. You will have some tests and checks to make sure you're fit enough for the anaesthetic. These can include blood and urine tests, an electrocardiograph (ECG) to check how well your heart is working, a physical examination, and scans such as a chest X-ray.

Your nurse will also ask you about any allergies you have, and you'll need to bring a list of any medicines you're taking. You might need to stop taking some drugs, such as warfarin.

Your doctor or nurse may suggest you start doing pelvic floor muscle exercises a few weeks before your operation. These exercises strengthen the muscles that control when you urinate (wee). Starting them before the operation might help you recover more quickly from any urinary problems after surgery (see page 11).

We describe the exercises in our fact sheet,



Pelvic floor muscle exercises.

On the day of the operation

You will go into hospital on the day of your operation or possibly the day before. An anaesthetist will explain the anaesthetic you will have during the operation, and the pain relief you will have afterwards. You won't be allowed to eat for about six hours before the operation, although you may be able to drink water or certain other drinks until two hours before. This will be explained to you.

You may be given an enema (liquid medicine) or a suppository (a pellet) to clear your bowels. These are put inside your back passage (rectum).

A nurse will prepare you for your operation. They will put elasticated knee length stockings on your legs – you might hear these called TEDs. They reduce the chance of blood clots forming in your legs. You will keep these on until you are moving around normally again.

During the operation

You'll have a general anaesthetic, so you're asleep during the operation and won't feel anything. You might also have a spinal anaesthetic so that you can't feel anything in your lower body afterwards, to make you more comfortable. The operation usually takes two to four hours but can sometimes take longer.

Robot-assisted keyhole surgery

This is the most common type of surgery for prostate cancer in the UK. Your surgeon will make five or six small cuts (about 1 cm long) in your lower abdomen (lower stomach area) and a slightly bigger cut (a few centimetres long) near

Getting organised at home

Before your operation, it helps to get organised at home to make life easier when you leave hospital. You won't be able to lift heavy things for a while and you will need to rest. You could:

- fill your freezer with meals so you don't need to cook
- do your shopping online
- if possible, arrange to have a friend or relative with you for the first couple of days after you go home in case you need help

- arrange for people to help with things like cleaning
- if you have food or household goods in large heavy bags, put some in smaller containers
- get a list of useful phone numbers ready
- have some absorbent (incontinence) pads ready (see page 8)
- make sure you have some comfortable, loose clothes to wear while any soreness settles down.

your belly button. They will insert a tube with a small camera on the tip through one of the smaller cuts. The image will appear on a screen so the surgeon can see what they're doing.

Your surgeon will then insert special surgical tools through the other cuts (called ports) to do the operation. They will inflate your abdomen with carbon dioxide gas at the start. This creates space between your organs for their surgical tools to move, and for the camera to get a good view of your prostate.

The surgeon will control the tools from a console in the operating room via four robotic arms. You may hear the equipment called the 'da Vinci[®]' robot. Although it's 'robot-assisted', it's still a surgeon who does the operation. They will take the prostate out through the cut near your belly button and close the cuts with a special type of glue or stitches.

Very rarely, the surgeon may need to switch to open surgery if it isn't possible to complete the operation using keyhole surgery.

Keyhole surgery by hand

The surgeon will make four or five small cuts in your abdomen. But unlike with robot-assisted surgery, they will hold the surgical tools in their hands, rather than using robotic arms.

Open surgery

Your surgeon will make a single cut (about 15 to 20cm long) in your lower abdomen, below your belly button, to reach the prostate. The surgeon will do the operation by hand, before closing the cut with stitches or clips.

Saving the nerves during surgery

There are two bundles of nerves attached to the prostate that help you get erections. Your surgeon will try to save these nerves if it's possible, depending on where the cancer is. This is called nerve-sparing surgery.

If your surgeon thinks your cancer may have spread to the nerves, they may need to remove one or both of these bundles. This will cause problems getting an erection without medical

help (see page 11). Even if the nerves are saved, it can still take some time for your erections to recover.

Although these nerves are involved in erections, they don't control feeling in the penis or the surrounding area. So even if the nerves are damaged or removed, you won't lose any feeling, and you should still be able to have orgasms.

After the operation

You will wake up in the recovery room. You will have an oxygen mask on, as you will be breathing more slowly than usual while the anaesthetic wears off. You will have a drip in your arm (intravenous infusion) to give you fluids and pain relief, and you will have a catheter in place to drain urine from your bladder (see below). You may also have a thin tube in your lower abdomen to drain fluid from the area where your prostate used to be (the prostate bed). This tube is usually removed 24 to 48 hours after the operation.

Tell your doctor or nurse if you have any pain or feel sick. They can give you drugs to help with this. When your doctor or nurse is happy with your progress, you will be taken back to the ward.

Catheter

You'll have a thin, flexible tube (called a catheter) passed up your penis to drain urine from your bladder while the area heals. The catheter is put in place during the operation, while you're asleep. It may feel strange or uncomfortable at first and you may feel like you need to urinate all the time. This feeling usually passes after a few hours and the catheter should drain all the urine without you needing to do anything.

Most men go home with the catheter in, and it will be removed at the hospital one to three weeks after your surgery. Read more on page 7.

Pain

You will be given pain-relieving drugs after the operation if you need them. These should control any pain you have, but tell your doctor or nurse if you have any pain. They will find the right type and amount of pain relief for you.

The drugs are usually given into a vein in your arm or hand through a drip. You might have a pump so you can give yourself pain relief, without having to wait for someone to bring it to you. There is a limit on the pump so you can't give yourself too much medicine by mistake.

After keyhole surgery, you may have some pain in the tip of your shoulder for a few days. This is caused by the carbon dioxide used during surgery. The gas irritates the nerves, and this can cause pain. Your stomach may also feel bloated, and you might feel some cramping and tightness. It's usually quite mild and goes away over time.

Swelling

You may have some bruising and swelling in and around your testicles and penis. This might make it uncomfortable to sit on hard surfaces. It shouldn't last more than a few weeks and may pass much sooner. If you have a lot of swelling, or if it gets worse, tell your doctor.

If you still have some swelling when you go home, you may find underpants (briefs) give you more support and are more comfortable than loose boxer shorts. You can also buy supportive underwear, such as a jock strap or a testicle support, to help control any swelling.

If you had lymph nodes removed during the operation, this can very occasionally cause swelling in the scrotum (the skin containing your testicles) and one or both legs (lymphoedema). You will be given compression stockings to help encourage the fluid to drain from your legs if you need them.

Eating and drinking

Your team will let you know when it's safe to start eating and drinking. You will usually start with sips of water.

Getting out of bed

You will be encouraged to get out of bed and start moving around slowly as soon as you can – usually on the morning after your operation. This reduces your risk of having a blood clot.

You may be prescribed daily injections for two to four weeks to reduce the risk of blood clots. If you need injections, your nurse will teach you how to inject yourself, or you will be referred to a district nurse who can give you the injections.

You will be able to go home one to five days after the operation, depending on your recovery and your doctor's advice.



At first, moving in bed was uncomfortable and sore. But it soon got much easier.

A personal experience

Going home

Some men worry about going home after having lots of support in the hospital – but you'll have the name of someone to contact at the hospital if there's a problem. A district nurse might visit you at home during the first few weeks. Talk to your doctor or nurse about this before your operation.

Looking after your catheter

Before you go home, your nurse will show you how to look after your catheter. The catheter will be attached to a bag that can be worn inside your trousers, strapped to your leg. Make sure the tube isn't bent or blocked, as this could stop urine draining into the bag.

The following tips can help prevent urine infections while you have a catheter.

- Always wash your hands with soap and water before and after touching your catheter.
- Wash the catheter and the area near the tip of your penis at least twice a day with warm water and unscented soap. Use one wash cloth for this and a different one for the rest of your body. Wipe downwards along the catheter, away from your body, and dry it carefully afterwards.

- Drink plenty of water (about 1.5 to 2 litres, or 3 to 4 pints a day).
- Eat plenty of fibre to avoid constipation (difficulty emptying your bowels) as this can stop the catheter draining properly.

Your catheter will be removed at the hospital one to three weeks after your surgery. This can be uncomfortable but it only takes a few seconds. Your doctor or nurse needs to make sure you can urinate before you go home – you might need to wait for a couple of hours so they can check. Some men need to have an X-ray of their bladder (called a cystogram) to make sure the muscle between their bladder and urethra (bladder neck sphincter) has healed before having their catheter removed.

You may notice some blood in your urine while the catheter is still in, and just after it's removed. This is quite common and usually stops on its own.

It's common to leak urine when the catheter is first removed, so remember to take some absorbent (incontinence) pads and spare underwear and trousers to the hospital. Close-fitting underwear can help to keep the pads in place, and men often find loose trousers most comfortable.

Some hospitals will provide a few absorbent pads. You can get more from pharmacies, chemists, large supermarkets or online. Services vary but your local NHS service may provide some free pads. You may also be able to order them from a supplier without paying VAT.



When they took the catheter out, I needed a pad straightaway as a lot of urine was coming out.

A personal experience

Surgery support pack

If you've decided to have surgery, our surgery support pack might be helpful. It includes information about the operation and how to manage the side effects of surgery. It also includes a small supply of absorbent pads for you to try, disposable bags for used pads, and wet wipes. The pack is designed to help you prepare for surgery, and to support you in the first couple of days after your catheter is removed. If you'd like to order a surgery support pack, speak to our Specialist Nurses.



Your wound

After keyhole surgery, the cuts are usually closed with a special type of glue, clips or stitches. The cuts heal within a few days and the stitches slowly dissolve and fall out on their own, so they don't need to be removed.

If you have open surgery, the cut is usually closed with stitches or clips. Some types of stitches need to be removed in hospital or by your GP after one to two weeks.

You may feel some pain in and around your wound. But your hospital will give you some painkillers before you go home and the pain should slowly improve as your wound heals. Most men find it's completely gone four to six weeks after their surgery.

If your pain gets worse, your wound becomes red, hot, tender or inflamed, or if you develop a high temperature (fever), contact your specialist nurse at the hospital or your GP, or go to your nearest accident and emergency (A&E) department.

The scars from your operation will fade over time. The muscles and tissues inside your body also need to heal. This may take several months and can sometimes take up to a year.

You will need to take it easy for the first couple of weeks after surgery. Gentle exercise around the home and a healthy diet will help your recovery. Light exercise such as a short walk every day will help improve your fitness. If you can, avoid climbing lots of stairs, lifting heavy objects or

doing manual work for eight weeks after the operation. Talk to your doctor about when it's safe to return to your usual activities or work.

It's safe to masturbate when you feel ready, there's no need to wait. After keyhole surgery, you can have sex or be sexually active once your catheter is removed, but most men wait several weeks. After open surgery, wait until the wound has healed and it feels comfortable before you try having gentle sex. If you receive anal sex, you may have to wait six weeks before having sex. This is because surgery can damage the back passage, which can make anal sex uncomfortable.

Constipation

Your bowel habits may take a few weeks to return to normal. You may have no bowel movements for several days after surgery. This is usually caused by the painkillers you'll be taking.

If this carries on or becomes uncomfortable you may need medicine to help empty your bowels (called a laxative). Your doctor might give you some laxatives to prevent constipation, but if not, ask your pharmacist for some as soon as you start having trouble. It's important you don't strain. Ask your doctor, nurse or GP for advice.

Eating high fibre foods (such as wholegrains and fruit), drinking plenty of fluids, and doing gentle physical activity may help. Read more in our fact sheet,



Diet and physical activity for men with prostate cancer.



I was constipated and passed a lot of wind. Drinking plenty of fluids and taking a regular walk helped get things moving.

A personal experience

Feeling tired

Some men get fatigue (extreme tiredness) for a few weeks or months after surgery. This should pass with time. Try to eat healthily and be physically active when you feel able to. This can help give you more energy.



Read more about ways to manage fatigue in our fact sheet, **Fatigue and prostate cancer**, or get practical tips in our interactive online guide at prostatecanceruk.org/guides

When to call your doctor or nurse

It's important to tell your doctor or nurse if:

- your bladder feels full or your catheter isn't draining urine
- your catheter leaks or falls out
- your urine contains blood clots, turns cloudy, dark or red, or has a strong smell
- your wound or the tip of your penis becomes red, swollen or painful
- you have a fever (high temperature of more than 38°C or 101°F)
- you feel sick (nauseous) or vomit
- you get cramps in your stomach area that won't go away
- you get pain or swelling in the muscles in your lower legs.

Your doctor or nurse will let you know if you should go to the hospital.

What happens next?

You will have regular check-ups after your operation – this is called follow-up. These appointments are to check whether your surgery has removed all of the cancer, help you deal with any side effects, and give you a chance to raise concerns and ask questions.

Your check-ups will usually start between six and eight weeks after surgery, and you will usually have one every three to six months. Around two years after your treatment, you may start to have appointments less often. The place where you have your follow-up appointments may change.

For example, you might have your first few appointments at hospital and then be offered follow-up at your GP surgery or over the phone.

At some hospitals, you may have fewer follow-up appointments, and be encouraged to take greater control of your own health and wellbeing. You might hear this called self-management. You may be able to see your results online and you may be given a support worker who will be your main contact during your follow-up care. You may also be invited to a workshop to develop the knowledge, skills and confidence to take care of your health.

Each hospital will do things slightly differently, so ask your doctor or nurse where and how often you will have check-ups.

PSA test

You will have a prostate specific antigen (PSA) blood test a week before your check-up, so the results will be available at the appointment. PSA is a protein produced by cells in the prostate, including prostate cancer cells. The PSA test is a good way of checking if your treatment has worked.

Your PSA level should drop so low it's not possible to detect it (less than 0.1 ng/ml) at six to eight weeks after surgery. A rise in your PSA level may suggest some cancer cells were left behind. If this happens, your doctor will talk to you about further tests and treatment.



Read more about follow-up in our booklet, **Follow-up after prostate cancer treatment: What happens next?**

The prostate

After your prostate is removed it will be sent to a laboratory to be looked at under a microscope. If you had lymph nodes removed these will be looked at too. This can give a clearer idea of how aggressive the cancer might be and whether it has spread. Your doctor will discuss the results with you at your first check-up. They may talk about 'negative or clear surgical margins' or 'positive surgical margins'.

- **Negative or clear surgical margin** – this means the tissue the surgeon removed was surrounded by a layer of normal tissue. It suggests all the cancer was removed.
- **Positive surgical margin** – this means there are cancer cells on the edge of the tissue the surgeon removed. It suggests that some cancer cells may have been left behind, and you may need further treatment.

Further treatment

If your results suggest some cancer cells may have been left behind or the cancer has come back, you might be offered radiotherapy, on its own or with hormone therapy. You may also be able to take part in a clinical trial. Read more in our booklet, **If your prostate cancer comes back: A guide to treatment and support.**

Going back to work

The amount of time you take off work will depend on how quickly you recover, how much physical effort your work involves, and whether you feel ready to go back to work. If you have open surgery, you might need longer to get back to your usual activities than after keyhole surgery. Ask your doctor or nurse about how much time you need to take off.

Driving

You will be able to sit in a car as a passenger while your catheter is still in. You may want to avoid long journeys for the first two weeks after the catheter is removed until you are used to dealing with any problems, such as leaking urine.

There are no official guidelines for how long you should wait before driving. Speak to your doctor about when it's safe for you to drive. You need to feel you can do an emergency stop comfortably. Check with your insurance company how soon after surgery you are insured to drive.

What are the side effects?

Like all treatments, surgery can cause side effects. These affect each man differently and you might not get all the possible side effects.

The most common side effects of surgery are leaking urine (urinary incontinence) and problems getting or keeping an erection (erectile dysfunction). Your risk of getting these side effects depends on your overall health and age, how far the cancer has spread in and around the prostate and how likely it is to grow, and your surgeon's skill and experience.

Worrying about possible side effects can make you feel down. Before your operation, talk to your doctor or nurse about the side effects. Knowing what to expect can help you deal with them. You can also speak to our Specialist Nurses.



Urinary problems

Leaking urine

Most men can't control their bladder properly when their catheter is first removed. This is because surgery can damage the muscles and nerves that control when you urinate. These include the pelvic floor muscles, which stretch below the bladder and help support it. The muscle at the opening of the bladder, which normally stops urine leaking, may also be affected.

You might just leak a few drops if you exercise, cough or sneeze (stress incontinence). Or you might leak more and need to wear absorbent pads, especially in the weeks after your surgery. You might also leak urine during sex.

Your risk of leaking urine depends partly on your age and whether you leaked urine before surgery. For example, older men are more likely to have problems with leaking urine after surgery.

Leaking urine usually improves with time. Most men start to see an improvement one to six months after surgery. But some men leak urine for a year or more and others never fully recover. This can be hard to deal with, but there are things that can help.

Watch Paul's story on our website at prostatecanceruk.org/real-stories for his experience of leaking urine after surgery.



I found using pads reassuring. They kept the urine away from my skin so it didn't irritate.

A personal experience

Difficulty urinating

A few men (less than five out of every 100 men) may find it difficult to urinate after surgery (urine retention). This can be caused by scarring around the opening of the bladder or the urethra (the tube you urinate through). This causes the urethra to become narrow, which is called a stricture. It can happen soon after surgery, or it might develop several months after. This is less likely to happen if you have robot-assisted surgery.

Some men find they suddenly and painfully can't urinate. This is called acute urine retention and it needs treating quickly to prevent further problems. Call your doctor or nurse or go to your nearest accident and emergency (A&E) department. They may need to drain your bladder using a catheter. Make sure they know you've had surgery for prostate cancer. If this happens in the few weeks after your surgery, you will need to see a urologist.



Read about ways to manage urinary side effects in our fact sheet, **Urinary problems after prostate cancer treatment**, or get practical tips in our interactive online guide at prostatecanceruk.org/guides

Sexual problems

Erection problems

During the operation, the nerves that control erections may be removed or damaged. This often causes problems getting or keeping an erection after surgery (erectile dysfunction).

If your nerves were removed, you'll need to rely on treatments to get an erection. Even if you had nerve-sparing surgery (see page 6), you may still have erection problems because the nerves could be affected for a while.

How likely you are to have erection problems will depend on several things, such as:

- your age and weight
- the strength of your erections before surgery
- other health problems such as high blood pressure or diabetes
- any medicines you take
- whether you smoke.

After surgery, including nerve-sparing surgery, most men find it difficult to get an erection strong enough for sex. It can take anything from a few months to a few years for erections to return and they may not be as strong as before. Some men will always need medical help to get erections, and some men might not be able to get erections even with medical help.

There are treatments available to help with erection problems. If you had nerve-sparing surgery, your doctor may prescribe tablets called PDE5 inhibitors, such as sildenafil (generic sildenafil or Viagra®) or tadalafil (generic tadalafil or Cialis®).

Other treatment options include a vacuum pump, injections, cream and pellets.

Your doctor may suggest starting treatment for erection problems before surgery or in the first few weeks afterwards. This is known as penile rehabilitation. If you had nerve-sparing surgery this may include daily tablets, and if you didn't it may involve a vacuum pump. Even if you aren't ready to have sex, starting treatment soon after surgery may improve your chances of getting erections later on. But it doesn't work for everyone.

There are specialist services available to support men with erection problems. Talk to your doctor or nurse to find out more.

If you have anal sex and prefer being the penetrative partner (top), you normally need a strong erection, so erection problems can be a particular issue. There are things that can help, such as using a constriction ring along with tablets. Our booklet, **Prostate cancer tests and treatment: A guide for gay and bisexual men**, has more information.



Side effects can be managed and there is lots of help out there. Ask your doctor about available services.

A personal experience

Changes in penis size and shape

Some men notice that their penis is a little shorter or curved after surgery. Using a vacuum pump, possibly with PDE5 inhibitor tablets, could help maintain the size of your penis.

Changes to orgasms

The seminal vesicles, which make most of the fluid in semen, are removed during surgery. This means you may have a 'dry orgasm' (where you feel the sensation of an orgasm but don't ejaculate), delayed orgasms (difficulty reaching an orgasm), feel pain when you orgasm, have less intense orgasms, or not be able to orgasm at all.

Desire for sex (libido)

Being diagnosed with prostate cancer and the time leading up to and after surgery can make you feel down or anxious. This can make you lose interest in sex.

Having children

After your operation, you won't be able to father a child naturally. You may want to think about storing your sperm before having surgery, so that you can use it later for fertility treatment. Ask your doctor or nurse about sperm storage.

Loss of sensitivity

If you receive anal sex, a lot of the pleasure comes from the penis rubbing against the prostate. As you will no longer have a prostate your experience of sex will probably change after surgery.

Read more about all of these sexual side effects in our booklet, **Prostate cancer and your sex life**.



You can also watch or read our real life stories on our website at prostatecanceruk.org/real-stories, or get practical tips in our interactive online guide at prostatecanceruk.org/guides


Dealing with prostate cancer

Having prostate cancer can change the way you feel about life. You might feel scared, stressed or even angry. There's no 'right' way to feel and everyone reacts differently. There are things you can do to help yourself and people who can help. Your loved ones may also need support – this section might be helpful for them too.

How can I help myself?

- **Look into your treatment options.** Ask your nurse or doctor about any side effects so you know what to expect and how to manage them.
- **Talk to someone.** It could be someone close or someone trained to listen, like a counsellor or your doctor or nurse.
- **Set yourself goals and things to look forward to.** Even if they're just for the next few weeks or months.
- **Look after yourself.** Learn some techniques to relax and manage stress, such as breathing exercises or listening to music.
- **Eat healthily.** It's good for your general health and can help you stay a healthy weight, which may be important for men with prostate cancer. Read our fact sheet,  **Diet and physical activity for men with prostate cancer.**
- **Be as active as you can.** Take things at your own pace and don't overdo it. Our fact sheet (see above) has lots of ideas to help you get active.
- **Check out our online 'How to manage' guides.** Our interactive guides have lots of practical tips to help you manage symptoms and side effects. We have guides on fatigue,

sex and relationships, and urinary problems. Visit prostatecanceruk.org/guides

 Visit prostatecanceruk.org/living for more ideas, or read our booklet, **Living with and after prostate cancer: A guide to physical, emotional and practical issues**. You could also contact Macmillan Cancer Support, Maggie's, Penny Brohn UK or your nearest cancer support centre.

Who else can help?

Your medical team

It may be useful to speak to someone in your medical team. They can explain your diagnosis, treatment and side effects, listen to your concerns, and put you in touch with other people who can help.

Trained counsellors

Many hospitals have counsellors or psychologists who specialise in helping people with cancer. Ask your doctor or nurse if this is available.


Support groups

At support groups, men get together to share their experiences of living with prostate cancer. Some groups are run by health professionals, others by men themselves.

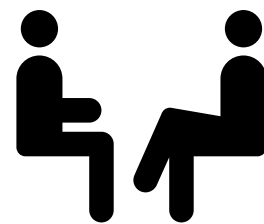
Prostate Cancer UK services

We have a range of services to help you deal with problems caused by prostate cancer or its treatments, including:

- **our Specialist Nurses**, who can help with any questions in confidence
- **our one-to-one support service**, where you can speak to someone who's had surgery
- **our online community**, a free forum to ask questions or share experiences
- **our sexual support service**, delivered over the phone by a Specialist Nurse with a particular interest in sexual problems.

 To find out more about any of our services, visit prostatecanceruk.org/get-support or call our Specialist Nurses on 0800 074 8383.

Questions to ask your doctor or nurse



You may find it helpful to keep a note of any questions you have to take to your next appointment.

Do you think surgery is a good option for me and why?

What type of surgery do you recommend for me? Will you try to do nerve-sparing surgery?

How many of these operations have you done and how many do you do each year?

Can I see the results of radical prostatectomies you've carried out?

How long should I expect to be in hospital?

What pain relief will I get after the operation?

How and when will we know whether the operation has removed all of the cancer?

How often will my PSA level be checked?

What is the chance of needing further treatment after surgery?

What support can you offer me if I get long-term side effects?

More information

Bladder and Bowel UK

www.bbuk.org.uk

Telephone: 0161 214 4591

Information and advice about bladder and bowel problems.

British Association for Counselling & Psychotherapy

www.bacp.co.uk

Telephone: 01455 883 300

Information about counselling and details of therapists in your area.

Cancer Research UK

www.cancerresearchuk.org

Telephone: 0808 800 4040

Information about cancer and clinical trials.

Continence Product Advisor

www.continenceproductadvisor.org

Unbiased information on products for continence problems, written by health professionals.

Macmillan Cancer Support

www.macmillan.org.uk

Telephone: 0808 808 0000

Practical, financial and emotional support for people with cancer, their family and friends.

Maggie's

www.maggies.org

Telephone: 0300 123 1801

Drop-in centres for cancer information and support, and online support groups.

Penny Brohn UK

www.pennybrohn.org.uk

Telephone: 0303 3000 118

Courses and physical, emotional and spiritual support for people with cancer and their loved ones.

Sexual Advice Association

www.sexualadviceassociation.co.uk

Information about sexual problems and their treatments, including erection problems.

About us

Prostate Cancer UK has a simple ambition: to stop men dying from prostate cancer – by driving improvements in prevention, diagnosis, treatment and support.

Download and order our fact sheets and booklets from our website at prostatecanceruk.org/publications or call us on **0800 074 8383**.

At Prostate Cancer UK, we take great care to provide up-to-date, unbiased and accurate facts about prostate cancer. We hope these will add to the medical advice you have had and help you to make decisions. Our services are not intended to replace advice from your doctor.

References to sources of information used in the production of this fact sheet are available at prostatecanceruk.org

This publication was written and edited by our Health Information team.

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- Samantha Thompson, Uro-oncology Clinical Nurse Specialist, Belfast Health and Social Care Trust, Northern Ireland
- Our Specialist Nurses
- Our volunteers.



Speak to our Specialist Nurses

0800 074 8383*

prostatecanceruk.org

Donate today – help others like you

Did you find this information useful? Would you like to help others in your situation access the facts they need? Every year, over 47,000 men face a prostate cancer diagnosis. Thanks to our generous supporters, we offer information free to all who need it. If you would like to help us continue this service, please consider making a donation. Your gift could fund the following services:

- £10 could buy a Tool Kit – a set of fact sheets, tailored to the needs of each man with vital information on diagnosis, treatment and lifestyle.
- £25 could give a man diagnosed with a prostate problem unlimited time to talk over treatment options with one of our Specialist Nurses.

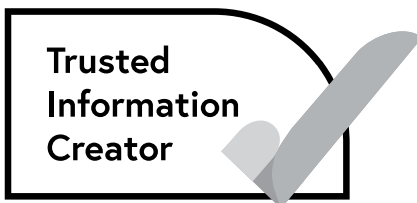
To make a donation of any amount, please call us on **0800 082 1616**, visit **prostatecanceruk.org/donate** or text **PROSTATE** to **70004**[†].

There are many other ways to support us. For more details please visit **prostatecanceruk.org/get-involved**

[†]You can donate up to £10 via SMS and we will receive 100% of your donation. Texts are charged at your standard rate. For full terms and conditions and more information, please visit prostatecanceruk.org/terms



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Patient Information Forum

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t Follow us on Twitter: **@ProstateUK**

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To be reviewed June 2022

Call our Specialist Nurses from Monday to Friday 9am - 5pm, Wednesday 10am - 5pm

* Calls are recorded for training purposes only.

Confidentiality is maintained between callers and Prostate Cancer UK.

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