

# Radiotherapy and Breast Cancer



This factsheet describes what radiotherapy is and what is involved. It gives tips to help you cope if you are given radiotherapy as a treatment for breast cancer. For more information, call the **National Cancer Helpline** on **1800 200 700** or visit **[www.cancer.ie](http://www.cancer.ie)**.

## What is radiotherapy?

Radiotherapy is the use of high-energy X-rays to treat cancer. The high-energy rays come from a machine called a linear accelerator and can damage and destroy cancer cells within the area being treated.

Radiotherapy also affects normal cells in the area being treated, but these cells can usually recover better than cancer cells. Treatments are usually given regularly over a period of time so that they have the greatest effect on the cancer cells, while limiting the damage to normal cells.

Radiotherapy can also be given using radioactive tubes that are put into the area where the cancer is. This is called internal radiotherapy or brachytherapy.

## When is radiotherapy given?

Radiotherapy is a very specialist treatment and is a common treatment for breast cancer. Your doctor will plan it very carefully and individually for you, depending on the type and stage of your cancer and the other type of treatments you are receiving. Remember that treatment plans vary, so it is best not to compare your treatment plan with other patients' plans.

- **After surgery**

In most cases, radiotherapy is given after surgery. This reduces the risk of cancer coming back by getting rid of any possible cancer cells that are still in the area. If you have a lump removed, you will most likely receive radiotherapy to the remaining breast tissue.

If you have a mastectomy (removal of your whole breast), but the tumour was large or cancer cells have spread to lymph nodes under your arm, you might receive radiotherapy to your chest wall area.

---

National Cancer Helpline **1800 200 700**

- **Chemotherapy**

Radiotherapy might be given to you before, during or after you have chemotherapy, depending on the type of chemotherapy. Radiotherapy cannot be given at the same time as some chemotherapy drugs. Your doctor will arrange your schedule based on which chemotherapy drugs you are taking.

- **Advanced cancer**

Radiotherapy might also be used in more advanced stages of breast cancer. This is called palliative treatment. It can help to control previously untreated disease in your breast, or help to relieve cancer-related symptoms; for example, pain, spinal cord compression or tumours caused by the cancer spreading to other parts of your body (secondary breast cancer). In these situations, the extent of the treatment will depend on your individual circumstances. Usually, the treatment will be given over a much shorter period of time.

- **Before surgery**

Occasionally, you might be given radiotherapy to reduce the size of a large tumour before you have surgery.

## How is treatment arranged?

The timing of your treatment will depend on your situation, and other treatments might be given first. It will usually be given daily, Monday to Friday, for between 5 and 6 weeks.

First, you will see the radiotherapy specialist (radiation oncologist) in the outpatient department to talk about your treatment. A further appointment will be made to plan the treatment. You will then be given a starting date. Radiotherapy is a specialised treatment and is not available in every hospital. However, each breast unit will have a link with a hospital that has a radiotherapy unit. You will usually be treated as an outpatient. If you think you will have problems getting to your appointments, tell the radiotherapy staff.

It is important that your treatment continues as planned and that you do not miss any appointments. If, for example, you have a holiday booked, tell the specialist or radiation therapist who is treating you so that arrangements can be made for it, if possible.

Each day the staff treating you will check how you are. If you have any problems, tell the radiation therapist or nurse. An appointment can be arranged with your specialist or breast care nurse, if needed. Radiotherapy does not make you radioactive. Close physical contact with others is safe during radiotherapy treatment and many people continue to work during their treatment.

## Transport to the radiotherapy centre

Sometimes transport to the centre can be arranged. You might also be eligible for some financial assistance from the Travel2Care scheme. To find out more contact your cancer nurse or medical social worker or any health professional involved in your care, or call the Irish Cancer Society on 01 231 6619.

## Treatment planning

Your treatment is individually planned, so do not compare treatment sites and number of treatments with those of other patients. Treatment planning, also known as simulation, finds the exact area to be treated, using the highest dose of radiation, while causing the fewest possible side-effects.

## Simulation

Simulation means planning your radiotherapy treatment. A special X-ray machine called a simulator is used for planning your treatment. You will be called to your radiotherapy centre for this planning. It is normal to be nervous the first time you visit the radiotherapy centre. That day, try to bring someone with you for company and support. When you go to the radiotherapy centre to plan your treatment, you should wear an old bra or vest because the markings from the treatment planning can stain your underwear. These stains can be difficult to remove.

Simulation is not painful. However, you will lie on a hard table in a room with machines above you, which might be uncomfortable. You will have to partially undress to expose the skin in your breast area. Your planning session can last from half an hour to an hour. During this time you will need to lie still while a doctor and radiation therapist take some X-rays and measurements. Some simulators use CT

scans instead of X-rays to plan your treatment. At some stages you will be alone in the room but you can be seen and heard at all times. The area of your body to be treated might be marked with a pink or purple marker or permanent tattoos. If a marker is used you are advised not to rub it off before starting treatment and to return to the radiotherapy centre for top-up markings if they fade. Skin tattoos might be used. If so, they will be very small and blue or black in colour. The tattoos will remain on this area for life, but they are not painful and are barely noticeable.

## Raising your arm



### Hints & tips

After your surgery but before your treatment, you should be able to raise your elbow to at least shoulder level so that you are comfortable in your treatment position. If you find this difficult, ask to see a physiotherapist before starting your treatment. If you are on pain medication, take your painkillers before you go to your appointment.

## How is radiotherapy given?

When you go for treatment you will be asked to undress to the waist and lie on the treatment bed. The radiation therapist will position you so that you are in the same position each time you have your treatment. Again, you will be in the room on your own, but the radiation therapist can see and hear you at all times from the outside room. You can also speak to the staff through an intercom.

When you are in the correct position you will be asked to stay very still and breathe normally.

The radiation therapist will position the machine to different angles to aim the treatment to the areas needed. You will not feel any pain while the treatment is being given, but you might feel some discomfort in your arm from keeping it in the same position during the treatment.

The treatment only takes a few minutes. When it has finished you will be asked to get dressed and will be given an appointment for the next day. This will be the routine until treatment finishes. The radiation therapist works closely with the doctors and other staff in the unit. They can give you help and advice about any aspect of your treatment. If you are anxious or concerned about something, do ask them for advice. Even if you feel embarrassed, they will be glad to answer your questions.

External radiotherapy does not make you radioactive. It is perfectly safe for you to mix freely with family and friends

## Will I have side-effects?

Radiotherapy can cause side-effects. Side-effects happen because radiotherapy affects normal cells as well as cancer cells. Your side-effects will generally be limited to the area being treated. Normal cells are able to recover, but they might be damaged in the short or long term by the effects of radiation. Most side-effects are temporary, but some might be permanent. Some side-effects might even occur months or years after treatment. Each person reacts differently to treatment, but certain side-effects are more common than others.

## What are the common side-effects?

- **Skin changes**

You might develop a skin reaction during or after treatment to your breast. The extent of this reaction will depend on a number of factors, including the dose of treatment given to you and the sensitivity of your skin. Skin reactions might be present and you might feel tenderness and itching of the skin in the treatment area 10–14 days after treatment begins. Your skin might flake as treatment goes on and it could become red, sore and weepy. Even after you have finished your radiotherapy, the effects to your skin can continue to worsen for about

another week afterwards. Everyone's skin reacts differently to radiation. Your skin might become sore, while someone else's is unaffected. Your healthcare team will check your skin frequently and give you suitable treatment for any reaction.

- **Pain or discomfort**

While you are having your treatment, you might have some aches, pains, twinges and swelling in the breast area now and then. These symptoms might continue for some time after treatment has finished. If treatment includes the centre or collarbone area, a small area of your gullet (oesophagus) could be affected. This might cause some heartburn and discomfort, but it usually improves with medication.

- **Fatigue**

During the weeks when you are being treated, your body uses a lot of energy, so you might feel more tired than usual, especially as treatment goes on. The stress of a cancer diagnosis and the journey to hospital can all add to this tiredness (fatigue). Research suggests that a balance between exercise and rest can help with this feeling of fatigue. A healthy diet and fresh air may also help you. For more information, contact the National Cancer Helpline on 1800 200 700 and ask for our booklet, Coping with Fatigue, or visit [www.cancer.ie](http://www.cancer.ie).

- **Other side-effects**

Sometimes part of the lung behind the treatment area becomes inflamed. This can cause a dry cough or shortness of breath. This usually heals by itself.

If you are a younger woman, you probably won't be able to breastfeed your baby on your treated breast.

### **What are the late side-effects?**

Some side-effects might not appear until treatment has finished. These are known as late side-effects. Some late side-effects can be serious and permanent. Radiotherapy to your breast and armpit can sometimes cause hardening of the tissues. This is known as fibrosis and is caused by a build-up of scar tissue. If the fibrosis of the breast becomes severe, the breast might become noticeably smaller and harder.

## **Caring for yourself during and after radiotherapy**



- Avoid using any perfumes, deodorants, dressings, creams or lotions in the treated area unless advised to do so by the radiotherapy staff.
- Wash the area gently with lukewarm water, either in a bath or shower, and pat dry with a soft towel. Do not rub the area. Some hospitals allow you to use a gentle, non-perfumed soap.
- Avoid exposing the treated area to direct sunlight for one year after treatment. When treatment is finished the skin in the treated area will be more at risk of burning, so it is important to keep this area covered or regularly apply a sunblock to the area. While you're having your treatment avoid anything associated with extreme temperatures, such as heat pads, saunas, hot water bottles or cold packs.
- Soft cotton bras or vests will help you to feel comfortable, and you may find it more comfortable to go without a bra for a time after treatment.
- If you wear a prosthesis, you might find a soft lightweight one is better than your silicone one.
- A well-balanced, healthy diet with plenty of fluids can help your body to cope with the effects of treatment.
- Try not to expect too much of yourself during treatment because your energy levels will be low.
- Swimming in chlorinated water is not advisable during treatment and for 3 to 4 weeks after treatment.
- If you develop a skin reaction, it should be fully healed about 4 weeks after treatment. Nursing staff in the radiotherapy centre will advise you on how to take care of your skin.

You might also notice tiny, dilated blood vessels under your skin. This is known as telangiectasia. Severe fibrosis can also block lymph drainage of your arm and cause a swelling called lymphoedema in your arm. If you notice any swelling in your arm, hand or breast, ask to be referred to a trained lymphoedema therapist for treatment. For more information on reducing your risk of arm lymphoedema contact the National Cancer Helpline on 1800 200 700 for a factsheet or visit [www.cancer.ie](http://www.cancer.ie).

#### • **Other late side-effects**

Other side-effects that can occur later include:

- Weakness of the bones in the area, for example, your ribs and collarbone.
- Damage to nerves in your arm, which can cause tingling, numbness, pain, weakness and possibly some loss of movement.
- Fibrosis of your upper lung, which can cause a dry cough and shortness of breath.

#### **Effects on other treatments**

If you are planning breast reconstruction, radiotherapy to the breast may affect the types of breast reconstruction you can have. Certain forms of breast reconstruction tolerate radiotherapy better than others. Your doctor and breast care nurse will give you further information.

Remember that serious side-effects are rare and experts agree that the benefits of the treatment outweigh the risks of these possible side-effects.

#### **What can I expect after treatment?**

Although completing radiotherapy treatment is usually a relief, many people still feel quite vulnerable. It can take some time before you will feel you are 'getting back to normal'.

Try not to expect too much of yourself in the early days and weeks after your treatment. You might go on feeling tired for some time, but gradually you should begin to feel better. For some, this can take several months and sometimes up to a year.

You will be given regular follow-up appointments to check your progress. But if at any time you have a concern or worry, contact the radiation specialist so that an earlier appointment can be arranged for you. Contact the National Cancer Helpline on 1800 200 700 for our booklet 'Coping with Fatigue' or download it at [www.cancer.ie](http://www.cancer.ie).

Your skin might feel dry after radiotherapy too. In this case, using a moisturiser as recommended by the radiotherapy staff might help. Breast tissue on the treated side may feel firmer than before. It is important to note what is normal for you. Continue to be breast aware after treatment. For a free breast awareness information pack, call the National Cancer Helpline on 1800 200 700.

#### **How can I cope with radiotherapy?**

When you are having radiotherapy you might feel quite emotionally upset, frightened or have difficulty adjusting to what is happening to you. Fear of the unknown is common, so finding out as much as possible about your treatment can help you to cope better. You might find it helpful to visit the centre beforehand, so you know what to expect. If you are feeling low, tired, anxious or tearful at any point during or after your treatment, remember that you are not alone. There are many people who can help you. Try to let other people know how you feel, particularly your family and friends, so that they can support you.

#### **Further support**

It can help to discuss your feelings or worries with your breast care nurse or specialist. A counsellor or psychotherapist might be helpful if you want to talk through your feelings in more depth over a period of time. You might also find it easier to share your feelings with someone who has had a similar experience to you. Reach to Recovery is a programme set up to help and support women who have recently had a breast cancer diagnosis. The programme involves personal contact between you and a Reach to Recovery volunteer. This is a woman who has had treatment for breast cancer. Carefully selected and fully trained volunteers are available to provide advice and reassurance at a time when you are most in need of both.

For information on counselling services or individual support, call the National Cancer Helpline on 1800 200 700.

## Useful organisations and websites

### Reach to Recovery

Provides practical and emotional support to women with breast cancer. For details call National Cancer Helpline: 1800 200 700  
Website: [www.cancer.ie](http://www.cancer.ie)

### Lymphoedema Ireland

Helpline: 087 693 4964  
Website: [www.lymphireland.com](http://www.lymphireland.com)

### Breast Cancer Care UK

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

### American Cancer Society

Website: [www.cancer.org](http://www.cancer.org)

### Daffodil Centres

The Irish Cancer Society's Daffodil Centres provide cancer information, support and advice in local hospitals. Daffodil Centres aim to provide a wide range of information locally to anyone affected by or concerned about cancer.

For details of your nearest Daffodil Centre call the National Cancer Helpline on 1800 200 700 or visit [www.cancer.ie](http://www.cancer.ie).



For more information on radiotherapy and breast cancer or for confidential advice from our cancer nurse specialists, call the **National Cancer Helpline** on **Freefone**

# 1800 200 700

(Monday–Thursday, 9am–7pm,  
Friday 9am–5pm) or email  
[helpline@irishcancer.ie](mailto:helpline@irishcancer.ie)



Irish Cancer Society  
43/45 Northumberland Road,  
Dublin 4

T: 01 231 0500  
F: 01 231 0555  
E: [helpline@irishcancer.ie](mailto:helpline@irishcancer.ie)  
W: [www.cancer.ie](http://www.cancer.ie)



Published by the Irish Cancer Society.  
© Irish Cancer Society 2010, revised 2014  
Next revision: 2016

All rights reserved. No part of this publication may be reproduced or transmitted, in any form or by any means, electronic or mechanical, including photocopying, recording or any information storage and retrieval system, without permission in writing from the Irish Cancer Society.