



which the beams are aimed. About half of all people with cancer need radiation treatment at some point.

For some types of cancer this is the main treatment. It might also be used in combination with surgery, chemotherapy or hormone therapy.

How is radiation treatment provided?

There are two ways of giving radiation treatment:

- External beam radiation treatment – this is given from outside the body
- Internal radiation treatment – this is given using a radioactive source placed inside the body

The way you have radiation treatment depends on the type of cancer you have and where the cancer is in your body. Some cancers are treated with both external and internal radiation.

1. External radiation treatment

The machine you are treated with will depend on the type of cancer you have and what part of your body is affected. For example, superficial therapy machines are better at treating cancers on or near the surface of the skin. Linear accelerators are used to treat cancers deeper in the body.

During treatment you will lie still and the machine will move around you so that the radiation can be directed at the tumour from different angles, similar to having an X-ray.

2. Internal radiation treatment

If you have internal radiation treatment, radioactive seeds or wires (such as caesium, iridium or iodine) will be placed into the body close to your cancer, or into the cancer itself. By doing this, high doses of radiation can be delivered exactly where the cancer is, without having to go through healthy tissue.

This information sheet has been written to support you during radiation treatment. You can read more about radiation treatment, practical support and the emotional impacts of cancer in the Cancer Society booklet Radiation treatment/ Haumanu iraruke- A guide for people having radiation treatment.

What is radiation treatment

Radiation treatment is the use of radiation beams to destroy cancer cells or stop them growing. It is used to:

- cure cancers, often in addition to other treatment.
- shrink a tumour so that surgery is more effective – neoadjuvant radiation treatment.
- treat any cancer cells remaining after surgery –adjuvant radiation treatment.
- slow the growth of cancer or relieve symptoms such as bone pain - palliative treatment.

Radiation treatment only affects the part of the body at



Your doctor might suggest treatment using internal radiation treatment alone or in combination with external radiation treatment and/or chemotherapy. or you swallow it, to target the cancer

- **intra-operative radiation** – radiation is given during surgery.

The types of internal radiation treatment include:

- **brachytherapy** – a radioactive source is placed inside the body, either close to or inside your cancer. The type of source depends on the type of cancer
- **radioisotope therapy** – a radioactive liquid is injected,

Will radiation treatment make me radioactive?

This is a common question, and the answer will depend on the type of treatment you are having.

External radiation treatment

does not make you radioactive. It is safe to be with your children, family/whānau and friends both throughout the treatment and after the treatment has been complete

Internal radiation treatment can be given in two ways

1. Temporary

a radioactive source is placed inside your body and then removed. You will only be radioactive when the source is present in your body. This is all done in hospital.

1. Permanent

a radioactive source is placed inside your body and not removed. You will be radioactive for a short time. There will be no outward appearance that you are radioactive, but it is important to follow any safety instructions given to you. This will ensure that your family/ whānau and friends are not exposed to radiation.

Where will I have radiation treatment?

Radiation treatment is available in specialist treatment centres in Auckland, Hamilton, Tauranga, Palmerston North, Wellington, Christchurch and Dunedin.

Is there help available with transport and accommodation?

Help may be available for transport and accommodation costs if you are required to travel some distance to your medical and treatment appointments. Your treatment centre or local Cancer Society can advise you on what sort of help is available, such as Cancer Society accommodation or National Travel Assistance.

Making decisions about treatment

If you are given a choice of treatments, including no treatment for now, you will need to think about your options. You may want to ask your doctor questions such as:

- what is the goal of the treatment?
- can I expect to live longer if I have treatment?
- if I have treatment, is there a risk that my quality of life will be affected by the treatment?
- are there other treatments for me?
- what is the chance of the treatment working?

Before you see your doctor, it may help to write down any questions you would like answered. We suggest that you take someone with you to your appointments to support you to get the information that you need.

A second opinion

Some people may want to ask another doctor about their cancer or treatment. You can ask your oncologist or family doctor to refer you to another cancer doctor if you would like a second opinion.

Looking after yourself

Cancer can cause physical and emotional strain. Eating well, exercising and relaxing may help to reduce stress and improve wellbeing. Addressing changes in your emotions and relationships early on is also very important. No matter how you are feeling, support services are available to you.

For more information or support call our Cancer Information Helpline 0800 CANCER (226 237) to speak with our specialist information staff or visit your local Cancer Society office.

Recommended reading

You may find the following Cancer Society resources helpful. Find them online at www.cancernz.org.nz or contact your local Cancer Society office.

Advanced Cancer/Matepukupuku Maukaha

Chemotherapy/Hahau

Coping with Cancer Eating Well During Cancer Treatment/
Kia Pai te Kai te wā Maimoatanga Matepukupuku

Emotions and Cancer

Getting on with Life After Treatment/Te Hoki Anō ki tō
Toioranga Whai Muri I te Maimoatanga

Living with Dry Mouth/Te Noho me te Waha Maroke

Suggested websites

You may be interested in looking for information about cancer and its treatment on the Internet. While there are very good websites, be aware that others may provide incorrect information. We suggest that you discuss any information you find with your medical team.

We recommend that you begin with the Cancer Society's website www.cancernz.org.nz and follow our links.

The following may also be helpful:

Radiation Oncology: Targeting Cancer (Australia)

www.targetingcancer.com.au

Cancer Council Australia -

www.cancer.org.au

Canterbury District Health Board (New Zealand) –

www.cdhb.health.nz/Hospitals-Services/Cancer-BloodServices/Canterbury-Regional-Cancer-Blood-Service/Radiation-Oncology/Pages/default.aspx

Macmillan Cancer Support (UK)-

www.macmillan.org.uk

National Cancer Institute (USA) -

www.cancer.gov/cancerinfo