Understanding Surgery
A guide for people with cancer, their families and friends

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Understanding Surgery is reviewed approximately every two years. Check the publication date above to ensure this copy is up to date.


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Note to reader
Always consult your doctor about matters that affect your health. This booklet is intended as a general introduction to the topic and should not be seen as a substitute for medical, legal or financial advice. You should obtain independent advice relevant to your specific situation from appropriate professionals, and you may wish to discuss issues raised in this book with them.

All care is taken to ensure that the information in this booklet is accurate at the time of publication. Please note that information on cancer, including the diagnosis, treatment and prevention of cancer, is constantly being updated and revised by medical professionals and the research community. Cancer Council Australia and its members exclude all liability for any injury, loss or damage incurred by use of or reliance on the information provided in this booklet.

Cancer Council
Cancer Council is Australia’s peak non-government cancer control organisation. Through the eight state and territory Cancer Councils, we provide a broad range of programs and services to help improve the quality of life of people living with cancer, their families and friends. Cancer Councils also invest heavily in research and prevention. To make a donation and help us beat cancer, visit cancer.org.au or call your local Cancer Council.

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Introduction

This booklet has been prepared to help you understand more about surgery, one of the main treatments for cancer. Surgery may be used by itself or with other cancer treatments.

It’s natural to feel nervous before surgery. Knowing what to expect, how to plan for surgery and the recovery process may make you feel less anxious. However, we cannot give advice about the best treatment for you. You need to discuss this with your doctors. We hope this booklet will answer some of your questions and help you think about other questions to ask your treatment team.

This booklet does not need to be read from cover to cover – just read the parts that are useful to you. Some medical terms that may be unfamiliar are explained in the glossary. You may also like to pass this booklet to your family and friends for their information.

How this booklet was developed

This information was developed with help from a range of health professionals and people who have had cancer surgery.
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What is cancer?

Cancer is a disease of the cells, which are the body’s basic building blocks. The body constantly makes new cells to help us grow, replace worn-out tissue and heal injuries. Normally, cells multiply and die in an orderly way.

Sometimes cells don’t grow, divide and die in the usual way. This may cause blood or lymph fluid in the body to become abnormal, or form a lump called a tumour. A tumour can be benign or malignant.

**Benign tumour** – Cells are confined to one area and are not able to spread to other parts of the body. This is not cancer.

**Malignant tumour** – This is made up of cancerous cells, which have the ability to spread by travelling through the bloodstream or lymphatic system (lymph fluid).

How cancer starts

- **Normal cells**
- **Abnormal cells**
- **Abnormal cells multiply**
- **Malignant or invasive cancer**
The cancer that first develops in a tissue or organ is called the primary cancer. A malignant tumour is usually named after the organ or type of cell affected.

A malignant tumour that has not spread to other parts of the body is called localised cancer. A tumour may invade deeper into surrounding tissue and can grow its own blood vessels in a process called angiogenesis.

If cancerous cells grow and form another tumour at a new site, it is called a secondary cancer or metastasis. A metastasis keeps the name of the original cancer. For example, breast cancer that has spread to the bones is called metastatic breast cancer, even though the person may be experiencing symptoms caused by problems in the bones.
How cancer is treated

The aim of cancer treatment is remission or cure, which is when the signs and symptoms of cancer reduce or disappear. Your treatment will depend on several factors, including:
- the type of cancer you have
- where the cancer began (the primary site)
- whether the cancer has spread to other parts of your body
- your general health and treatment preferences.

Treatments for cancer include:
- **surgery** – aims to remove the cancer from the body
- **radiotherapy** – uses radiation to kill cancer cells or damage them so they cannot grow or multiply
- **chemotherapy** – uses drugs to destroy cancer cells or slow their growth
- **immunotherapy** – uses antibodies or vaccines to help the body’s immune system fight cancer cells
- **hormone therapy** – uses drugs to reduce or block the effect of natural hormones in the body that cause some cancer cells to grow.

Many cancers can be treated using these methods, either alone or in combination. For example, you may have surgery to remove the cancer followed by radiotherapy to target any remaining cancer cells.

Further information

This booklet provides a general overview of what to expect when you have surgery for cancer. For information about surgery for the cancer you have, call Cancer Council 13 11 20 and ask for a free booklet, or download a digital version from your local website.
Q: What is surgery?
A: Surgery is a medical treatment performed by a surgeon or a surgical oncologist to remove cancer from the body or repair a part of the body affected by cancer. It’s sometimes called an operation or surgical resection.

For many cancers, doctors follow medical standards called clinical practice guidelines, which outline treatments that have been verified by research. Sometimes surgery is the most effective approach for a particular type of cancer, which is why it is recommended. In other cases, non-surgical treatments have been proven to be more effective.

Q: How is surgery used for cancer?
A: There are several reasons why surgery is used for cancer:

**Prevention** – Preventive or prophylactic surgery aims to remove healthy tissue that doctors believe will probably become cancerous in the future. It may significantly reduce a person’s cancer risk. For example, a woman with a strong family history of ovarian cancer may have prophylactic surgery to remove her healthy ovaries. The decision to have any type of prophylactic surgery should always be made after talking to qualified health professionals, including a genetic counsellor.

**Diagnosis** – Surgery may be done to confirm a cancer diagnosis. The doctor may remove all or part of a tumour in a procedure called a biopsy (see page 17–19).
Staging – Surgery can help the doctor determine the size of the tumour and whether the cancer has spread. This is called staging. The results of the surgery and other tests will help the doctor work out the stage and decide on appropriate treatment. Call 13 11 20 for more information about staging.

Primary treatment – Small, early-stage cancers that haven’t spread are often successfully treated with surgery. If the cancer is confined to one part of the body, the surgeon will remove the cancerous tissue or a whole organ. This may be the only treatment, or it may be combined with other treatments – see What other treatments might I have?, page 13.

Debulking – If it is not possible to remove all the cancer without damaging nearby healthy organs, a surgical procedure called debulking is done to remove as much of the tumour as possible and to make other cancer treatments more effective.

Reconstructing the body – Reconstructive or plastic surgery can be done for different reasons, such as to improve your appearance and self-image, and to help with mobility or function. Examples include breast reconstruction after a mastectomy, or a skin graft after surgery for skin cancer.

Supporting other treatments – Supportive surgery is done to help another cancer treatment. For example, you may have day surgery to insert a tube (catheter) into a large vein in your chest so you can receive chemotherapy (e.g. via a central venous access device or port).
Palliative treatment – Surgery can be used to improve quality of life by easing symptoms and side effects of cancer and treatment. For example, surgery may be done if the cancer grows very large and blocks the bowel (obstruction). Other surgical procedures can help to reduce pain.

See page 20 for information about the types of surgery used for cancer.

Q: How is surgery done?
A: The way the surgery is done (the approach or technique) depends on the type of cancer, its location, the surgeon’s training and the equipment in the hospital/operating theatre. There are many different techniques that surgeons can use.

Doctors are constantly developing new surgical techniques with the aim of improving recovery times and causing less pain.

Open surgery – During open surgery, the surgeon makes a single vertical cut (incision) into the body to see and operate on the organs and remove cancerous tissue. Sometimes the cut can be quite large. Open surgery might also be used to find out more information about the cancer and its stage.

For cancers in the abdomen or the pelvic area, open surgery is the most common approach and is known as a laparotomy. When open surgery is done on the chest area, it is called a thoracotomy.
**Keyhole surgery** – Also called minimally invasive surgery, this is when the surgeon makes a few small cuts in the body instead of the one large cut used in open surgery.

For abdominal surgery (laparoscopy), the surgeon makes about 3–5 small cuts and inserts an instrument called a laparoscope. This has a camera and a light attached to it, and the images are projected onto a TV screen. Other instruments are used to remove cancerous tissue.

Similar surgery can be performed on other parts of the body, such as the chest. This is sometimes called thoracoscopy or video-assisted thoracic surgery (VATS). Some people have keyhole surgery followed by open surgery.

In many cases, keyhole surgery can lead to a shorter stay in hospital and reduce bleeding, pain and recovery time.

**Robotic surgery** – This is a type of keyhole surgery where the surgical instruments are moved by robotic arms controlled by the surgeon, who sits at a console next to the operating table.

**Laser surgery** – A laser can be used to remove or destroy cancerous tissue. In some cases, laser surgery can be less invasive than other types of surgery.

**Cryosurgery** – Also called cryotherapy, this is often used to treat skin cancers. Liquid nitrogen is sprayed onto the skin to freeze and kill the cancerous tissue.
Q: Will I stay in hospital?
A: Often you will need to be admitted to hospital to have surgery. This is called inpatient care. The length of your hospital stay depends on the type of surgery you have, the speed of your recovery and whether you have support at home after you are discharged.

It may be possible to have surgery as an outpatient (day surgery). This means you can go home soon after the surgery – you don’t have to stay overnight in hospital, provided there are no complications. Your doctor will tell you whether you will have surgery as an inpatient or outpatient at one of your pre-surgery appointments.

Q: What is a surgical margin?
A: The surrounding tissue that is removed with the cancer is called the surgical margin. It is checked under a microscope in a laboratory by a pathologist. If there aren’t any cancer cells in the tissue, it is called a clear, negative or clean margin. If there are cancer cells, it is a positive or close margin, and you may require more treatment.

Before I had surgery for breast cancer, the doctor told me he didn’t know whether the cancer had spread. During surgery, he removed the tumour and an area around it. The pathology results showed there was cancer in the margin, and I had to have further surgery.
Q: Can surgery spread the cancer?

A: There are some situations where it is possible for surgery to spread the cancer, but these are very rare. In these cases, surgeons take precautions and will still operate if the benefits of surgery outweigh the risk of not having it.

For example, most men with testicular cancer have the entire testicle removed. This is because removing only part of the testicle can increase the chance of the cancer cells spreading during surgery.

If the surgeon has to remove tissue from more than one part of the body, they will use different instruments at each location to reduce the risk of cancer cells spreading.

Some people think cancer can spread if it’s exposed to air during surgery. This is incorrect. This myth may exist because people who feel worse after surgery than they did before might believe this is due to the cancer spreading. However, it’s common to feel unwell after surgery.

Another reason people may believe that exposure to air can spread cancer is if the surgeon finds more cancer than expected. In this case, the diagnostic tests and scans may not have shown all of the cancer, but the cancer was already there – surgery didn’t cause it to spread.

If you are concerned about the cancer spreading during surgery, talk to your surgeon or call Cancer Council 13 11 20.
Q: What questions should I ask?
A: It’s important to ask questions about the type of surgery recommended to you and the surgeon who will be operating, such as their training and experience. See pages 59–60 for a list of suggested questions.

Q: What other treatments might I have?
A: Other treatments, such as chemotherapy or radiotherapy, can be given before, during or after surgery. Call Cancer Council 13 11 20 for information about these treatments.

### Other cancer treatments

<table>
<thead>
<tr>
<th><strong>Neo-adjuvant therapy</strong></th>
<th>Given before surgery to try to shrink the tumour and make it easier to remove.</th>
</tr>
</thead>
</table>
| **Adjuvant therapy**     | Given after surgery, often when:  
                             • the tumour hasn’t been completely removed  
                             • cancer has spread to other parts of the body, such as the lymph nodes  
                             • there is a chance there are hidden cancer cells  
                             • the cancer is likely to come back. |
| **Simultaneous therapy** | Two types of treatment are given at the same time. This is rare – an example is specialised chemotherapy called hyperthermic intraperitoneal chemotherapy, which is delivered directly to the abdomen during surgery. |
Which health professionals will I see?

You will be cared for by a range of health professionals before, during and after surgery who will work as part of a multidisciplinary team (MDT). Read Cancer Council’s booklet about the type of cancer you have for a list of the people who will make up your MDT.

Some of the health professionals you may see include:

- **surgeon/surgical oncologist** – a doctor who specialises in the surgical treatment of cancer
- **anaesthetist** – a doctor who administers anaesthetic before surgery and monitors patients during the operation
- **cancer care coordinator or clinical nurse consultant** – coordinates your care, liaises with other members of the MDT and supports your family throughout treatment
- **nurses** – administer drugs and provide care, information and support throughout your treatment
- **social worker, psychologist** – link you to helpful services and provide emotional support to you and your family
- **dietitian** – recommends an eating plan to follow when you’re in treatment and recovery
- **physiotherapist** – helps you to move and exercise safely to regain strength, fitness and mobility
- **occupational therapist** – offers equipment/aids and advice about getting back to your daily activities
- **general practitioner (GP)** – provides follow-up care after surgery.

Other help is available in certain situations – for instance, if you will require a stoma (see page 32), a stomal therapy nurse will give you specialised information and support.
Making treatment decisions

Sometimes it is difficult to decide on the type of treatment to have. You may feel that everything is happening too fast. Check with your doctor how soon your treatment should start, and take as much time as you can before making a decision.

Understanding the disease, the available treatments and possible side effects can help you weigh up the pros and cons of different treatments and make a well-informed decision that’s based on your personal values. You may also want to discuss the options with your doctor, friends and family.

You have the right to accept or refuse any treatment offered. Some people with more advanced cancer choose treatment even if it offers only a small benefit for a short period of time. Others want to make sure the benefits outweigh the side effects so they have the best possible quality of life.

Talking with doctors

When your doctor first tells you that you have cancer, you may not remember the details about what you are told. Taking notes or recording the discussion may help. Many people like to have a family member or friend go with them to take part in the discussion, take notes or simply listen.

If you are confused or want clarification, you can ask for further explanation – see pages 59–60 for a list of suggested questions. If you have several questions, you may want to talk to a nurse or ask the office manager if it is possible to book a longer appointment.
A second opinion
You may want to get a second opinion from another specialist to confirm or clarify your doctor’s recommendations or reassure you that you have explored all of your options. Specialists are used to people doing this.

Your doctor can refer you to another specialist and send your initial results to that person. You can get a second opinion even if you have started treatment or still want to be treated by your first doctor. You might decide you would prefer to be treated by the doctor who provided the second opinion.

Taking part in a clinical trial
Your doctor or nurse may suggest you take part in a clinical trial. Doctors run clinical trials to test new or modified treatments and ways of diagnosing disease to see if they are better than current methods. For example, if you join a randomised trial for a new treatment, you will be chosen at random to receive either the best existing treatment or the modified new treatment.

Over the years, trials have improved treatments and led to better outcomes for people diagnosed with cancer.

It may be helpful to talk to your specialist or clinical trials nurse, or to get a second opinion. If you decide to take part, you can withdraw at any time. For more information, call Cancer Council 13 11 20 for a free copy of Understanding Clinical Trials and Research, or visit australiancancertrials.gov.au.
There are hundreds of different types of surgery used to diagnose, stage and treat cancer. Some of the more common types are outlined in this chapter – some are minor and are more commonly called procedures, while others are much bigger operations.

For more information about surgery to treat specific types of cancer, refer to Cancer Council’s booklet about the type of cancer you have. Call 13 11 20 and ask for a free copy, or download a digital version from your local Cancer Council website.

**Surgery to diagnose and stage cancer**

For most cancers, abnormal tissue must be removed and examined to make a diagnosis and find out whether the cancer has spread. This process is called staging. Staging can help the doctor recommend the best treatment for you. Some cancers are also given a grade, which describes how abnormal the cancer cells are and how fast they are growing.

The procedure used to diagnose and stage the cancer is called a biopsy, and it may be done under a local or general anaesthetic. The tissue sample is sent to a laboratory for examination under a microscope by a pathologist.

Often a biopsy is done using a thin or hollow needle, which may be guided by an ultrasound, x-ray or CT machine. A surgical biopsy (open biopsy) is done by cutting the body to remove all or part of the tumour. Various surgical tools can be used depending on the part of the body affected.
A biopsy is sometimes done in the doctor’s rooms, but it may also be done in an operating theatre in hospital as day surgery.

Sometimes diagnostic and staging surgery removes all of the cancer, and you don’t need further surgery or treatment. For specific information about staging the type of cancer you have, talk to your medical team or call Cancer Council 13 11 20 and ask for a free information booklet.

**Types of biopsy**
The types of biopsy used to diagnose and stage cancer include:

- **incisional biopsy** – part of the tumour is cut out

- **excisional biopsy** – the entire tumour is cut out. A margin of healthy tissue is usually removed at the same time

- **core biopsy** – a needle is used to remove a thin core of tissue. Sometimes a CT scan or ultrasound is used to guide the needle

- **fine needle aspiration or biopsy** – a thin needle is used to remove a sample of fluid and tissue from the tumour

- **skin biopsy** – a skin cancer is cut out. The doctor will do an incisional or excisional biopsy of the area. For more information about treating skin cancers, call Cancer Council 13 11 20 and ask for a free copy of *Understanding Skin Cancer* or *Understanding Melanoma*, or download digital versions from your local Cancer Council website
• **endoscopic biopsy/endoscopy** – a long, thin, flexible tube with a light and a camera is inserted into the body through a natural opening (e.g. the mouth) or a small cut. The doctor views images of the body on a TV or computer screen and takes a biopsy.

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Part of body tested</th>
<th>Where the tube is inserted</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bronchoscopy</td>
<td>Lungs or respiratory tract</td>
<td>Mouth or nose</td>
</tr>
<tr>
<td>Colonoscopy</td>
<td>Colon</td>
<td>Anus</td>
</tr>
<tr>
<td>Colposcopy</td>
<td>Vagina and cervix</td>
<td>A speculum is inserted into the vagina to view the organs</td>
</tr>
<tr>
<td>Cystoscopy</td>
<td>Bladder</td>
<td>Urethra</td>
</tr>
<tr>
<td>Gastroscopy</td>
<td>Stomach and small intestine</td>
<td>Mouth</td>
</tr>
<tr>
<td>Hysteroscopy</td>
<td>Uterus (womb)</td>
<td>Vagina</td>
</tr>
<tr>
<td>Laparoscopy</td>
<td>Stomach, liver, female reproductive organs</td>
<td>Small cuts in the abdomen</td>
</tr>
<tr>
<td>Laryngoscopy</td>
<td>Larynx (voice box)</td>
<td>Mouth</td>
</tr>
<tr>
<td>Mediastinoscopy</td>
<td>Chest</td>
<td>Small cut in the lower neck</td>
</tr>
<tr>
<td>Pyeloscopy</td>
<td>Kidney</td>
<td>Urethra</td>
</tr>
<tr>
<td>Sigmoidoscopy</td>
<td>Colon</td>
<td>Anus</td>
</tr>
<tr>
<td>Thoracoscopy</td>
<td>Lungs</td>
<td>Small cut in the chest</td>
</tr>
<tr>
<td>Ureteroscopy</td>
<td>Ureter</td>
<td>Urethra</td>
</tr>
</tbody>
</table>
## Surgery to treat cancer

The type of surgery used to treat cancer depends on the location and stage of the cancer and your general health. The table below lists some of the more common types of cancer surgery.

<table>
<thead>
<tr>
<th>Surgery</th>
<th>Cancer type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colectomy</td>
<td>Bowel</td>
</tr>
<tr>
<td>Craniotomy</td>
<td>Brain</td>
</tr>
<tr>
<td>Cystectomy</td>
<td>Bladder</td>
</tr>
<tr>
<td>Gastrectomy</td>
<td>Stomach</td>
</tr>
<tr>
<td>Hepatectomy</td>
<td>Liver</td>
</tr>
<tr>
<td>Hysterectomy</td>
<td>Cervical, ovarian, uterine</td>
</tr>
<tr>
<td>Laryngectomy</td>
<td>Laryngeal (voice box)</td>
</tr>
<tr>
<td>Lobectomy</td>
<td>Lung</td>
</tr>
<tr>
<td>Mastectomy</td>
<td>Breast</td>
</tr>
<tr>
<td>Nephrectomy</td>
<td>Kidney</td>
</tr>
<tr>
<td>Oesophagectomy</td>
<td>Oesophageal</td>
</tr>
<tr>
<td>Orchidectomy</td>
<td>Testicular</td>
</tr>
<tr>
<td>Pancreaticoduodenectomy (Whipple’s procedure)</td>
<td>Pancreatic</td>
</tr>
<tr>
<td>Pneumonectomy</td>
<td>Lung</td>
</tr>
<tr>
<td>Prostatectomy</td>
<td>Prostate</td>
</tr>
<tr>
<td>Thyroidectomy</td>
<td>Thyroid</td>
</tr>
<tr>
<td>Vulvectomy</td>
<td>Vulvar</td>
</tr>
</tbody>
</table>
Planning and preparation

To make the process of planning and having surgery easier, you need to:

• have the required preoperative tests
• understand the risks and possible complications, and give your informed consent
• follow specific instructions about how to prepare for surgery.

Preoperative assessment

During a preoperative assessment appointment, your medical team will check your fitness for surgery. The health professionals you see will vary depending on the type of cancer and surgery and your general health, but they could include:

• the surgeon or another member of the surgical team, such as a resident medical officer or registrar
• the anaesthetist or another member of the anaesthesia team, such as a specialist nurse or registrar
• a physiotherapist to show you exercises to do before surgery to improve the chances of a smooth recovery.

You will be asked about your medical history and any medicines you are taking. You may also have tests such as blood tests, urine tests and a chest x-ray, and imaging tests such as CT, MRI or PET scans. You probably won’t need to have all of these tests and scans.

Tell the doctor if you are taking any over-the-counter or herbal medicines, as these could affect the surgery and your recovery.
You will be told whether you will have surgery as an inpatient or outpatient, what to take to hospital, and other useful information (see Preparing for surgery, pages 25–26). Your legs may be measured for stockings to help reduce the chance of developing a blood clot in your veins (deep vein thrombosis or DVT). You might wear these during surgery and for a short time afterwards.

If you will need support services after surgery, such as the advice of a dietitian or social worker, you will be given referrals for these.

If you are having minor surgery, you may not need to attend a preoperative assessment appointment. Your doctor will discuss the surgery and how to prepare at one of your usual appointments.

**Understanding the risks**

Almost all medical procedures have risks, and surgery is no exception. Factors to consider when weighing up the risks and benefits include:

- the length of the operation
- the type of anaesthetic you will have
- your age and general health.

Although advances in surgical techniques have made surgery safer, there are still things that may not go as planned. Possible complications are discussed in the next two chapters – The day of the surgery (pages 28–35) and Recovering from surgery (pages 36–52). Overall, you and your surgeon should feel that the expected benefits outweigh the possible risks.
Informed consent

A doctor needs your agreement (consent) to perform any medical treatment. Receiving and understanding information about treatment before agreeing is called informed consent.

Adults can give their consent – or refuse it – if they have capacity. Capacity means they can understand the information about the proposed choices and make decisions based on this information.

Sometimes consent is not needed, such as in a medical emergency. However, if your surgery is planned, your doctor will discuss:
- why you need the surgery and its benefits
- other treatment options
- how they will perform the surgery
- possible side effects, risks and complications.

For more information about consent, read Cancer Council’s booklet *Cancer Care and Your Rights*. Call 13 11 20 and ask for a free copy, or download a digital version from your local Cancer Council website.

Waiting for surgery

It’s common to have to wait for surgery. The length of time depends on many factors, including the type of cancer you have and its stage, the surgery you are having and the hospital’s schedule. In most cases, waiting doesn’t have a major impact on the surgery outcome. If you are anxious or concerned about waiting for surgery, speak to your surgeon or call Cancer Council 13 11 20.
Frank’s story

When my mum was diagnosed with bowel cancer, the medical team recommended she have a right hemicolectomy to remove the affected parts of her bowel.

Before surgery, we went to the hospital to see the surgeon for the pre-assessment appointment. My wife and I went along to provide support and help Mum understand the surgeon’s instructions.

The surgeon talked to the three of us about the potential risks and benefits of the hemicolectomy. Mum’s elderly and she had heart problems a few years ago, so she takes low-dose aspirin daily. The doctor explained the risks of bleeding during the operation and told Mum to stop taking aspirin for a week before the surgery.

Even though it was stressful to ‘download’ all the medical information and instructions, the pre-assessment actually eased our minds. I walked away knowing that although it’s a major operation, very few people die. I also knew the practical things we had to do to help Mum prepare.

On the day of the surgery, we all felt nervous but ready. Mum was in theatre for a while, but she got through the operation without any problems. Over time and with the dietitian’s help, she resumed eating.

When I look back, I think Mum was calmer than us. It can be really nerve-racking and stressful to be the support person for someone having surgery. We found it helpful to ask the medical team questions about what was happening so we felt in control and knew how to look after her.
Preparing for surgery
At the preoperative assessment appointment, you will be given instructions about how to prepare for the surgery based on your health and medical history. Let your treatment team know if you have any concerns about what you are asked to do. The advice you receive will cover the following issues:

**Bathing and shaving** – You will be told to shower or bathe either the night or morning before surgery. If you have been told that hair near the surgical site will need to be shaved, you may be asked to do it yourself before you go to hospital, or it will be done when you are admitted. In cases where there is a lot of hair at the surgical site, you will be asked to avoid shaving the area yourself, as any cuts to the area can increase the risk of infection.

**Eating and drinking** – Most people are told not to eat or drink for 6–12 hours before surgery. This may be called fasting or nil by mouth, and it ensures that your stomach is empty before surgery. This reduces the risk of some complications. In some cases, you can continue drinking clear fluids until two hours before surgery – your surgeon or anaesthetist will advise you on this. You should also avoid drinking alcohol and smoking for at least 24 hours before the operation.

Smoking can delay your healing and recovery time. If you smoke, try to quit before you have surgery. Giving up smoking can be difficult. For help, talk to your doctor or call the Quitline on 13 7848.
**Medicine** – Your doctor will tell you whether to keep taking any medicine you are on or to stop taking it in the days or weeks before surgery. If you’re instructed to fast and have to take medicine, swallow it with a small mouthful of water.

**Support person** – You may want to ask a friend or family member to stay in the waiting room while you are in surgery. If you are having day surgery, you should arrange for someone to take you home when you are discharged. It’s not safe to travel alone or use public transport or a taxi, as you will still be under the effects of the anaesthetic. If your treatment centre has a social worker, they can help organise transport if necessary.

**Personal items** – Your treatment team will let you know what personal items to take to hospital with you and what to leave at home. For example, they may tell you to take all your current medicines with you, but suggest you leave valuables, such as jewellery, at home.

You will be asked to remove nail polish, including clear polish, before surgery. Checking your fingernails during surgery is one way the anaesthetist can monitor the level of oxygen in your blood.
Key points

• Your medical team will determine if you are fit enough for surgery by looking at your medical history and doing tests and scans. This is known as a preoperative assessment.

• You will be asked whether you are taking any medicines. Tell the doctor if you are taking over-the-counter or herbal medicines, as these could affect the surgery and your recovery.

• The doctor will explain whether you will have surgery as an inpatient or outpatient. You may be measured for stockings to help prevent blood clots.

• If you will need support services after surgery, such as a dietitian, you will receive referrals for these.

• There are risks associated with any surgery. Your doctor will explain these.

• The doctor needs your agreement (consent) to perform the operation. Receiving relevant information about the benefits and risks of surgery before agreeing to it is called informed consent.

• It’s common to have to wait for surgery. Your waiting time depends on how urgent your case is and the schedule of the hospital where you will have the surgery.

• To prepare for surgery, you will be given instructions based on your health and medical history. Instructions will cover issues such as bathing and shaving, eating and drinking, medicines you are taking, transport home from the hospital, and what to take with you.
The day of the surgery

Although each person’s situation is different, the information in this chapter provides a general overview of what may happen on the day of the surgery. Procedures vary between hospitals and according to whether you have surgery as an outpatient or inpatient.

Admission and preparation

Aim to arrive at the time allocated to you by the hospital, which is called the admission time. Arriving early doesn’t mean you’ll be admitted or have surgery early. When you’re admitted, you might not know the exact time of the surgery, but you’ll probably know if it will be in the morning or the afternoon. Sometimes there are unexpected delays, depending on other patients or emergencies – the receptionists and nurses will keep you informed.

You will change into a surgical gown and put your personal possessions in a bag for storage or to give to your support person. If the surgery is to a part of your body with hair, it will be shaved unless you have already done it yourself.

Some people are given a sedative (pre-medicine or pre-med) as an injection or tablet to help them feel relaxed.

While your medical team can give you information about the surgery, there may be some unknown factors. For instance, they may not know until the surgery how many stitches you will need or if you will need a blood transfusion. See pages 31–32 for more information about unknown factors.
**Anaesthetic**

You will be given drugs (anaesthetic or anaesthesia) to temporarily block any pain or discomfort during the surgery. An anaesthetist will administer these drugs and monitor you throughout the operation.

Before you receive anaesthetic, the medical team will talk to you about your medical history. You should also tell them when and what you last ate and drank, or if you think you have a cold or the flu.

There are different types of anaesthetic depending on the type of surgery:

**General anaesthetic** – This is usually an injection of drugs into a vein that puts you into an unconscious state. A general anaesthetic can also be given as gas through a mask that the anaesthetist places over your face.

You may experience some side effects, such as nausea, when you wake up from general anaesthetic. Most of these effects are temporary and are easily managed by your medical team – see page 40 for information about side effects.

**Regional anaesthetic (nerve block)** – A local anaesthetic is injected through a needle placed close to a nerve or nerves near the surgical site. This numbs the part of the body being operated on. A local anaesthetic cream is usually applied to the skin first to minimise the pain from the needle. You may be given a light sedative to help you relax, or stronger medicine to put you to sleep. You won’t feel any pain or discomfort during the surgery.
Local anaesthetic – This involves numbing the skin or surface of the part of the body being operated on. It is usually done via an injection, but drops, sprays or ointments may be used instead. You may also be given a sedative to help you relax. You are still awake during surgery, but you won't feel any pain or discomfort. The numbness typically lasts for several hours to a day.

Risks of anaesthetic
It’s uncommon to have an allergic reaction to anaesthetic. Your medical team will review your medical records and general health to determine whether you are at risk of a reaction. Anaesthetists are trained to recognise the adverse effects of anaesthetic, and they will give you medicine to manage any complications.

The operating theatre
You will lie on a bed that is wheeled into the operating theatre, which is a sterile (clean) room where the surgery occurs. The surgical team will wear caps, masks and gowns to help prevent infection.

If you are having a general anaesthetic, the anaesthetist will put a small tube (cannula) into a vein in the back of your hand or arm. The anaesthetic will be injected into the cannula. You might feel a slight stinging sensation, but once the drugs take effect, you
won’t be aware of what’s happening. Some people say that having a general anaesthetic feels like a deep, dreamless sleep.

During surgery under general anaesthetic, a machine called a ventilator breathes for you. The anaesthetist constantly monitors your vital signs (heart rate, temperature, blood pressure and blood oxygen levels) to ensure they remain at normal levels. They also give you pain medicine so you are comfortable when you wake up.

When the surgery is finished, the anaesthetic will begin to wear off slowly, or you will be given more medicine to reverse the effects. You’ll be taken to the recovery room (see pages 36–37), and your vital signs will be monitored until you are fully awake.

**Unknown factors**

There are some things the medical team may not know until the surgery is in progress. The surgeon will discuss these with you during your preoperative assessment appointment (see pages 21–22).

**Taking a different approach** – The surgeon may plan for keyhole surgery but revert to open surgery for better access to the tumour or due to complications.

**Involving another surgeon** – Another surgeon may be called into the theatre to assist your surgeon. This is standard practice, as the extra support can help achieve the best outcome for you. For example, a gynaecological surgeon may ask for assistance from a colorectal surgeon if they discover cancer in the bowel.
Removing extra tissue – It may be difficult for your doctor to tell you exactly what will be removed during the surgery, as scans don’t always detect all of the cancer. If the cancer is found in places that weren’t indicated on scans, your surgeon may remove extra tissue to cut out as much cancer as possible.

Creating a stoma – The medical team will talk to you before surgery about the possibility of creating an artificial opening in the body (stoma). An example of a stoma is a colostomy, when part of the large bowel is brought out through an opening in the abdomen, and a pouch is attached to collect waste from the body. A stoma may be temporary or permanent.

Needing a blood transfusion – If you lose a lot of blood, some blood or blood products can be transferred into your body (transfusion). Blood from a donor is usually used. There are strict screening and safety measures in place, so this is generally very safe.

If you’re concerned about receiving someone else’s blood products, you might be able to bank some of your own blood before the surgery so it can be transfused back to you. However, this procedure is rarely used. Talk to your doctor if you are worried about needing a blood transfusion.

When I had breast reconstruction surgery, I was given two blood transfusions. I had told my doctor I didn’t want anyone else’s blood, but in the end I was very grateful because the transfusions saved my life. Anna
Surgical wound

Your surgeon can choose how to close up the wound (incision) created during the surgery. Their approach will depend on the part of your body affected and what kind of surgery you have (e.g. open or keyhole surgery). Common methods of closing a surgical wound include:

- **sutures or stitches** – sewing the wound closed using a strong, threadlike material that can dissolve or will be removed at a later date (see *Follow-up appointments*, page 49)
- **staples** – small metal clips
- **glue** – transparent liquid or paste used to seal minor wounds (up to 5 cm) or applied on top of sutures
- **adhesive strips** – pieces of tape placed across the wound to hold the ends together, which may be used with sutures.

The wound will usually be covered with surgical dressings to keep it dry and clean. These will be in place for a few days, then changed regularly. If you have surgery as an inpatient, the nurses can look at the wound to see if it’s healing and check for bleeding or signs of infection. If you have a shower, the dressing will be taken off and reapplied afterwards.

If you have day surgery, you may need to see your general practitioner (GP) to have the wound checked before seeing your surgeon a few weeks later.

The wound may feel itchy or irritating after surgery. Tell the nurses if this happens – it could be a sign it’s healing, but it may also be a problem, such as an allergic reaction to adhesive tape.
Possible complications

Sometimes complications occur during surgery. It’s very unlikely that all of the complications described here would be relevant to your situation. Your surgeon can give you a better idea of your actual risks.

Generally, the more complex the surgery is, the higher the chance of complications. Read about possible complications after surgery on pages 41–42.

**Bleeding** – You may lose blood during surgery. Your surgeon will usually manage and control bleeding, and you may receive a blood transfusion to replace lost blood (see page 32). However, needing a blood transfusion during surgery is rare.

**Damage to nearby tissue and organs** – Most internal organs are packed tightly together, so operating on one part of the body can impact on nearby tissue and organs. This may affect the function of other organs after surgery – for example, the surgeon’s handling of the bowel during pelvic surgery may cause temporary constipation (difficulty passing a bowel motion) or a build-up of gas in the abdomen.

**Drug reactions** – In rare cases, some people have an adverse reaction to anaesthetic or other drugs used during surgery. This can cause a drop in blood pressure, heart rate and breathing, which is why an anaesthetist monitors you during surgery. Tell your doctor if you’ve had any previous reactions to over-the-counter, prescribed or herbal medicine, even if the reaction was small.
Key points

• On the day of the surgery, you should arrive at your allocated admission time. Arriving early doesn’t mean you’ll be admitted or operated on early. You may not know the exact time of the surgery, but you’ll probably know if it is scheduled for the morning or afternoon.

• You will change into a surgical gown. If there is hair on the part of your body being operated on, it will be shaved.

• Some people are given a sedative (pre-medicine) as an injection or a tablet to help them relax.

• Once you are in the operating theatre, the anaesthetist will give you drugs (anaesthetic or anaesthesia) to temporarily block any pain or discomfort. A general anaesthetic puts you into an unconscious state; local and regional anaesthetics numb parts of the body.

• It’s rare to have an allergic reaction to anaesthetic. If it occurs, the anaesthetist will give you medicine to manage any complications.

• There may be unknown factors about the surgery. For instance, another surgeon may be called in to assist, extra cancerous tissue may be removed, or you may need a blood transfusion. Your doctor will discuss these possibilities with you before the surgery.

• Surgical wounds can be closed up using sutures or stitches, staples, glue or adhesive strips.

• Complications may occur during surgery. Your doctor will explain the risks.
Recovering from surgery

No matter what kind of surgery you have, it will probably make you feel tired and drained. Even if your pain is under control, surgery can be physically and emotionally stressful.

Your medical team will talk to you about your recovery – it may take a few days or a week to recover from a less complex operation, but it can take a few months to recover from major surgery. Follow your surgeon’s advice, and try to be patient and allow yourself time to recover.

Hospital recovery room

Immediately after surgery, you will be moved from the operating theatre to a large area nearby with medical monitoring equipment and specially trained staff. This is the recovery room. In some hospitals, it may be called a recovery ward or post-anaesthesia care unit. It might be a shared space or a private room.

Some people who need a high level of care will go into the high dependency unit (HDU) or intensive care unit (ICU). This allows you to be closely monitored so potential problems can be identified and treated early. You will be moved out of the HDU or ICU as your condition improves. Your doctor will tell you before surgery if it’s likely you will be moved to one of these units.

You may have had a tube down your throat during the surgery to help you breathe (intubation). This will be removed while you are under anaesthetic, but your mouth and throat may feel temporarily dry or sore.
While the anaesthetic wears off, a nurse will monitor your vital signs, check the wound and your pain levels, and give you medicine or fluids to help you feel better and reduce side effects caused by the anaesthetic (see page 40). You’ll probably receive pain medicine through a tube connected to a vein in your hand or arm (intravenous drip), and there might be some drains to remove waste and fluid from your body (see page 38). The surgeon or anaesthetist may examine you again while you are in the recovery room.

You will be moved from the recovery room once you have woken up from the anaesthetic.

In some cases, people are allowed visitors while they are in the recovery room. Each hospital has different policies, e.g. only one visitor at a time. See page 54 for more information.

**Hospital ward**

If you are staying in hospital to recover (i.e. you had surgery as an inpatient), you will be moved from the recovery room to a ward. You will be looked after by nurses and other health professionals, such as a physiotherapist or dietitian. If you have day surgery, you will usually be able to go home soon after the surgery.

While you are on the ward, nurses will check you regularly. They will usually take your blood pressure, pulse and temperature, check your wound and change the dressing as needed. You will be able to have visitors during the hospital’s visiting hours.
Help with your recovery
While you are recovering on the hospital ward, the nurses will monitor your progress and help you with the following:

**Pain control** – You may be given a PCA (patient-controlled analgesia) device, which is a pump that is connected to a drip or cannula that allows you to receive a dose of medicine when you press a button. The PCA is programmed to prevent you from overdosing.

You may receive pain medicine as a tablet instead. Tell the doctor or nursing staff if you’re in pain or the pain worsens.

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**Tubes and drains**

Depending on the surgery, you may have some tubes or drains attached to your body.

**Drip (intravenous infusion) in your hand or arm** – gives you fluids until you can eat and drink normally. This may be in place for a few hours or a few days, depending on the surgery.

**Tube (drain) in the wound** – drains excess fluid into a small bottle. This is usually removed after a few days.

**Small tube (catheter) in your bladder** – to drain urine into a bag. This is usually removed when you start walking after surgery.

**Tube in the nose (nasogastric tube)** – goes down into the stomach and removes fluid from the stomach until bowel function returns to normal.
Movement and circulation – When you return from theatre, you may be wearing compression stockings and/or have an injection of medicine to prevent blood clots forming in the deep veins of your legs (deep vein thrombosis or DVT).

Try to get up and move around as much as possible to help your recovery and reduce the chance of blood clots or infections. The nurses or a physiotherapist will give you advice about this.

Eating and drinking – Most people can start eating and drinking either the same day or the day after surgery. Some people begin by drinking broth and soup before progressing to plain foods and small meals, while others receive nutrition through a drip for a short while rather than eating.

If the cancer and surgery affect your digestive system (e.g. mouth, throat, oesophagus, stomach, bowel), you will need to follow the dietitian’s advice about eating and drinking. You can also read Cancer Council’s booklet *Nutrition and Cancer* – call 13 11 20 and ask for a free copy, or download a digital version from your local Cancer Council website.

Bathing – The timing of your first shower depends on how you are feeling – some people shower the same day or the next day if they are up to it. The nurses will probably encourage you to shower as soon as possible because it is a good reason to get out of bed. They can help you if you need to remove dressings or cover them to keep them from getting wet. If you can’t get up and move, the nurses will help you bathe in bed.
Side effects of general anaesthetic

**Nausea and vomiting** – You may feel nauseous or vomit within 24 hours of surgery, but there are medicines to control these side effects. Sometimes vomiting makes you feel better. Some people continue to feel nauseated for the first few days after they are discharged from hospital, but this will improve.

**Chills and dizziness** – Your body may cool down after surgery, so you may feel cold and shiver. During the surgery and recovery, your temperature will be maintained, usually with warm blankets. Some people feel dizzy from the anaesthetic or because they may be dehydrated. You will be monitored to make sure you aren’t getting an infection.

**Mental effects** – You may feel confused, groggy or ‘fuzzy’ in the minutes or hours after you wake up, and you may not remember why you had surgery. Most people make a full recovery within a few hours. In some cases, this may take days, particularly in elderly people and those who had memory problems before surgery.

Rarely, people have ongoing mental effects (such as fogginess or mild memory loss) for a week or several months after surgery. This is called postoperative cognitive dysfunction. The reasons for this are unknown.

**Agitation** – You might cry or feel restless and anxious when you wake up. Some people feel like their arms or legs are twitchy. This is a normal reaction.

Tell your medical team if any of these side effects get worse or worry you.
The hardest part was knowing how much progress I had to make after the operation. The nurses wrote some goals for me: pain control, breathing exercises, tubes out, getting out of bed, walking. Over time, I was able to achieve all those things and go home. Earl

Possible complications
Sometimes complications occur after surgery. It’s very unlikely that all of the complications described here would be relevant to your situation. Your surgeon can give you a better idea of your actual risks. Generally, the more complex the surgery is, the higher the chance of complications. Most complications are minor and can be treated easily; rarely, complications can have serious consequences.

Infection – The biggest risk of infection after surgery is at the wound site, but infection can also occur in the chest and around the catheter site. There are some simple ways to prevent infections. Sometimes the doctor will prescribe medicine before surgery (prophylactic antibiotics). You will be monitored for signs of infection, such as redness around the wound or a discharge from the wound, cloudy urine, cough, shortness of breath and chest pain.

Bleeding – Bleeding can happen inside the body (internally) or outside the body (externally). Internal bleeding can occur if a blood vessel breaks free after surgery, and external bleeding can occur if a wound opens up. Your medical team will manage any post-surgery bleeding. This could include giving you a blood transfusion or further surgery to stop bleeding.
**Blood clots or DVT** – All surgery and some cancers increase the risk of developing blood clots in the deep veins of the legs or pelvis (deep vein thrombosis or DVT). There are ways to prevent this from occurring, including being given injections of anti-clotting drugs, wearing compression stockings during and after surgery, and using devices called pneumatic cuffs to keep the calf muscles moving during and sometimes after surgery. The nurses will also encourage you to get out of bed and move around as soon as you feel up to it.

**Lung problems** – After surgery, it may be painful to breathe or cough for a period of time. You will be encouraged to do deep breathing exercises and to get out of bed and move around. Your medical team will monitor your breathing during your recovery and provide medicine to control any pain you have.

**Weak muscles (atrophy)** – Although you’ll need to rest after surgery, it’s important to get up and move around. If you aren’t mobile, your muscles may get weak (atrophy). A nurse or physiotherapist may help you to get moving as soon as possible and give you advice about the best exercises to do. Generally, the sooner you are able to get up and move, the better your recovery will be.

Before the surgery, my doctor discussed the complications that could occur afterwards. It was full on hearing about it, but I wanted to know everything that could happen. 

*Kathleen*
Leaving hospital (discharge)
If you have day surgery, you will be discharged from hospital after you leave the recovery room. It’s important to prearrange for someone to take you home after surgery. The nurses will contact this person to tell them when you’ll be ready to leave.

If you have inpatient surgery, you will be discharged when the medical team thinks you are healthy enough to leave. Some people stay in hospital for a day or two, but others stay for longer – in some cases several weeks or, rarely, months.

Along with discharge papers, the medical team may give you:
• scan and test results
• instructions about recovering at home (see pages 45–48)
• guidelines about when to contact your doctor (see page 46)
• a medical certificate for your employer
• insurance forms, bills or receipts
• a list of any medicines/prescriptions, or a small supply of medicines (such as pain relief).

If you want specific paperwork (e.g. a letter for your employer) and it isn’t offered, you can request it from the doctor, nurses, receptionist or social worker. You may want to make a copy for your records or to show to your GP, but in most cases, paperwork will be automatically sent to them.

Most people go home after discharge, but some go to an inpatient rehabilitation centre to help them get safely back on their feet and return home. See page 49 for information about rehabilitation.
Questions to ask before you leave hospital

Your medical team will give you information about your care so you can continue to recover safely. These are some questions that you may consider asking before you are discharged.

Will the stitches need to be taken out or will they dissolve?

Will the wound dressing need to be changed? Who will do this?

Can I have a shower or bath?

Who should I call if I have a problem?

Can I eat my usual diet?

When can I go back to work?

When do I need to see my doctor for a check-up?

What medicines do I need to take?

Can I do my usual activities (e.g. exercise, housework, driving)?

Are there any symptoms that I should keep an eye out for?
Taking care of yourself at home

Looking after yourself at home is one of the most important parts of your recovery. Your rate of improvement and progress will depend on the type of surgery you have, what support you have at home, your overall fitness and health, and whether you are having other cancer treatments.

If you live alone, it’s a good idea to organise another adult to stay with you at home the first night after discharge, or to arrange to stay with family or friends.

When you first get home

Keep in mind that recovery will take time, and try not to expect too much of yourself. A community nurse may visit to check on you and change any dressings, or you might see your GP for similar care. There are many aspects of your recovery that you will need to monitor in the first few days and weeks.

Pain – The most common side effect of surgery is pain. Take pain relief medicine as prescribed by your health care team. If your pain isn’t under control, gets worse, or if the medicine causes side effects, talk to your GP.

If you are prescribed antibiotics, take the full course as instructed. You may feel better after a few days, but you will need to take the entire course to completely kill bacteria and prevent infection.

For more information about pain relief, read Cancer Council’s booklet Overcoming Cancer Pain.
When to call the doctor or go to hospital

Contact your doctor immediately or go to the nearest hospital emergency department if you have any of the following symptoms:

- increased bleeding, swelling, redness, pus or drainage from the wound or around any tubes, drains or stomas
- a fever over 38°C
- swelling in your limbs
- sudden, severe pain
- pain or burning when urinating
- nausea or vomiting for 12 hours or more
- trouble breathing, walking or doing things you could do before the surgery.

Wound care – Your nurse will give you instructions about how to care for the wound. Clean it with mild soap and warm water and pat it dry, and avoid putting lotions or perfumes on the wound and the area around it. Your nurse will also explain how to change the dressings.

If adhesive strips have been used to close the wound, they should fall off within a few weeks, or you will be told when to remove them. If you remove the strips too soon, the wound might open. Your doctor or nurse will remove any stitches or staples during a follow-up appointment (see page 49).

You might have some bruising around the surgical site, but this will fade over a few weeks. Try not to pick at any scabs around the wound, as this can cause infection.
**Rest** – Although it’s a good idea to stay active and do gentle exercise while you are recovering, it’s also important to follow your doctor’s advice about restrictions, such as avoiding heavy lifting. You may find that you tire easily and need to rest during the day. Get plenty of sleep and take breaks if you feel tired, and ask family or friends to assist you with household tasks, such as cooking. If you require home help services, speak to the hospital social worker or call Cancer Council 13 11 20 to find out what is available in your area.

**Bathing** – Unless you’ve been told otherwise, you will be able to shower. Wash your body as gently as possible and pat yourself dry. If you have dressings, you might need to keep them dry while you shower – your nurse will give you instructions.

**Going to the toilet** – Try not to strain when you go to the toilet, as this can cause small tears around the anus and swollen veins (haemorrhoids or piles). If you are taking strong pain medicine, you may also need to take medicine to help prevent constipation. If you haven’t had a bowel movement within a few days of the surgery, your pharmacist or doctor can give you advice or medicine to help.

Some people have trouble holding urine or bowel movements (incontinence) after surgery, especially abdominal surgery. This is usually temporary. Ask your surgeon or GP if you can speak to a continence nurse, who can help treat or manage this problem. For more information, call the National Continence Helpline on 1800 33 00 66 or visit continence.org.au or bladderbowel.gov.au.
Drains and tubes – Some people go home with a temporary drain or tube near the surgical site to collect extra fluid leaving the body. The hospital will usually organise a community nurse to visit you to empty the drain or tube.

Eating and drinking – Some people feel queasy after surgery. When you feel like eating, try basic foods such as rice and toast before going back to your usual diet (or following the special diet you were instructed to eat). Eat fibre and drink plenty of water to avoid constipation, and avoid alcohol, especially if you are taking medicine.

Activity – Try to do some gentle exercise to build up your strength. A physiotherapist can help you with this. Your doctor will discuss activities that should be avoided, such as heavy lifting, driving or sexual intercourse. It may be several weeks before you return to your usual activities. Read Cancer Council’s booklet Exercise for People Living with Cancer for more information.

You may also need some equipment to help you move safely, such as a walker, cane, shower chair or ramp. A physiotherapist or occupational therapist will show you how to use this equipment.

Lymphoedema – If the surgeon removes lymph nodes (glands) from your armpit or pelvic area, the lymph fluid may no longer drain properly and your arm or leg may swell. This is called lymphoedema. You may have to wear compression sleeves or stockings to manage this. For more information, call Cancer Council 13 11 20 or visit the Australasian Lymphology Association website at lymphoedema.org.au.
Follow-up appointments

The timing of your first follow-up appointment will depend on the type of surgery and your recovery. You may see the surgeon or your GP, depending on where you live and what the medical team recommends. If you have been told not to drive, you may need someone to drive you to the appointment. It’s also a good idea to take someone with you for support and to take notes.

Your doctor will check your wound and remove any stitches, staples, adhesives or drains that are still in place. If your pathology results are available, your doctor will discuss these with you and tell you whether you will need any further treatment. You will also be given advice about getting back to your normal activities. You may need to ask about specific things, such as driving, exercising and going back to work.

Rehabilitation

Rehabilitation (rehab) can help you regain physical strength and get back to your daily activities. It may include physical therapy (e.g. in a pool or gym), or specialist care if you need help with speaking, eating and other tasks. You could have rehab as an inpatient or outpatient.

Inpatient rehab – Some people recover in a rehab centre or nursing home before returning home. The length of your stay depends on the speed of your recovery.

Outpatient rehab – You can visit a rehab facility as a day patient to receive similar care. Hospital staff or your GP can organise this.
Coping with your emotions
For some people, having cancer is like an emotional roller-coaster. You may have many mixed feelings before, during and after surgery. It’s natural to feel anxious, scared or angry.

When you return home, you might feel vulnerable or helpless. You may need help doing things you used to be able to do yourself, such as laundry or cooking. If your body has changed, it may affect your self-esteem.

If you have ongoing feelings of sadness and feel down most of the time, you may be depressed. Signs and symptoms of depression include:

- feeling overwhelmed, sad, irritable and frustrated
- not being able to concentrate
- withdrawing from other people
- relying on alcohol or drugs
- thinking life’s not worth living
- having trouble sleeping (insomnia).

Some of the physical symptoms of depression include tiredness and appetite loss, but these symptoms can also be caused by having surgery.

A range of effective treatments for depression are available, including counselling and medication. For information and ways to access services, talk to your GP, call Cancer Council 13 11 20, or go to beyondblue.org.au. Medicare rebates may be available for some treatments, such as seeing a counsellor or psychologist.
Sexuality, intimacy and infertility
Surgery for cancer can affect your sexuality in physical and emotional ways. The impact of these changes depends on many factors, such as surgery side effects, your self-confidence and whether you have a partner. Although sexual intercourse may not be possible straightaway, closeness and sharing can still be part of your relationship.

If surgery for cancer might cause infertility, your doctor will discuss the possibility of storing eggs, embryos and sperm before surgery.

Changing body image
Having surgery can change the way you think and feel about yourself (your confidence and self-esteem). You may feel less confident about who you are and what you can do. This feeling is common whether your body has changed physically or not.

Give yourself time to adapt to any changes. Try to see yourself as a whole person (body, mind and personality) instead of focusing only on the parts of you that have changed.

For practical suggestions about changes to your body, such as hair loss and weight changes, call Cancer Council 13 11 20.
Key points

- After surgery, you will be moved out of the operating theatre to a large area nearby with medical monitoring equipment (recovery room). Some people will go into the high dependency unit (HDU) or intensive care unit (ICU).

- You’ll probably receive pain medicine through tubes or an intravenous drip. There might be some drains to remove waste and fluid from your body.

- While you are on the hospital ward, nurses will monitor your progress and help you with pain control, moving around, eating and drinking, and bathing.

- General anaesthetic can cause side effects such as nausea, chills, dizziness and agitation. These will wear off in time.

- Possible complications after surgery include infection, bleeding, lung problems and weak muscles. Steps will be taken to prevent or manage these.

- You will be officially discharged from hospital when the medical team thinks you are healthy enough to leave.

- When you first get home, you will need to monitor some aspects of your recovery, such as pain management and wound care. See your doctor or go to hospital if you experience major side effects.

- The timing of your first follow-up appointment will depend on the type of surgery you had and your recovery.

- You may need rehabilitation (rehab) to help regain physical strength and get back to your usual daily activities.

- Surgery can affect the way you feel about yourself and your sex life. It may help to talk to a doctor or counsellor.
If someone you care about is having surgery to treat cancer, it could be an anxious and uncertain time for you too. It can be difficult to watch someone go through this experience – you may want to help them, but not know how.

**Being a support person**

One thing you may want to do is offer to be the support person. This may involve providing practical and emotional help to the person with cancer before, during and after surgery. The surgical team may ask that there is only one support person on the day of the surgery, as there may be limited space in the waiting room.

Before surgery, you can accompany the person to appointments and help them make an informed decision about their treatment. Once they decide to have surgery, help them follow the instructions about preparing (see *Planning and preparation*, pages 21–27). Even if they have day surgery, you can help them to organise their personal items, paperwork, and transport to and from the hospital.

On the day of the surgery, you can stay in the surgical waiting room during the operation. The nursing staff can give you an estimation of how long you are likely to be waiting.

If you decide not to stay in the waiting room, the staff can take your contact details and call you when the surgery is finished. You may want to go outside for a walk and some fresh air, or to meet a friend or family member for support.
Visiting someone in hospital

Recovery room

In some situations, such as when a child or a person with special needs has surgery, visitors may be allowed in the recovery room (see pages 36–37) at the discretion of the nursing staff. There are strict rules in these circumstances:

• often only one visitor at a time is permitted
• you should wash your hands or use hand sanitiser before entering the room
• you may only be allowed to stay for a brief time so the person has plenty of time to recover.

Seeing your loved one after surgery can be frightening and overwhelming. They may have drains, drips, tubes or monitors attached to them, and the anaesthetic may make them groggy, sick and confused. They will soon return to their usual self.

Regular hospital ward

If the person is moved to a hospital ward, you will need to follow usual hospital visiting hours and procedures. The medical team can give you updates about the person’s recovery and when they are likely to be discharged.

Going home

When the person returns home, you can provide valuable assistance and support. For more information, read Cancer Council’s booklet Caring for Someone with Cancer, or contact Carers Australia on 1800 242 636.
Caring for someone after surgery

You can provide physical and emotional support to the person you are caring for in the following ways:

- **Provide practical help**
  For example, cook meals, set up a bedroom that is easily accessible (i.e. not upstairs), help with housework and pay bills.

- **Help with bathing**
  Assist the person to shower, if they need help.

- **Exercise together**
  Do some gentle exercise together, such as walking.

- **Be encouraging**
  Help the person manage their expectations about recovery by urging them to take it easy and reinforcing that they don’t have to ‘bounce back’ right away.

- **Be considerate**
  Listen to their concerns and feelings if they want to talk, but respect their confidentiality and privacy.

- **Attend follow-up appointments**
  You can take part in the discussion, take notes or simply listen.
Cancer Council offers a range of services to support people affected by cancer, their families and friends.

**Cancer Council 13 11 20** – This is many people’s first point of contact if they have a cancer-related question. Trained professionals will answer any questions you have about your situation. For more information, see the inside back cover.

**Practical help** – Your local Cancer Council can help you access services or offer advice to manage the practical impact of a cancer diagnosis. This may include access to transport and accommodation or legal and financial support. Call 13 11 20 to find out what is available in your state or territory.

**Support services** – You might find it helpful to share your experiences with other people affected by cancer. For some people, this means joining a support group. Others prefer to talk to a trained volunteer who has had a similar cancer experience.

Cancer Council can link you with others by phone, in person or online at cancerconnections.com.au. Call us to find out what services are available in your area.

**Life after cancer** – It’s natural to feel a bit lost after finishing treatment. You might notice every ache or pain and worry that the cancer is coming back.

Cancer Council can provide support and information to people adjusting to life after cancer – call 13 11 20 for details.
Printed, online and audiovisual resources – In addition to this resource, there is a wide variety of free information available about cancer-related topics. Cancer Council produces easy-to-read booklets and fact sheets on more than 20 types of cancer, treatment, emotional issues and recovery.

Cancer Council publications are developed in consultation with health professionals and consumers. Content is reviewed regularly, according to best practice guidelines for health information.

Related publications
You might also find the following free Cancer Council publications and audiovisual resources* useful:

- Emotions and Cancer
- Nutrition and Cancer
- Talking to Kids About Cancer
- Understanding Clinical Trials and Research
- Understanding Complementary Therapies
- Relaxation and meditation CDs
- Cancer, Work & You
- Caring for Someone with Cancer
- Sexuality, Intimacy and Cancer
- Overcoming Cancer Pain
- Living Well After Cancer
- Living with Advanced Cancer

Call 13 11 20 for copies, or download digital versions from your local Cancer Council website.

* May not be available in all states and territories.
Useful websites

The internet has many useful resources, although not all websites are reliable. The websites listed below are good sources of support and information.

**Australian**

Cancer Council Australia .......................................................... cancer.org.au
Cancer Australia .......................................................... canceraustralia.gov.au
healthdirect Australia .................................................. healthdirect.gov.au
beyondblue ................................................................. beyondblue.org.au
Carers Australia .......................................................... carersaustralia.com.au

Australian and New Zealand College of Anaesthetists .......................... anzca.edu.au
All About Anaesthesia ........................................ allaboutanaesthesia.com.au
Royal Australasian College of Surgeons ................................... surgeons.org

**International**

American Cancer Society .......................................................... cancer.org
Cancer Research UK .......................................................... cancerresearchuk.org
Macmillan Cancer Support (UK) .................................. macmillan.org.uk
National Cancer Institute (US) .............................................. cancer.gov
Encyclopedia of Surgery .................................................. surgeryencyclopedia.com
You may find these questions helpful when thinking about what to ask your doctor about surgery. If your doctor gives you answers that you don’t understand, ask for clarification.

**Treatment choice and informed consent**
- Why do I need surgery?
- Do I have a choice of treatments?
- What are the advantages and disadvantages of surgery for me?
- How successful is this type of surgery for this type of cancer?
- Are there any clinical practice guidelines on how to treat this type of cancer?
- How much does the surgery cost? Are there any extra costs I should know about, such as costs related to anaesthesia?
- Can I talk to someone who has had this surgery?
- Can I get a second opinion?
- Will I need other treatment before or after surgery?

**The surgery**
- What type of surgery will I have, e.g. open surgery or keyhole surgery?
- What exactly will you do during the operation? Will you remove part of the tumour or all of the cancer?
- How long will the surgery take?
- Could your plans to operate on me change? Why?
- What anaesthetic will I receive? How will it be given? When will I meet the anaesthetist?
- What are the potential risks and complications?
- Will I need a blood transfusion?
- Where will I have the surgery?
**Side effects and recovery**

- What are the effects of the surgery (e.g. will it affect my mobility, diet, ability to work, sex life)? What are the long-term effects?
- Will I have tubes and drains?
- Will I have any pain? How will it be managed?
- How long will I be in hospital?
- Will I need rehabilitation? Will I have it as an inpatient or outpatient?
- When I go home, will I be provided with written information about my after-care?
- What problems should I look out for when I go home? Who should I contact if they occur?
- How often will I need check-ups?
- What kind of support is available to people who have this type of surgery?

**Information about the surgeon**

- Do you work in a multidisciplinary team (MDT)?
- Who will be in charge of my care?
- Do you specialise in this type of surgery? How were you trained?
- How many times have you done this surgery?
- Which hospitals do you operate in?
abdomen
The part of the body between the chest and hips, which contains the stomach, spleen, pancreas, liver, gall bladder, bowel, bladder and kidneys.

anaesthetic
A drug that stops a person feeling pain during a medical procedure. Local and regional anaesthetics numb part of the body; a general anaesthetic causes a person to lose consciousness for a period of time.

benign
Not cancerous or malignant.

blood transfusion
The process of transferring donated or stored blood and blood products into the bloodstream.

catheter
A hollow, flexible tube through which fluids can be passed into or out of the body.

central venous access device (CVAD)
A thin plastic tube inserted into a vein. The CVAD gives access to a vein so blood or chemotherapy can be given and blood can be taken.

colostomy
An opening (stoma) in the abdomen made from the colon (part of the large bowel). Also, the operation that creates this stoma.

CT scan
A computerised tomography scan. This scan uses x-rays to create a picture of the inside of the body.

debulking
Surgical removal of a part of a tumour to enhance the effectiveness of other treatments, such as chemotherapy.

depression
Very low mood and loss of interest in life lasting more than two weeks.

deep vein thrombosis (DVT)
A blood clot that forms in the deep veins of the leg or pelvis, often caused by immobility after surgery or long-distance travel.

genetic counsellor
A health professional who has been trained in genetics and counselling.

incision
A cut made into the body during surgery.

inpatient
A person who stays in hospital while having treatment.

intravenous (IV)
Injected into a vein.

keyhole surgery
Surgery done through small cuts in the body using a laparoscope for viewing. Also called minimally invasive surgery.

laparotomy
A type of open surgery in which a long cut is made in the abdomen to examine and remove internal organs.

lymphatic system
A network of tissues, capillaries, vessels, ducts and nodes that removes
excess fluid from tissues throughout the body, absorbs fatty acids and produces immune cells.

**lymph nodes**
Small, bean-shaped glands that form part of the lymphatic system.

**lymphoedema**
Swelling caused by a build-up of lymph fluid. This happens when lymph vessels or nodes don’t drain properly.

**malignant**
Cancer. Malignant cells can spread (metastasise) and eventually cause death if they cannot be treated.

**margin**
When a malignant tumour is surgically removed, some surrounding tissue will be removed with it. If this surrounding tissue does not contain any cancer cells, it is said to be a clear, negative or clean margin. If it does contain cancer cells, it is called a positive or close margin.

**mastectomy**
The surgical removal of the breast.

**MRI scan**
A magnetic resonance imaging scan. A scan that uses magnetism and radio waves to take detailed cross-sectional pictures of the body.

**multidisciplinary team (MDT)**
A team of health professionals who collaborate to discuss a patient’s physical and emotional needs and decide on treatment.

**nil by mouth**
When you are unable to have food or drink for a period of time before surgery.

**outpatient**
A person who receives medical treatment without being admitted into hospital.

**palliative treatment**
Medical treatment for people with advanced cancer to help them manage pain and other symptoms of cancer. Treatment may include surgery, chemotherapy or radiotherapy. It is an important part of palliative care.

**pathologist**
A specialist doctor who interprets the results of tests (such as blood tests and biopsies).

**pathology report**
A document that provides information about the cancerous tissue, including its size and location, hormonal status, how far it has spread, surgical margins and how fast it is growing.

**PET scan**
A positron emission tomography scan. A scan in which a person is injected with a small amount of radioactive glucose solution. Cancerous areas show up brighter in the scan because they take up more of the glucose.

**recovery room**
A hospital room for the care of patients immediately after surgery.

**registrar**
A hospital doctor who is training to be a specialist.

**rehabilitation**
A program to help a person recover and regain function after surgery.
**resection**  
Surgical removal of a portion of any part of the body.

**resident medical officer**  
A hospital doctor who has not undertaken specialist training.

**skin graft**  
A shaving of skin that is stitched over the wound left by the removal of a skin cancer.

**staging**  
Performing tests to determine how far a cancer has spread.

**stoma**  
A surgically created opening to the outside of the body.

**stomal therapy nurse**  
A registered nurse who specialises in caring for people who have stomas.

**surgery**  
An operation by a surgeon to remove or repair a part of the body affected by cancer.

**surgical oncologist**  
A doctor who specialises in the surgical treatment of cancer.

**thoracoscopy**  
A surgical procedure where a cut is made in the chest and a small video camera with a telescope called a thoracoscope is inserted. Also called video-assisted thoracic surgery (VATS).

**thoracotomy**  
Surgery in which a long cut is made in the chest to examine, biopsy and/or remove a tumour.

**ultrasound**  
A non-invasive scan that uses soundwaves to create a picture of part of the body.

**ureter**  
The tube that carries urine from the kidneys to the bladder.

**urethra**  
The tube that carries urine from the bladder to the outside of the body. For men, the urethra also carries semen.

**vital signs**  
Measurements of the body’s heart rate, temperature, blood pressure and blood oxygen levels. This indicates the state of essential body functions.

**x-ray**  
A type of high-energy radiation that shows solid areas in the body such as bone. It is used to diagnose different conditions.

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**Can’t find a word here?**

*For more cancer-related words, visit:*
- cancercouncil.com.au/words
- cancervic.org.au/glossary
How you can help

At Cancer Council, we’re dedicated to improving cancer control. As well as funding millions of dollars in cancer research every year, we advocate for the highest quality care for cancer patients and their families. We create cancer-smart communities by educating people about cancer, its prevention and early detection. We offer a range of practical and support services for people and families affected by cancer. All these programs would not be possible without community support, great and small.

Join a Cancer Council event: Join one of our community fundraising events such as Daffodil Day, Australia’s Biggest Morning Tea, Relay For Life, Girls’ Night In and Pink Ribbon Day, or hold your own fundraiser or become a volunteer.

Make a donation: Any gift, large or small, makes a meaningful contribution to our work in supporting people with cancer and their families now and in the future.

Buy Cancer Council sun protection products: Every purchase helps you prevent cancer and contribute financially to our goals.

Help us speak out for a cancer-smart community: We are a leading advocate for cancer prevention and improved patient services. You can help us speak out on important cancer issues and help us improve cancer awareness by living and promoting a cancer-smart lifestyle.

Join a research study: Cancer Council funds and carries out research investigating the causes, management, outcomes and impacts of different cancers. You may be able to join a study.

To find out more about how you, your family and friends can help, please call your local Cancer Council.
Being diagnosed with cancer can be overwhelming. At Cancer Council, we understand it isn’t just about the treatment or prognosis. Having cancer affects the way you live, work and think. It can also affect our most important relationships.

When disruption and change happen in our lives, talking to someone who understands can make a big difference. Cancer Council has been providing information and support to people affected by cancer for over 50 years.

Calling 13 11 20 gives you access to trustworthy information that is relevant to you. Our cancer nurses are available to answer your questions and link you to services in your area, such as transport, accommodation and home help. We can also help with other matters, such as legal and financial advice.

If you are finding it hard to navigate through the health care system, or just need someone to listen to your immediate concerns, call 13 11 20 and find out how we can support you, your family and friends.

Cancer Council services and programs vary in each area. 13 11 20 is charged at a local call rate throughout Australia (except from mobiles).
For information and support on cancer-related issues, call Cancer Council 13 11 20. This is a confidential service.