

# Radiation Therapy

Your Care

Gippsland  
Radiation Oncology



**Information for patients,  
families and friends**



## **About this booklet**

This booklet is for patients having radiation therapy treatment at Gippsland Radiation Oncology, Cancer Care Centre at Latrobe Regional Hospital.

It provides general information about radiation therapy, to help you understand and prepare for your treatment.

If you need more information please ask your radiation oncologist or the other staff during your next visit.

***You may find it useful to bring this booklet with you to your appointments.***

### **Contact Numbers - During Business Hours**

Radiation Therapy Reception	03 5173 8770
Latrobe Regional Hospital	
General Enquires	03 5173 8000

### **After Hours or Weekends**

Emergency	03 5173 8222
-----------	--------------

### **Websites**

The Alfred	alfredhealth.org.au
Alfred Health Radiation Oncology	alfredhealth.ro
Latrobe Regional Hospital	lrh.com.au
Melbourne Prostate Institute	melbourneprostate.org

## Contents

Welcome to the Alfred Health Radiation Oncology	4
What is radiation therapy?	5
How does radiation therapy work?	5
Why should I have radiation therapy?	5
Who are my radiation therapy team?	6
What is the radiation therapy process?	7
Step 1 – Initial consultation	8
Step 2 – Planning (simulation) appointment	8
Step 3 – First day of treatment	10
Step 4 – Daily treatments	12
Step 5 – Follow-up appointment	13
Radiation therapy appointments	13
Travelling to Alfred Health Radiation Oncology	14
Accommodation	16
Side effects	17
Allied health professionals	18
Clinical trials	21
Patient identification	21
Feedback about your care	21
Healthcare rights in Victoria	22
Patient information services	23
Frequently asked questions	23

## 1. Welcome to Alfred Health Radiation Oncology

Gippsland Radiation Oncology services are provided via Alfred Health. The original metropolitan service, Alfred Health Radiation Oncology was established at The Alfred in 1992. The second service Gippsland Radiation Oncology was established in 2006 and is located in the Gippsland Cancer Care Centre, Latrobe Regional Hospital

Both the metropolitan and regional services have a team of highly experienced and specialised staff, utilising state-of-the-art equipment. This ensures that the service is at the forefront of radiation treatment, providing the best possible advice, treatment and follow-up for our patients.

Gippsland Radiation Oncology was funded by the Federal and State Government and is a collaboration between Latrobe Regional Hospital and Alfred Health. The service commenced with one machine in 2006 and gradually built up until a second machine was installed in 2012, doubling capacity to deliver treatment.

The service is now capable of providing highly complex and 3D conformal treatment techniques for most tumour sites. In combination with increased capacity in medical oncology, the service is well positioned to provide oncology services to the cancer patients in Gippsland.

## 2. What is radiation therapy?

Radiation therapy is treatment using radiation, such as x-rays and electrons, to kill or damage cancer cells to stop them from growing and multiplying. Radiation therapy can also be used to treat a variety of benign (non-cancerous) diseases.

Radiation therapy is a localised treatment as it only affects the area being treated. Treatment can range from a single session to multiple sessions lasting up to 8 weeks, depending on the type of treatment.

## 3. How does radiation therapy work?

The aim of radiation therapy is to maximise the damage to cancerous cells, while trying to spare the surrounding healthy tissue.

Radiation therapy damages the cancer cells in the area being treated. The radiation damages the DNA (genetic code) of cancer cells which makes them unable to grow or divide. As cancer cells are more sensitive to radiation than normal cells, the normal cells are able to repair some of the damage and survive.

## 4. Why should I have radiation therapy?

Many people will have radiation therapy as a part of their treatment when they are diagnosed with cancer. Research shows that at least one in two people will benefit from this non-invasive treatment technique.

Radiation therapy can be used in different combinations with surgery, chemotherapy or other drug therapy and has several different aims:

- Cure
- Control
- Symptom relief

## 5. Who are my radiation therapy team?

The radiation therapy team responsible for your care and treatment involves many specialist staff:

### **Radiation Oncologist**

A doctor who specialises in the treatment of cancer and other conditions using radiation therapy.

### **Radiation Oncology Registrar**

A doctor who is training to be a specialist radiation oncologist.

### **Radiation Therapist**

A health professional who plans and delivers radiation therapy according to the radiation oncologist's prescription. Radiation therapists also monitor patients during treatment and ensure referrals to other health professionals.

### **Radiation Oncology Nurse**

A nurse who assesses and cares for patients during radiation therapy treatment. Nurses help with the management of side effects and referrals to other support services.

### **Medical Physicist**

Physicists who run routine quality assurance procedures on the equipment and machines to ensure safe and accurate treatment.

### **Administration Staff**

Staff who perform a variety of tasks including assisting patients with medical appointments, and managing patient records.

### **Students**

We are a teaching organisation. Students may be involved in your care while under the supervision of qualified staff. If you do not wish for students to be present please inform staff.

## 6. What is the radiation therapy process?

### Step 1 - Initial consultation

- Fill out registration forms
- Consultation with radiation oncologist and radiation oncology registrar
- Information pack provided

### Step 2 - Planning (Simulation) appointment

- Meet with radiation therapist and sometimes the radiation oncologist
- Decide on positioning for treatment
- May involve:
  - Making equipment to aid positioning
  - CT-scan
  - Drawing marks on your skin
  - Taking measurement & photos of your position
  - Tattoos
- Social work consultation

### Step 3 - First day of treatment

- Meet with radiation therapist
- Lie in same position as at Planning Appointment
- Radiation treatment delivered
- Meet with nurses after treatment to discuss side effects

### Step 4 - Daily treatment appointment

- Radiation treatment delivered by radiation therapists
- Weekly review with radiation oncologist, nurse and/or senior radiation therapist
- Allied health support as required

### Step 5 - Follow-up appointment

- At a specified time after treatment has finished
- Consultation with your radiation oncologist

## **Step 1: Initial consultation**

This is the first time you meet with your radiation oncologist to discuss your medical history, treatment options and agree on a care plan. The radiation oncology registrar may also be involved at this consultation. An information pack will be provided.

## **Step 2: Planning (simulation) appointment**

This appointment is required to plan your radiation therapy treatment and may take up to 60 minutes. It is usually done by taking a CT scan of the area requiring treatment. This appointment may also be referred to as your simulation appointment. Please report to the radiation therapy reception on arrival.

At your planning appointment you will meet with radiation therapist and possibly your radiation oncologist and their registrar. A decision will be made regarding the best and most comfortable way to position you for treatment. This position is important because it will be replicated daily for the duration of your treatment.

Depending on the area of your body we are treating we may need to make personalised equipment, such as a face mask, to stabilise your position. This equipment helps to keep you comfortable and still during the treatment and makes the treatment more accurate.

Once you are positioned the CT-scan will be taken. Everyone will leave the room for a couple of minutes when the CT-scan is being taken. Your radiation oncologist will use this information to decide on the area to be treated. The radiation therapists will then draw lines on your skin or on the personalised equipment and may give you tattoos. These lines or skin marks help us to position you accurately for treatment and guide us to the area of the body your radiation oncologist wants to treat.



A list of radiation therapy treatment appointments will be provided at your planning appointment or on your first day of treatment.

You may bring a family member or friend to your planning appointment. You may find their presence comforting but they will have to leave the room during the CT scan.

## **Skin marks**

Lines are drawn on the skin with different coloured semi-permanent markers, but will not be marked on your face or neck. The lines are also drawn on both sides of your body to ensure your position can be easily reproduced during treatment. You may also be asked for permission to place small “pin prick” tattoos (permanent markers) on your body or limbs to assist with this process

You will be asked to keep these lines on your skin as best as you can between your planning appointment and your first day of treatment.

The lines will fade when you take a shower or bath, perspire and when your clothes rub against the skin.

If the lines disappear we can re-draw them with the help of the measurements we take during your planning appointment, however this will add some extra time to your treatment appointment. Please do not draw over these lines yourself.

## **Tapes**

During your planning appointment small pieces of waterproof tape may be placed over some of the lines. This helps to keep the lines on the skin for longer. Please let the staff know if you are allergic to any tapes or band-aids.

## Powdering the lines

Lightly powdering the lines will help to keep the marks from fading due to absorption of moisture and natural oils from your skin. Lightly dusting the lines with cornflour or Johnson's Baby Powder 3 or 4 times a day is recommended.

Powders other than cornflour or Johnson's Baby Powder should not be used, as they may contain fragrances or other additives that may affect the way your skin reacts to treatment.

## Planning your radiation therapy treatment

Between your planning appointment and your first treatment a radiation therapy treatment plan is created. This can take up to 1-2 weeks depending on the complexity of your treatment plan.

### Step 3: First day of treatment

Each day please report to the radiation therapy reception on arrival. A radiation therapist from your treatment room will come and collect you from the waiting area.



A radiation therapist discussing treatment on the first day

Radiation therapists are responsible for your daily treatment. They will position you on the treatment bed as you were for the planning appointment. It is important to remain still, relaxed and breathe normally throughout the treatment.

Prior to the first treatment the radiation therapist will explain what to expect during the treatment process

The first day of treatment takes longer than subsequent appointments as all the measurements must be checked. The treatment is the same each day and is given according to your treatment plan.

Staff must leave the room while the treatment machine, called a linear accelerator, is turned on. The radiation therapists will observe you using a closed circuit television and microphone system while you are in the treatment room. If you have any problems the staff can stop the machine and come into the room.



Treatment room with linear accelerator and couch

Each treatment machine has a team of radiation therapists, both male and female, who will deliver your treatment on a daily basis.

This means you may not have the same staff treating you every day.

Treatment is painless and usually takes 10 to 30 minutes to complete. Most of this time is spent making sure you are positioned correctly, the machine is only turned on for 30 to 60 seconds at a time. You won't see or feel anything when the machine is turned on, you will just hear a buzzing noise.

The treatment machine can also take x-ray pictures to ensure that your treatment is delivered to the highest accuracy possible. Small adjustments to your positioning can be made if required.

After your treatment you will see an oncology nurse. The nurse will discuss skin care and any specific side effects related to your treatment. Any special medications will be given to you at this time if they are required.

You will be given a short form to fill out called, "Supportive Care Screening Tool". This form is given to all patients on the first day of treatment to assess if there are any other ways we can be of assistance during your treatment.

A nurse will see you every week during your treatment to check on your progress, but nurses are also available at any time should you have any additional concerns.

#### **Step 4: Daily treatments**

You will be required to attend Monday to Friday for the duration of your treatment course. When treatment is completed you are required to return to the front desk and sign a Medicare form.

You will be seen weekly during your treatment to check on your progress. This can involve your radiation oncologist, radiation oncology registrar, nurses and radiation therapists. If you have any concerns at any time please notify a staff member.



Positioning a patient for treatment

## Step 5: Follow-up appointment

After your treatment has finished, you will have a follow-up appointment with your radiation oncologist. In some circumstances, e.g. if you are from out of town or are seeing another specialist for ongoing active treatment of your disease, follow-up may be transferred to another specialist.

This appointment is usually a few weeks or months after your treatment is finished. This allows the treatment to take effect and any side effects to settle down.

After your first follow-up appointment, your radiation oncologist will arrange ongoing regular follow-ups to check on your progress

## 7. Radiation therapy appointments

### Standard Treatment Hours

Monday – Friday

8:00 am – 5:00 pm

At times we may schedule appointments outside these hours. Do not arrive more than 15 minutes early for appointments scheduled prior to 8.00am, as the doors may be locked for security reasons.

Treatment is not usually scheduled over weekends and public holidays. During periods such as Christmas or Easter where break may affect your treatment, you may be asked to attend.

You will be asked to nominate a range of convenient times to attend for treatment and we will try to give you appointments as close as possible to your preferred times.

Certain times may be required for patients who cannot attend at other times. Such as hospital transport or ambulance patients.

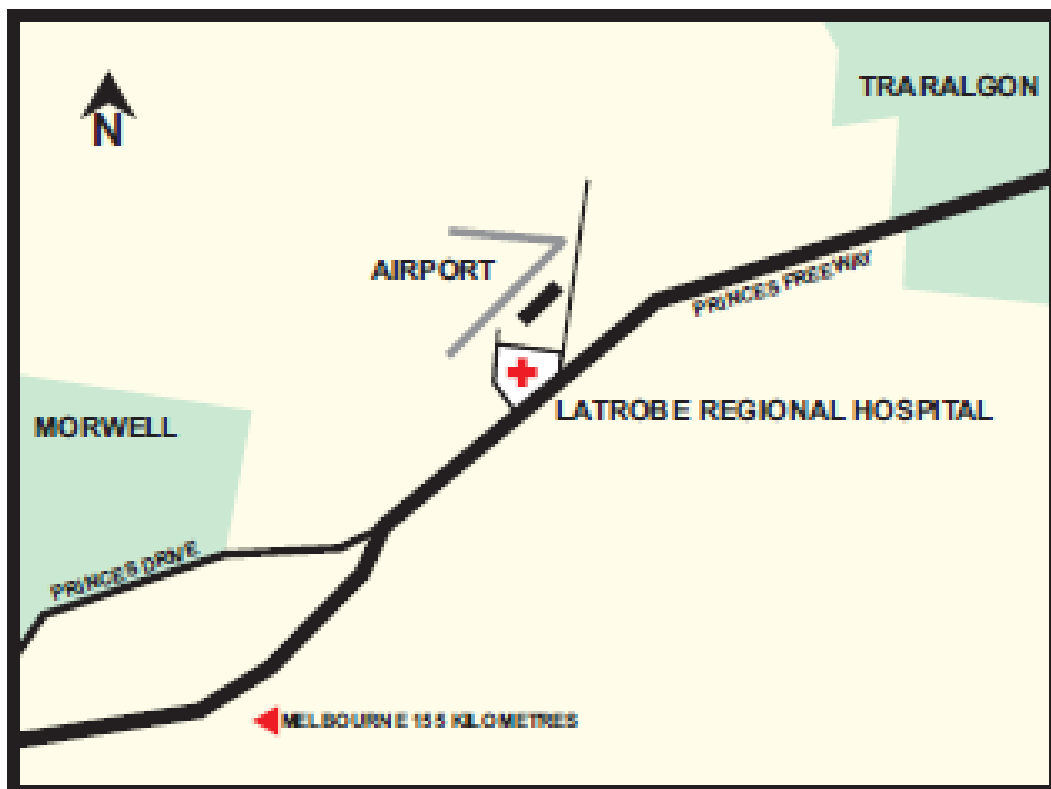
You may be asked to change your scheduled time to accommodate these patients. Please be assured that your special needs will always be considered. Being flexible allows us to provide the best quality of service to everybody, including you.

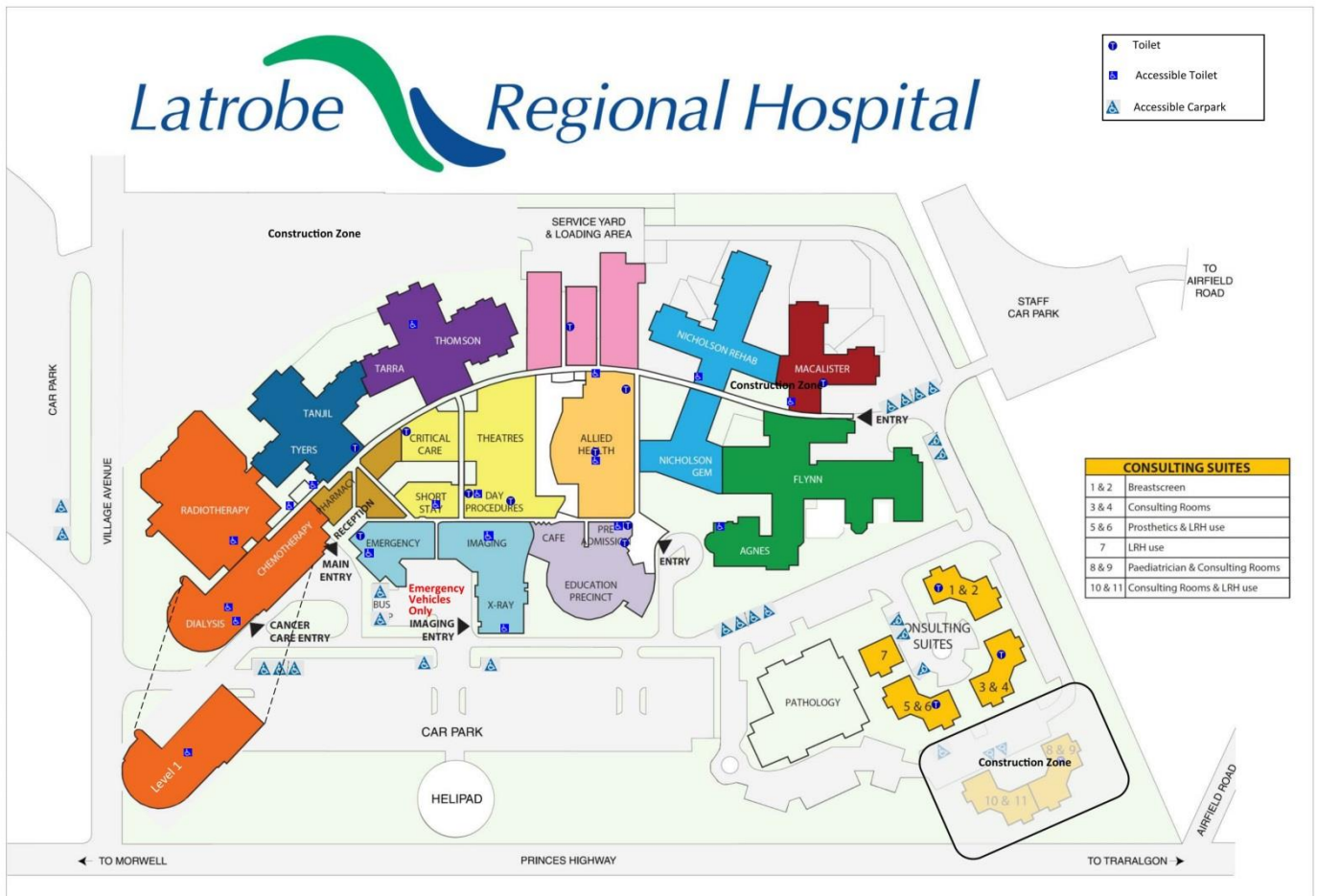
We always try to minimize waiting times for treatment and consultations, explain any unforeseen delays and ensure you have sufficient time to ask questions and discuss any needs you may have.

If you have any questions about your appointments, please ask the radiation therapists on your treatment machine.

## 8. Travelling to Gippsland Radiation Oncology

Gippsland Radiation Oncology is located in the Gippsland Cancer Care Centre at Latrobe Regional Hospital, Princes Highway, Traralgon West, Victoria.





## Public Transport

### Buses

A bus stop is located at the front of Latrobe Regional Hospital. To see the local bus timetable please visit the Latrobe Valley Bus Lines on [www.lvbl.com.au](http://www.lvbl.com.au) or phone 03 5134 2055

## Parking

### Visitor Car Parking

Free public parking is available at the front of the hospital and Village Avenue side, with disabled parking available with permit

## Accommodation



The Gippsland Rotary Centenary House is a community owned facility that provides safe, supportive and affordable accommodation to patients and their families of the Gippsland Cancer Care Centre.

If you require accommodation, please let your radiation oncologist know during your initial consultation, or let your radiation therapist know during your planning appointment. Our social worker will be able to see you after your planning appointment and book this for you.

Website: <http://www.centenaryhouse.org.au>

Ph: (03) 5171 1600.



## 10. Side effects

### Common side effects

- Tiredness – Particularly towards the end of treatment.
- Skin reaction – The skin may become pink or red and feel itchy or irritated, similar to mild sunburn.

***Side effects are specific to your treatment and the area of the body being treated.***

### Skin care during treatment

Care of your skin in the area being treated is important.

The following tips should be followed throughout your treatment:

- Use lukewarm water when washing, not hot water and pat dry.
- Avoid using soap or other products in the treatment area, unless prescribed by your radiation oncologist or nurse.
- Avoid wet shaving in the treatment area. An electric shaver may be used.
- Avoid sun exposure to the treatment area. This may aggravate your skin reaction.
- Avoid other forms of direct heat on the treatment area such as hair dryers, electric blankets.
- Loose clothing is recommended, preferably cotton, allowing air to circulate freely.

***Continue following these tips for 2-3 weeks after your treatment has finished, as your side effects may continue during this period.***

## 11. Allied health professionals

The services listed below are available for patients undergoing radiotherapy at Gippsland Radiation Oncology. Please speak to your radiation oncologist or nurse for a referral to these services.

### Cancer Support Nurse

Cancer support nurses provide support and information to patients and their families who are facing the challenge of a cancer diagnosis.

They can provide you with information regarding:

- cancer types
- surgery
- radiation therapy
- chemotherapy
- regular information sessions
- talking to family & friends
- communicating with your doctor
- support groups

Cancer support nurses have access to a variety of resources such as books, DVD's and CD's. They are happy to assist you in finding relevant and reliable websites for information about cancer and its treatment.

### Physiotherapists

Physiotherapist's diagnose and treat health conditions that limit your ability to move and perform functional daily activities. They promote movement, pain reduction and function restoration. This service is available on a consultative basis and includes:

- Mobility and safety assessment
- Provision of weigh bearing aids
- Balance assessments
- Exercise prescription

## Psychiatry & Psychology

Patients undergoing radiation therapy may experience a range of emotional responses, most of which are indirectly related to treatment.

Common responses include anxiety and depression. Changes in cognition may also occur and can include memory problems, concentration and attention difficulties. Feelings of exhaustion and fatigue often lead to decreased motivation and physical activity which may impact on emotional wellbeing.

Psychological adjustment to radiation therapy is related to a number of factors, including treatment site pain, alterations in sleep, impact on usual functioning and resilience.

Psychological and psychiatric support can include:

- Activity scheduling and memory aids.
- Relaxation and meditation.
- Sleep strategies.
- Pain management.
- Medication.

## Speech Pathology

The speech pathology team provides assessment, therapy techniques and support for patients with speech, swallowing and voice problems that may occur as a result of radiation treatment to the brain, head and neck region.

## Social Work

Social workers are members of Allied Health and form part of the hospital treatment team which provides care to patients, their families and carers. Social workers assist in managing the impact of illness, hospitalisation and treatment. An appointment will be made for you to assess any support requirements that may be necessary.

A range of services are provided such as:

- assessment
- counselling
- crisis intervention
- discharge planning
- case management and care coordination referrals
- family and carer support
- resourcing
- education and research.

## Dietitian

The dietitians at Gippsland Radiation Oncology are involved in assisting with the nutrition related side effects of cancer and its treatment. The more common nutrition related side effects include loss of appetite and weight as well as altered bowel motions.

Depending on the area of the body being treated, a routine appointment will be made with dietitian during your treatment

Not all people who undergo radiation therapy experience nutrition related side effects. The type and severity of symptoms is dependent on a number of factors including the dose of treatment and the area being treated.

## 11. Clinical trials

A number of clinical trials are conducted at Gippsland Radiation Oncology, ranging from departmental projects to international studies for a variety of different cancers. These studies are important in improving treatments and outcomes for patients.

If you meet the selection criteria to participate in a trial, you may be asked to discuss this option in more detail with your radiation oncologist and a member of our research team.

## 12. Patient identification

Correct patient identification is essential for the health and safety of our patients. You will be asked three questions each time you attend planning and treatment:

1. What is your full name?
2. What is your date of birth?
3. What is your address?

On your first day of planning and first day of treatment you will also be asked what procedure you are here for and if you are pregnant (for women of child bearing capacity).

During your planning appointment the staff will also ask for your consent to take a photograph of your face, which will be attached to your treatment record. This is another method used for correct identification.

## 13. Feedback about your care

We welcome and encourage patients and their families to give us feedback about their experiences. Your feedback is important to us and helps us know what we are doing well and where we need to improve.

You can provide feedback by:

- Talk to the staff caring for you.
- Complete a paper feedback form in the department or online at [www.alfredhealth.org.au/feedback](http://www.alfredhealth.org.au/feedback).
- Contact our Patient Liaison Team on (03) 9076 8001.

## 14. Healthcare rights in Victoria

As our patient you are entitled to receive the best possible care, and care that is appropriate to your health needs.

According to The Australian Charter of Healthcare Rights in Victoria your rights are:

- Access – a right to access health care.
- Safety – a right to receive safe and high quality care.
- Respect – a right to be shown respect, and to be treated with dignity and consideration.
- Communication – a right to be informed about services, treatment options and costs in a clear and open way.
- Participation – a right to be included in decisions and to make choices about your health care.
- Privacy – a right to privacy and confidentiality of your personal information.
- Comment – a right to comment on your health care, and to have your concerns addressed.

Please feel free to ask staff for a copy of the charter. The charter can also be accessed at [www.health.vic.gov.au/patientcharter](http://www.health.vic.gov.au/patientcharter).

## 15. Patient information and services

### Resource Room

The Resource Room is located near the waiting room of Gippsland Radiation Oncology. This resource area provides access to:

- Cancer Council booklets.
- A collection of booklets related to specific cancer sites.
- A computer with internet access for patient use.
- Other relevant information sheets

### Cancer Council Victoria

[www.cancervic.org.au](http://www.cancervic.org.au)

The Cancer Council Victoria is a non-profit cancer charity organisation involved in cancer research, patient support, cancer prevention and advocacy. The **Cancer Council Helpline (13 11 20)** is a confidential service where you can talk about your concerns and needs with experienced cancer and palliative care nurses, for the cost of a local call.

A Multilingual Cancer Information Line, for those that speak languages other than English, is also available, so you can access information in the language of your choice.

## 16. Frequently asked questions

### Will I feel anything during my radiation therapy treatment?

No, you won't feel anything. You will just hear a buzzing noise when the machine is turned on.

## **Will I be radioactive?**

No. Radiation therapy uses x-rays which pass through the body and does not make you radioactive. It is completely safe to be in contact with others immediately after your treatment, including pregnant women and babies.

## **Why do I have to come for treatment every day and why is the treatment spread out over such a long period of time?**

The aim of radiation therapy is to maximise the damage to cancerous cells, while trying to spare the surrounding healthy tissue.

We do this is by giving the total amount of radiation, split up over many days or “fractions”. The treatment is spilt into fractions to:

- Damage the DNA (genetic code) of cancer cells, making them unable to grow or divide.
- Allow normal cells time to repair
- Attack cancer cells in different stages of their cell cycle to maximise cell damage.

It is important to come for treatment every day to ensure this cycle of cell damage is maintained. We also know that it is beneficial to finish a course of radiation therapy within an appropriate time frame, so missing days should be avoided unless absolutely necessary.

## **Will I have to change my diet?**

In most cases we want you to continue eating a healthy, well balanced diet while you are having radiation therapy treatment.

However, depending on the area of the body we are treating or the type of treatment, we may ask you to change your diet. In this situation specific instructions will be given.



## **Can I work during treatment?**

Many people continue to work during treatment. This is your choice, however if you are not feeling up to it you may wish to consider taking some time off.

## **Can I drive during treatment?**

Yes, most people will continue to drive during their treatment. If you are not feeling up to it or are very tired you may wish to have a break from driving or drive less.

In some cases, such as neurological conditions, seizures or brain surgery, the Australian Transport Council states you are not legally allowed to drive for a period of six months. If you are not sure if you are fit to drive please discuss this with your radiation oncologist.

## **Will I lose my hair?**

Hair will only be lost if it is in the treatment area and it depends on the amount of radiation that is being given. Please speak to your radiation oncologist or nurse for information.

## **Can you see my cancer on the x-ray pictures you take during my daily treatment?**

The x-ray pictures we take are used to check your set-up and positioning only. We cannot see your cancer or check your treatment progress. This can only be done once the treatment is completed and you have follow-up scans, blood tests, etc.

## **Can I shower and bath when I'm having treatment and have lines on my skin?**

Yes, we recommend using lukewarm water when washing the treatment area. Do not scrub or wet shave in the treatment area, pat dry and avoid using soap, shampoo or other products on the area, unless prescribed by our radiation oncologists or nurses.

## **Can I exercise during treatment?**

Yes, if you are feeling up to it. You may find you are more tired than usual due to the treatment so you may need to reduce the amount of exercise you are doing.

## **Can I go swimming during treatment?**

Most patients are able to swim during treatment but please confirm this with your radiation oncologist. For example, depending on your treatment, chlorine may irritate the skin. After swimming it is important that you shower immediately to clean your skin.

If your skin starts to breakdown it is advised that you stop swimming due to the risk of infection.

## **Will radiotherapy make me sick?**

Radiation therapy can cause nausea. If you are feeling unwell, please speak to your radiation oncologist or oncology nurse and they will be able to assist you.

## **Will I have to stay in hospital during my treatment?**

Most radiation therapy is given as an outpatient service, so you will not be required to stay in hospital.

## **Will radiotherapy affect my sex life?**

A cancer diagnosis and the treatment you are receiving can have an effect on your sex life in many ways. Side effects of your diagnosis and treatment, as well as emotional, hormonal and physical changes, self-esteem and many other factors can all have a significant impact on you and your sexuality. For advice please speak to your radiation oncologist or nurse.

## Do I need to pay for my radiation therapy treatment?

### Outpatients

If you are having radiation therapy and you are a Medicare card holder, all your consultations at Gippsland Radiation Oncology and your treatments will be bulk billed and covered by Medicare. You will be asked to sign a Medicare form, every day at the reception desk, on your way out.

### Inpatients

If you are having radiation therapy and you are a Medicare card holder, all your treatments are covered by Medicare.

You will not need to sign a Medicare form for your radiotherapy, while you are staying at the hospital.

### Non-Medicare card holders and overseas patients

At the end of each consultation you will receive an invoice. If you decide to proceed to treatment, staff will discuss with you a payment plan. Usually this plan requires payment in advance and reconciliation of the account when treatment is completed.

We may need to contact your health insurance company regarding guarantee of payment in which case payment in advance may not be required.

Please note that whilst some of the cost may be claimed from your private health insurer, Gippsland Radiation Oncology does not submit claims on your behalf.

**GRO – Radiation Therapy**

Information for patients, families and friends

**Latrobe Regional Hospital**

Radiation Oncology  
P.O. Box 424  
Traralgon VIC 3844  
T 03 5173 8770  
F 03 5173 8473

[lrh.com.au](http://lrh.com.au)

**Further information:**

**The Alfred**

[alfredhealth.org.au](http://alfredhealth.org.au)

**Alfred Health Radiation Oncology**

[alfredhealth.ro](http://alfredhealth.ro)

**Latrobe Regional Hospital**

[lrh.com.au](http://lrh.com.au)

**Gippsland Rotary Centenary House**

[centenaryhouse.org.au](http://centenaryhouse.org.au)

**Melbourne Prostate Institute**

[melbourneprostate.org](http://melbourneprostate.org)

**Cancer Council Victoria**

[cancervic.org.au](http://cancervic.org.au)

If you would like to provide feedback or request a copy of this information in a different format, contact us at [patient.information@alfred.org.au](mailto:patient.information@alfred.org.au)



First Published March 2013. This Edition January 2017.

AHRO Patient Information by Alfred Health Radiation Oncology is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License