MACMILLAN
CANCER SUPPORT

Radiotherapy for lung cancer

About this booklet

This booklet is about radiotherapy for lung cancer. It is for anyone who has been diagnosed with lung cancer and is having radiotherapy to treat it. There is also information for carers, family members and friends.

The booklet explains:

- the different types of radiotherapy
- how to prepare for radiotherapy
- how radiotherapy is planned and given
- the side effects of radiotherapy for lung cancer and ways to manage these.

We hope it helps you deal with some of the questions or feelings you may have.

It is best to read this booklet along with our booklet called **Understanding lung cancer**. We also have other treatment booklets about lung cancer (page 70):

- **Chemotherapy for lung cancer**
- **Surgery for lung cancer**
- **Targeted therapy and immunotherapy for non-small cell lung cancer**.

We cannot give advice about the best treatment for you. You should talk to your doctor, who knows your medical history.

How to use this booklet

This booklet is split into sections to help you find what you need. You do not have to read it from start to finish. You can use the contents list on page 5 to help you.

It is fine to skip parts of the booklet. You can always come back to them when you feel ready.

On pages 76 to 87, there are details of other organisations that can help.

There is also space to write down questions and notes for your doctor or nurse (page 88).

Quotes

In this booklet, we have included quotes from people who have had lung cancer, which you may find helpful. These are from people who have chosen to share their story with us. To share your experience, visit **macmillan.org.uk/shareyourstory**

For more information

If you have more questions or would like to talk to someone, call the Macmillan Support Line free on **0808 808 00 00**, 7 days a week, 8am to 8pm, or visit **macmillan.org.uk**

If you would prefer to speak to us in another language, interpreters are available. Please tell us, in English, the language you want to use.

If you are deaf or hard of hearing, call us using Relay UK on **18001 0808 808 00 00**, or use the Relay UK app.

We have some information in different languages and formats, including audio, easy read, Braille, large print, interactive PDF and translations. To order these, visit **macmillan.org.uk/otherformats** or call **0808 808 00 00**.

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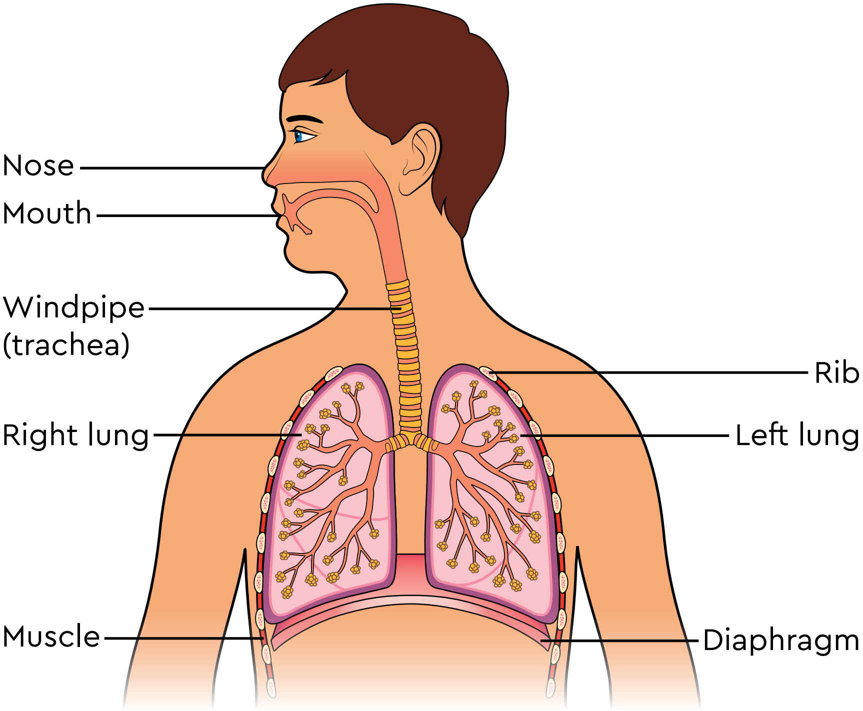
The lungs and lung cancer

About lung cancer

Lung cancer is the third most common cancer in the UK. About 49,200 people are diagnosed with lung cancer each year. It is more common in older people but can also affect younger people.

The lungs are the parts of the body that we use to breathe. They supply oxygen to the organs and tissues of the body. The lungs are divided into areas called lobes. The right lung has 3 lobes and the left lung has 2 lobes.

The lungs



Most lung cancers are caused by smoking. This is the biggest risk factor.

Some people who have never smoked can also get lung cancer. Around 15 in 100 people (15%) diagnosed with lung cancer are people who have never smoked. This is called non-smoking lung cancer. It is more common in younger people. The Ruth Strauss Foundation has more information about non-smoking lung cancer (page 77).

Finding out you have lung cancer

Being diagnosed with lung cancer can cause many different emotions (page 66). There is no right or wrong way to feel. You may have been worrying about having cancer for a while. Or your diagnosis might have been unexpected.

This information is for people who have already been diagnosed with lung cancer and are going to have radiotherapy to treat it. You might also be having other lung cancer treatments.

It is best to read this information with our general booklet about lung cancer. Our booklet **Understanding lung cancer** explains all the different treatments for lung cancer (page 70).

If you need support, you can contact our cancer support specialists on **0808 808 00 00**. They will be able to talk to you about your diagnosis and help answer any questions you have.

We have more information about lung cancer on our website. Visit **macmillan.org.uk/lungcancer**

> **"Everything felt like a giant plate of spaghetti that I couldn't unravel. The Macmillan nurse was amazing. She helped me make sense of it all and got my thinking straight. She also helped prepare me to ask all the right questions when I had my next clinic consultant appointment."**

Natasha, diagnosed with lung cancer

Types of lung cancer

There are 2 main types of primary lung cancer:

- non-small cell lung cancer (NSCLC), which is the most common type of lung cancer
- small cell lung cancer (SCLC), which is much less common than NSCLC – about 10% to 15% of lung cancers are SCLC.

Primary lung cancer is cancer that starts in the lung.

The cancer cells are examined in a laboratory by a doctor called a pathologist who is an expert in cell types. The cancer types are named after:

- how the cancer cells look under a microscope
- the type of cells the cancer started in.

These cancers behave in different ways. Your treatment will depend on the type of lung cancer you have.

About radiotherapy

Radiotherapy for lung cancer

Radiotherapy uses high-energy rays to destroy cancer cells. It destroys cancer cells in the area of the body where you have it, while doing as little harm as possible to normal cells.

Radiotherapy is given from a machine that delivers radiotherapy to the cancer. This is sometimes called external beam radiotherapy (page 32).

Some normal cells in the treated area can also be damaged by radiotherapy. This can cause side effects. These normal cells are usually able to repair themselves, but cancer cells cannot. As the normal cells recover, the side effects usually get better.

Radiotherapy is carefully planned by a team of experts. Radiotherapy techniques are improving. This means your radiotherapy team can treat the cancer more effectively, while reducing harm to normal cells.

Radiotherapy is one of the main treatments for lung cancer. You often have it with other treatments.

Your treatment plan

After a diagnosis of lung cancer, a team of specialists meets to talk about the best treatment for you. This is called a multi-disciplinary team (MDT). After this you will make decisions about your treatment along with your cancer team.

The multi-disciplinary team (MDT) will include:

- a thoracic surgeon – a doctor who does operations and specialises in lung surgery
- a clinical oncologist – a doctor who uses radiotherapy, chemotherapy and targeted and immunotherapy drugs to treat people with cancer
- a respiratory specialist – a doctor who is an expert in chest and breathing conditions
- a clinical nurse specialist (CNS) – a nurse who gives information about cancer, and support during treatment
- a radiologist – a doctor who looks at scans and x-rays to diagnose problems
- a pathologist – a doctor who looks at cells or body tissue under a microscope to diagnose cancer.

The team may also include other healthcare professionals, such as:

- a palliative care doctor or nurse, who specialises in controlling symptoms
- a dietitian – someone who gives information and advice about food and food supplements
- a physiotherapist – someone who gives advice about exercise and mobility.

To help your specialists decide on the best treatment for you, they look at things including:

- the type of lung cancer you have
- the stage of the cancer
- the results of tests done on the lung cancer cells
- your general health
- how able you are to do everyday things – this is called your performance status (page 18)
- your treatment preferences
- lung cancer treatment guidelines.

Talking about your treatment plan

After the MDT meeting, you usually see your cancer doctor and specialist nurse. They will talk to you about the aims of your treatment and tell you what your treatment options are. You can make decisions together with your team. This is called shared decision making.

You will need more information about different options for your treatment, and how it is likely to affect you. The aim is to reach a decision about your treatment or care that is right for you.

Before you meet with your doctor or nurse it can help to write down your questions. You may want to ask a family member or friend to come with you. They can help remember what is said and talk with you about it afterwards.

It is important to understand how a treatment may affect you before you give your permission (consent) to have treatment. Your cancer doctor or nurse will explain what each treatment involves and how it may affect you.

Your cancer team should explain:

- the aim of the treatment – whether it is to cure the cancer or control it
- the benefits of the treatment
- the disadvantages of the treatment – for example, the risks and side effects
- any other treatments that may be available
- what might happen if you do not have the treatment.

Your doctor or nurse might give you printed information or show you videos about your treatment options.

Your doctor may talk to you about having radiotherapy as part of a clinical trial. We have more information about clinical trials on our website. Visit **macmillan.org.uk/clinical-trials**

Your performance status

When deciding on the best treatment for you, your cancer doctor needs to check your overall health. This includes measuring how well you can do ordinary daily activities. This is sometimes called your performance status. It helps you and your doctor think about how a treatment may affect your:

- ability to care for yourself
- quality of life
- ability to do the things that are important to you.

Doctors use different scales to help them measure your performance status. They usually give a grade or performance score between 0 and 4.

A score of 0 means you are fully active and can do all the things you did before your cancer diagnosis. A score of 4 means you are spending most of your time in bed, needing full care.

You and your doctor can make decisions about which treatments are best for you based on your performance score.

When is radiotherapy used to treat lung cancer?

Whether radiotherapy is used will depend on the stage and type of lung cancer and the aim of your treatment. You can find out more about the different stages of lung cancer in our booklet **Understanding lung cancer** (page 70). We also have information at **macmillan.org.uk/lung-cancer-staging**

Your cancer doctor and nurse will talk to you about the aim of your radiotherapy.

Radiotherapy can be given:

- to try to cure the cancer – this is sometimes called radical treatment
- to control the cancer and slow its growth, which can help people to live for longer
- to treat symptoms of advanced lung cancer (palliative radiotherapy).

Radiotherapy for non-small cell lung cancer (NSCLC)

Radiotherapy for non-small cell lung cancer (NSCLC) may be given in the following ways:

- On its own instead of surgery to try to cure early stage NSCLC. Early stage NSCLC is when the cancer has not spread outside the lung, or it has only just spread outside the lung, possibly to nearby lymph nodes. You usually have a type of radiotherapy called stereotactic ablative radiotherapy (SABR).
- After surgery to remove lung cancer to try to reduce the risk of the cancer coming back (adjuvant radiotherapy).
- At the same time as chemotherapy, if the cancer is locally advanced and you cannot have or do not want lung surgery (concurrent chemoradiation).
- Before or after chemotherapy if the cancer is locally advanced (sequential chemoradiation).
- To control symptoms if lung cancer has spread to other parts of the body (palliative radiotherapy).

Locally advanced lung cancer is when the cancer has spread to areas outside the lung or to the lymph nodes.

Radiotherapy for small cell lung cancer (SCLC)

Radiotherapy for small cell lung cancer (SCLC) may be given in the following ways.

- Before or after chemotherapy, usually if you cannot have both treatments together (sequential chemoradiation).
- At the same time as chemotherapy (concurrent chemoradiation).
- After chemotherapy if you have extensive stage SCLC which has responded to treatment (sequential chemoradiation). Extensive stage SCLC means the cancer has spread outside the lung, to the chest area or to other parts of the body.
- To the head, to stop any lung cancer cells that may have spread from growing into a tumour in the brain (prophylactic cranial irradiation, or PCI).
- To control symptoms, if the cancer is more advanced or has spread to other parts of the body (palliative radiotherapy).

About your radiotherapy team

A team of specialists is involved in planning and giving your radiotherapy. Here are some of the people you may meet.

Consultant clinical oncologist – a doctor who is an expert in radiotherapy and other cancer treatments, who plans and oversees your treatment.

Therapeutic radiographers – experts in radiotherapy who help plan your treatment. They operate the radiotherapy machines and position you for your treatment. Your radiographer will give you information and support during your treatment.

Physicist – a radiation expert who helps plan your treatment. They work out the amount of radiation you need and the best way of giving it. They also check that the machines give the planned dose of radiation in the correct way.

Specialist nurse – sometimes called a clinical nurse specialist (CNS) or an advanced nurse practitioner. They have expert knowledge about lung cancer. Some radiotherapy clinics have nurses who give information about the treatment and its side effects. They may also give advice on skin care, and medicines to manage side effects.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Preparing for treatment

Preparing for radiotherapy

Your cancer team will give you information about your treatment and its possible side effects. They will tell you what to expect and how to prepare. They may provide information for you to take home, or suggest useful websites.

It is important to understand your treatment and the effects it may have on you. You might want to write down your questions. You can usually take a family member or friend with you to appointments. They can take notes about what is said.

Your cancer doctor or specialist will talk to you about any tests, scans or check-ups you need before your treatment begins.

Your cancer doctor will arrange for you to have different breathing tests. These are to test how well your lungs are working. You may also need tests to check your general health and how well your heart and kidneys are working. You will also have blood samples taken.

We have information on our website about lung cancer tests and scans. Visit **macmillan.org.uk/tests-scans**

Helping you prepare for treatment (prehabilitation)

Your cancer team may talk to you about things to help you to prepare for treatment. This might help you to feel fitter and cope better with treatment. This is sometimes called prehabilitation.

It can include:

- advice on diet to make sure you are eating as well as possible – a dietitian might give you diet supplements and drinks to help you gain weight if needed
- information from a physiotherapist about exercise that can make you fitter and improve your breathing – or an exercise programme you can go along to
- emotional support to look at ways of helping you cope with your diagnosis and treatment.

Stopping smoking

If you smoke, your doctor will advise you to try to stop. Stopping smoking may make radiotherapy work better and reduce the side effects of treatment. Your nurse or radiographer will talk to you about this.

It can be difficult to stop smoking, especially when you are stressed. Your hospital will usually have a service to support you. Using NHS Stop Smoking Services improves your chances of success. Your GP can also give you support and advice. They can provide nicotine replacement therapies on prescription. You can also find stop smoking organisations on pages 80 to 81. We have more information about stopping smoking on our website. Visit **macmillan.org.uk/stop-smoking**

Help at home

Feeling tired is a common side effect of radiotherapy, so you may need help with day-to-day tasks. Family and friends often want to help. If you live alone or care for someone, ask to see a hospital social worker about getting help.

Organising meals

If you can, plan ahead. Shop before your treatment starts so there is food at home. Choose meals that are easy to prepare or make meals you can freeze for later. You might also want to take snacks and drinks with you on treatment days.

Plan your meals and make a list to help you save time and energy. Ask others to help, or to get things for you when they do their own shopping. Try online shopping and have it delivered to you. Family or friends can do this for you if they are too far away to help in person.

Transport and travel

If you drive, you may want to drive yourself to hospital for your treatment. But you usually feel more tired as your treatment progresses. If you feel tired, it is best to ask a family member or friend to drive.

If you are using public transport your radiographer may try to arrange your treatment when it is easier or less busy for you to travel.

If you are worried about getting to the hospital, tell the staff in the radiotherapy department. They may be able to arrange transport for you.

Help with travel costs

You may be able to claim a refund for your travel costs under the Healthcare Travel Costs Scheme (HTCS). If you need someone to travel with you to hospital for medical reasons, you may be able to get a refund on their travel costs too. This will depend on whether you are receiving any benefits.

We have more information on our website about how to claim for travel costs. There is also advice on parking costs. You can read more in our booklet **Help with the cost of cancer** (page 70).

Accommodation

If you are having a type of radiotherapy called CHART you might need to stay near the hospital (page 40). This is because you will have treatment sessions 3 times a day. Your cancer team will talk to you about this. They usually organise accommodation nearby or in the hospital for you.

Work

Some people decide to continue working during treatment. If you want to do this, talk to your employer or the HR department. They can support you and make adjustments to help you in your job. This could include working part-time or working from home. We have more information in our booklets **Work and cancer** and **Your rights at work when you are affected by cancer** (page 70).

Pregnancy and contraception

Before radiotherapy you might be asked to do a urine test to make sure you are not pregnant. Your cancer team will advise you not to get pregnant. Radiotherapy can harm a developing baby. It is important to use contraception to prevent pregnancy.


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Types of radiotherapy

External beam radiotherapy

You have your radiotherapy planning and treatment done in the hospital radiotherapy department.

External beam radiotherapy is given from a radiotherapy machine. It aims high-energy rays at the area of the body being treated. There are different types of radiotherapy machines. The most common is a linear accelerator (LINAC). It looks like a large x-ray machine or CT scanner.

There are different types of external beam radiotherapy, depending on if you are being treated for non-small cell lung cancer or small cell lung cancer. The radiographer who operates the machine will give you information and support during treatment. They arrange your treatment appointments.

External beam radiotherapy does not make you radioactive. It is safe for you to be with other people, including children, throughout your treatment.

Planning your radiotherapy treatment

Before you start treatment, your radiotherapy needs to be planned. This makes sure the radiotherapy is aimed precisely at the cancer and causes the least possible damage to healthy tissue. You will have a CT scan of the area to be treated. Your radiotherapy team uses the results of the scan to work out the:

- amount of radiotherapy needed for your treatment
- part of the lung that will be treated.

Your planning visit

Your first planning visit usually takes 30 to 60 minutes or sometimes longer. You might need more than 1 hospital appointment. Your radiotherapy team will tell you what to expect and let you know if there is anything you need to prepare.

Before the planning visit, some people may need to have a mould made. This is a light plastic mesh shaped to your chest and shoulders. It fastens to the couch and keeps you still during your treatment. A technician or radiographer usually makes it in the radiotherapy department.

We have more information about getting a mould made on our website. Visit **macmillan.org.uk/radiotherapy-masks**

Your planning CT scan

You usually have a planning CT scan of the chest. This helps your radiotherapy team to work out the precise dose and area of your treatment.

A CT scan makes a detailed picture of the inside of the body. The picture is built up using x-rays taken by the CT scanner. The scan uses radiation, but this is very unlikely to harm you. It will not harm anyone you come into contact with.

Before your scan, the radiographer may ask you to:

- change into a hospital gown
- remove any jewellery or objects containing metal from your body.

You might be given an injection of dye into a vein. This helps show certain areas of the body more clearly.

During the scan you lie still on a hard couch. It is important to tell the radiographers if you feel uncomfortable. Once you are in position and comfortable, the radiographers record the details of your position. You will need to be able to lie in the same position for all your radiotherapy sessions.

The radiographers might talk to you about using a breathing technique. This is not suitable for everyone and is not always done at the planning CT scan. It involves holding your breath for short periods of time to help keep your lungs still. You will be asked to use this technique when you have your radiotherapy treatments.

The information from the CT scan is sent to a planning computer.

Skin markings

You might have some small permanent markings made on your skin. The marks are about the size of a pinpoint. They help the radiographers make sure you are in the correct position for each session of radiotherapy. Usually, tiny permanent markings are made in the same way as a tattoo. The marks will only be made with your permission.

If you are worried about them, talk to your radiographer.

Having a CT scan

Treatment sessions

You might have lung cancer radiotherapy for different lengths of time and in different ways. Your doctor, radiographer or nurse will explain how your treatment will be given.

- Radiotherapy for lung cancer is often given once a day, Monday to Friday, with a break at the weekend. This may be over 4 to 7 weeks and is often called standard radiotherapy.
- If you have early stage non-small cell lung cancer (NSCLC) you might have fewer sessions over a shorter time using higher doses of radiotherapy.
- If you have NSCLC, you might have radiotherapy more than once a day and over the weekend. This is called hyper-fractionated radiotherapy.
- Radiotherapy to control symptoms may be given over a shorter time, either over 5 to 10 days or sometimes as a single treatment.

Usually, each radiotherapy appointment takes about 10 to 30 minutes. But you may be in the department for longer. The radiotherapy itself usually only takes a few minutes. Most of the appointment is spent getting you into the correct position and checking your details.

Positioning for radiotherapy

The radiographer may ask you to change into a hospital gown. This is so they can access the marks made on your skin at your planning appointment (page 35).

They help you onto the treatment couch and position you carefully. For radiotherapy to the lung, you lie on your back. You may have special cushioning supports for your arms to make sure you are as comfortable as possible.

The radiographer also adjusts the height and position of the couch and radiotherapy machine. They will explain what they are doing. They help you arrange your clothes or gown so the part of your body being treated is bare. They are careful to protect your privacy so nobody else can see you.

It is important to lie as still as possible during the treatment. Tell the radiographer if you are not comfortable.

When you are in the correct position, they leave the room and the treatment starts. The radiographer can see and hear you from outside the room. There is usually an intercom so you can talk to them if you need to during your treatment.

During treatment

The treatment is not painful. You might hear a slight buzzing noise from the radiotherapy machine during treatment. You might be able to listen to music to help you to relax. If you want your own music, ask your radiographer if this is possible.

Radiotherapy often involves having treatment from several different directions. To do this, the radiotherapy machine may move into different positions during treatment. This might happen several times. Sometimes, the radiographer comes into the treatment room to change the position of the machine.

Or radiotherapy may be given as the machine moves around you in an arc.

The radiotherapy machine may also take x-rays or CT scans of the treatment area. These may be taken on the first day and on other days. They are used to help make sure the treatment is given accurately. They are not used to show how well treatment is working. Radiotherapy takes time to work.

After treatment

Once your treatment session has finished, the radiographer will come and help you off the couch. It is important to wait until they tell you it is okay to move. You can then usually get ready to go home.

Types of external radiotherapy for non-small cell lung cancer

Some people have standard radiotherapy which usually means having treatment once a day, Monday to Friday for 4 to 7 weeks. But there are also some specialised ways of having lung radiotherapy for non-small cell lung cancer (NSCLC).

Stereotactic ablative radiotherapy (SABR) for NSCLC

SABR is a specialised type of radiotherapy. It may be used to try to cure early lung cancer (stage 1 to 2).

You might have SABR if you cannot have lung surgery or do not want surgery. SABR is not available at every hospital, so you might have to travel to have it.

The radiotherapy team uses scans, specialist machinery and complex planning to target the radiotherapy beams very precisely. This gives a very high dose of radiotherapy to small cancers, and only a low dose to healthy tissue surrounding it. This helps to reduce side effects.

You have fewer treatments over a shorter period. You might have SABR as 3, 5 or 8 treatments usually given every other day. Your doctor or radiographer will explain how many sessions you need over how many days. We have more information about SABR on our website. Visit **macmillan.org.uk/sabr**

SABR might also be used to treat some lung cancers that have spread to other parts of the body.

Continuous hyper-fractionated accelerated radiotherapy (CHART)

If you have stage 3 NSCLC lung cancer and are not having chemoradiation you might have continuous hyper-fractionated accelerated radiotherapy. This is sometimes called CHART.

Stage 3 lung cancer is when the cancer may have spread to other parts of the lung, outside the lung and usually to the lymph nodes. But it has not spread to a different part of the body.

You have radiotherapy 3 times a day including weekends, for 12 days. Each treatment must be at least 6 hours apart.

CHART is not available at every hospital, so you may have to travel to have it. You usually have to stay in the hospital or somewhere nearby during treatment.

Types of external radiotherapy for small cell lung cancer

You usually have standard radiotherapy to the lung for small cell lung cancer (SCLC). This might mean having radiotherapy once a day, Monday to Friday, for 4 to 7 weeks.

Radiotherapy can also be given at the same time as chemotherapy. This is called chemoradiation (pages 42 to 43).

Preventive radiotherapy to the brain for SCLC

Your cancer doctor may talk to you about having radiotherapy to the brain. This is called prophylactic cranial irradiation (PCI) – pages 51 to 55. With SCLC, there is a risk that cancer cells too small to see on a scan may have spread to the brain. Over time these cells could develop into a secondary cancer in the brain. PCI can reduce this risk and help people with SCLC to live longer.

You usually have PCI after having chemotherapy or chemoradiation that the cancer has responded well to. Your doctor and nurse will explain what is involved and what the side effects are before you decide.

Chemoradiation

Chemoradiation is when chemotherapy and radiotherapy are given at the same time. It is sometimes called concurrent chemoradiation.

Some people have chemotherapy before or after radiation. This is called sequential chemoradiation. You might have this because it would be too difficult to cope with both treatments at the same time.

Chemoradiation can make treatment more effective. But you usually have more side effects, so you need to be well enough to cope with these.

Non-small cell lung cancer (NSCLC)

If the cancer has spread into areas around the lung (locally advanced) and surgery is not suitable you may have chemoradiation. You usually start chemotherapy during the first week of radiotherapy. Or you might have 1 cycle of chemotherapy while your radiotherapy is being planned.

Some people might have an immunotherapy drug for up to a year after chemoradiation. Your doctor will talk to you about whether this is a suitable option for you. We have more information in our booklet **Targeted therapy and immunotherapy for non-small cell lung cancer** (page 70).

Less commonly, some people might go on to have surgery 3 to 5 weeks after chemoradiation. But usually, you will just have chemoradiation.

Small cell lung cancer (SCLC)

People with SCLC that has not spread to other parts of the body might also have chemoradiation. How you have this may depend on the cancer centre where you are having treatment.

For example, you may have radiotherapy 2 times a day, Monday to Friday for 3 weeks, along with chemotherapy. If this is too much to cope with, you can have radiotherapy once a day over 4 to 6 weeks. We have more information about chemotherapy in our booklet **Chemotherapy for lung cancer** (page 70).


NASA

Side effects

Side effects of lung radiotherapy

You may get some side effects over the course of your treatment. Your cancer doctor, specialist nurse or radiographer will explain the side effects so you know what to expect.

Always tell them about any side effects you have. There are often things they can do to help. They will also give you advice on how you can manage side effects.

If you have chemoradiation you might have worse side effects.

Side effects might get worse after radiotherapy finishes. It can take 1 or 2 weeks after treatment before side effects start getting better. After this, most side effect usually slowly go away.

Difficulty swallowing

Radiotherapy can cause inflammation in the gullet (oesophagus). You may have:

- difficulty swallowing or pain when you swallow
- indigestion or heartburn.

These side effects usually happen towards the end of treatment and continue for a few weeks after it finishes. Your doctor can prescribe liquid medicines including painkillers to help reduce the symptoms.

To make swallowing easier, you could try these things:

- Avoid foods that are crunchy or hard to swallow.
- Avoid spicy, hot or very cold foods.
- Avoid citrus fruits like oranges, lemons or grapefruit, or juices.
- Eat softer foods or cut food into small pieces and add sauces or gravy.
- Take painkillers 30 minutes before you eat.
- Eat small meals more often instead of 3 meals a day.
- Drink plenty of fluids – use a straw if it is easier.
- Try not to smoke or drink alcohol – this can make your side effects worse.

If you have difficulty eating, you may meet with a dietitian. They can give you nutritious, high-calorie drinks. You can get these from most chemists, or your GP can prescribe them.

If you are not able to eat or drink enough, your doctor or dietitian might suggest you have tube feeding to maintain your weight. You have a thin tube that goes through the nose into the throat through which you have fluids and nutrition. This is not often necessary and is only needed until your side effects improve. We have more information in our booklets **Eating problems and cancer** and **The building-up diet**.

You can order our booklets and leaflets for free.
Visit **orders.macmillan.org.uk** or call **0808 808 00 00**.

Tiredness

Radiotherapy often makes people feel tired. This can build up over your treatment. If you are having other treatments, such as surgery or chemotherapy, you may feel more tired.

It can help to:

- pace yourself and get plenty of rest
- do some light exercise, such as short walks – this will give you more energy.

Sometimes tiredness can continue for weeks or months after treatment finishes. If it does not get better, tell your doctor or nurse. We have more information in our booklet **Coping with fatigue (tiredness)**.

Skin changes

The skin in the treated area may get dry and itchy. If you have white skin this area might become red. If you have black or brown skin this area might become darker than the surrounding skin.

The radiographers will advise you on how to look after your skin. If it becomes sore, your doctor can prescribe cream to help. It can help to:

- wear loose-fitting clothes made from natural fibres such as cotton
- wash your skin gently with soap and water, gently pat dry and avoid rubbing
- use your usual moisturiser or ask the radiographer for advice
- use your regular deodorant unless the area gets irritated.

When you finish radiotherapy, you should protect the skin in the treated area from direct sunlight. Once any skin reaction has disappeared, use a suncream with a high SPF of 50.

Breathlessness and a cough

You may find your breathing gets worse during radiotherapy and for a few weeks or months after it finishes. You may also get a dry cough. This is because radiotherapy can cause inflammation in the area of the lung being treated. This is called pneumonitis and can be serious.

It is important to contact your cancer team if:

- you have these symptoms
- these symptoms get worse.

They may prescribe steroids to help improve your symptoms. Pneumonitis can happen during radiotherapy or within a few weeks of it finishing.

Blood in your phlegm (sputum)

You might notice small flecks or streaks of blood in your phlegm (sputum). Tell your radiographer, doctor or nurse if this happens. If you are worried about the amount of blood or it increases, let them know straight away.

Hair loss

Hair loss only happens in the treatment area. Men may lose hair on their chest, but it usually grows back. Occasionally hair loss is permanent. We have more information in our booklet **Coping with hair loss**.

You can order our booklets and leaflets for free.
Visit **orders.macmillan.org.uk** or call **0808 808 00 00**.

Late effects of radiotherapy to the lung

Late effects are side effects that do not go away, or side effects that develop months or years after treatment.

Some possible late effects after lung radiotherapy include the following:

- Inflammation or scarring (fibrosis) in the treated area of the lung. This can cause breathlessness or a cough. You might find you cannot walk as far after radiotherapy before stopping to catch your breath. If you are worried about your breathing, talk to your cancer team.
- Narrowing of the gullet (oesophagus) making it difficult to swallow. If this happens you may have a small procedure to stretch this narrowing.
- A slight increase in the risk of heart problems, which might cause pain or tightness in the chest.
- Thinning of the bones in the chest area or the back bones, which may cause pain or small breaks (fractures) in these areas.
- Damage to the nerves in the armpit. This is rare, but it can cause pain, numbness or tingling sensations in the arms or hands.
- Lower immunity due to damage to the spleen which is on your left upper side. This might mean you need to have extra vaccinations, and antibiotics to prevent infection.

You may get these side effects, or others not listed. If you do, tell your cancer doctor or nurse straight away. There are different things that can be done to manage late effects. Your doctor will talk to you about the late effects you might get. This depends on the position of the cancer and the type of radiotherapy you have. Also let them know if any side effects do not improve.

Prophylactic cranial irradiation (PCI) for small cell lung cancer

If you have small cell lung cancer (SCLC) your cancer doctor might talk to you about having prophylactic cranial irradiation (PCI). PCI is radiotherapy to the brain to destroy any cancer cells that might have spread to the brain. They might be too small to see on a scan. Prophylactic means preventive, and cranial means the head. PCI is also sometimes called prophylactic cranial radiotherapy (PCR). We have more information about PCI on our website. Visit **macmillan.org.uk/pcr**

Chemotherapy is not always effective at treating cancer cells that might have spread to the brain. The brain is protected by a membrane called the blood-brain barrier. This stops a lot of chemotherapy drugs from getting to the brain.

PCI is not suitable for everyone. Your doctor or nurse will talk to you about the possible benefits and disadvantages of PCI before you make your decision. It can cause different side effects. You also need to be well enough to have it.

If you have PCI, you will have a mask made from a plastic mesh. You wear this during treatment to help keep your head still. You can breathe through it and it should not be uncomfortable.

Early side effects of PCI

Some people have very few side effects while other people have more. Usually, the side effects of PCI are mild. They sometimes get a little worse in the first 2 weeks after treatment finishes. After this, they usually improve. If you are worried about side effects, contact your radiotherapy team.

Hair loss

You will lose your hair in the area being treated when you have PCI. Your hair may start to fall out about 3 weeks after your first treatment. It usually starts to grow back 1 to 2 months after you finish treatment. Sometimes it grows back a slightly different colour and texture than it was before, and it may not be as thick. We have more information in our booklet **Coping with hair loss** (page 70).

Tiredness

Radiotherapy can make you tired. You may feel tired for weeks or months after PCI has finished. Some people may develop extreme tiredness a few weeks after radiotherapy has finished. You may:

- have very little energy
- feel sleepy
- spend a lot of time sleeping.

This slowly gets better over a few weeks. We have more information in our booklet **Coping with fatigue (tiredness)** - page 70.

Headaches

Some people have headaches during treatment. You may get headaches in the first few days after starting PCI. If you have a headache, it is important to tell the staff looking after you. Your doctor may prescribe painkillers, or sometimes steroids.

Feeling sick

You may feel sick (nauseous), but this is not common. Feeling sick can usually be treated with anti-sickness drugs (anti-emetics). Your doctor can prescribe these. Tell your doctor if it does not get better. They can prescribe other anti-sickness drugs that may be more effective, or steroids. We have more information on feeling sick on our website. Visit **macmillan.org.uk/nausea-vomiting**

Loss of appetite

You may find that you lose your appetite. If you do not want to eat, you can replace meals with nutritious, high-calorie drinks. These are available from most chemists. Your GP can also prescribe them. A dietitian or specialist nurse at your hospital can give you advice.

We have more information about loss of appetite on our website. Visit **macmillan.org.uk/eating-problems**

Skin changes

Do not put anything on the treated area of your skin before checking with your nurse or radiographer.

Wash your hair or scalp gently with mild shampoo and lukewarm or cool water. Gently pat your hair or scalp dry with a soft towel. Do not rub it, and do not use a hairdryer.

The treated skin might become itchy and sore behind the ears. If you have white skin the treated area might become red. If you have black or brown skin the area might become darker.

When you finish radiotherapy, you should protect the skin in the treated area from direct sunlight. Once any skin reaction has disappeared, use a suncream with a high SPF of 50.

Possible late effects on memory and concentration

Radiotherapy to the brain may affect your memory and ability to think or reason. This is called cognitive function. After treatment, you may have memory loss or difficulty concentrating.

Your doctors can explain more about this. They will discuss with you the risk of this happening compared to the benefit of having PCI. The effects on memory are more likely to happen in older people who have PCI.

Palliative radiotherapy for lung cancer

Radiotherapy can be given to shrink the cancer and improve symptoms when lung cancer has spread. This is called palliative radiotherapy. It can be given to different parts of the body, depending on where the cancer has spread.

It may be given to reduce symptoms, such as:

- coughing up blood
- pain in a bone, if the cancer has spread to the bones
- pain in the chest area
- breathlessness or a cough
- increased pressure in the brain, if the cancer has spread there.

Some people have just 1 session of treatment. Other people have it over a few days. Or they might have a higher dose over 1 or 2 weeks. Your cancer doctor or nurse will explain more about this.

SABR may also be used to treat lung cancer that has spread to other parts of the body such as the liver or the brain (pages 39 to 40).

Side effects

The side effects of palliative radiotherapy depend on the part of the body being treated. They are usually quite mild. We have more information on our website about side effects of radiotherapy used to treat secondary cancers. You can search for your treatment and cancer type at **macmillan.org.uk/treatments-and-drugs**

Radiotherapy for conditions caused by lung cancer

Radiotherapy may also be used to treat other conditions caused by lung cancer.

Superior vena cava obstruction

Doctors may use radiotherapy to treat a condition called superior vena cava obstruction (SVCO). This is when the cancer is pressing on a large vein in the chest, causing a blockage to the blood flow. We have information on our website about SVCO.
Visit **macmillan.org.uk/svco**

Spinal cord compression

Radiotherapy may also be used if lung cancer has spread to the spine or near it and is causing pressure on the spinal cord. This is called metastatic spinal cord compression (MSCC). We have information about MSCC in our MSCC alert kit. Visit **macmillan.org.uk/malignant-spinal-cord-compression**


STOP

After treatment

After radiotherapy

You might have regular follow-up appointments at the radiotherapy department or a hospital closer to home. The first appointment is usually a few weeks after treatment has finished. Some people might have further treatment after radiotherapy. It depends on the treatment you are having. At your follow-up appointment your doctor, nurse or radiographer will:

- ask how you have been feeling
- ask about any ongoing side effects or any late effects.

If your treatment is finished, you will have regular check-ups and may have CT scans or chest x-rays. Your appointments will be every few months at first, but eventually they may be once a year. They might be in person, or by phone or video.

Appointments are a good opportunity for you to talk to your doctor, nurse or radiographer about any concerns you have. But if you notice any new symptoms between appointments, contact your doctor or lung specialist nurse for advice.

Driving after lung cancer

Lung cancer may affect your ability to drive safely. You need to tell the DVLA (England, Scotland or Wales) or the DVA (Northern Ireland) if:

- you have any problems with your brain or nervous system
- your doctor says you might not be fit to drive
- the medicines you are taking cause side effects that could affect your driving
- you have a bus, coach or lorry licence
- you are restricted to certain vehicles or to vehicles that have been adapted for you.

Talk to your doctor or nurse if you are worried that your cancer treatments or symptoms may affect your driving.

Taking care of yourself

After treatment, you may have side effects or symptoms to cope with. Recovering from radiotherapy takes time. It also depends on any other treatment you may have had.

It is important to take care of yourself and give your body time to recover. Start slowly rather than trying to do too much too quickly.

You might find these suggestions helpful for taking care of yourself during and after treatment.

- If you are tired, it may make problems like breathlessness worse. Ask family or friends for help with day-to-day things that use more energy.
- Even a small amount of regular physical activity will give you more energy and make you feel stronger. This includes going for a short walk. We have more information in our booklet **Physical activity and cancer**.
- Try to talk about your feelings with healthcare professionals, family, friends, or people going through a similar experience. We have more information in our booklet **Your feelings after cancer treatment**.
- Eating healthily can help give you more energy. If you have lost weight or are having difficulty eating, ask your cancer team for advice. There are different ways to add more calories and nutrients to food. There are also nutritional drinks and powders to help increase your weight. Some of these can be prescribed by your doctor. We have more information in our booklet **Healthy eating and cancer**.

- Sleeping well can help you to cope with treatment. If you are having trouble sleeping, there are things you can do that may help improve your sleep. We have more information about this on our website. Visit **macmillan.org.uk/trouble-sleeping**
- Some complementary therapies such as relaxation, massage, meditation and yoga might help you feel better and reduce anxiety. We have more information in our booklet **Cancer and complementary therapies**.

Effects on your sex life

Cancer and its treatment can also cause physical and emotional changes that may affect your sex life. There are ways to improve your sexual wellbeing and to manage any problems. We have more information about what may help in our booklet **Cancer and your sex life**.

You can order our booklets and leaflets for free. Visit **orders.macmillan.org.uk** or call **0808 808 00 00**.

Your feelings and relationships

Your feelings

It is common to have many different feelings when you are told you have cancer. You may feel shocked, scared, depressed, guilty or angry. This can be difficult to cope with. Partners, family and friends may also have some of the same feelings.

We have more information about emotions on our website and in our booklet **How are you feeling? The emotional effects of cancer** (page 70).

Your healthcare team will usually give you support. But you may feel you need more help. Talk to your cancer doctor, GP or specialist nurse. They can refer you to a specialist doctor, psychologist or counsellor who can help.

You can also call the Macmillan Support Line on **0808 808 00 00** and talk to one of our cancer support specialists.

Talking to family, friends or other people affected by cancer may help. For more information or for help finding local support groups, visit **macmillan.org.uk/supportgroups** Or talk to other people on our Online Community at **macmillan.org.uk/community**

There is more information on page 72 about other ways we can help you.

Further information

About our information

We provide expert, up-to-date information about cancer. And all our information is free for everyone.

Our information has the PIF Tick quality mark for trusted health information. This means our information has been through a professional and strong production process.

Order what you need

You may want to order more booklets or leaflets like this one. Visit **orders.macmillan.org.uk** or call us on **0808 808 00 00**.

We have booklets about different cancer types, treatments and side effects. We also have information about work, financial issues, diet, life after cancer treatment and information for carers, family and friends.

Online information

All our information is also available online at **macmillan.org.uk/information-and-support** You can also find videos featuring stories from people affected by cancer, and information from health and social care professionals.

Other formats

We also provide information in different languages and formats, including:

- audiobooks
- Braille
- British Sign Language
- easy read booklets
- interactive PDFs
- large print
- translations.

Find out more at **macmillan.org.uk/otherformats**

If you would like us to produce information in a different format for you, email us at **informationproductionteam@macmillan.org.uk** or call us on **0808 808 00 00**.

The language we use

We want everyone affected by cancer to feel our information is written for them.

We want our information to be as clear as possible. To do this, we try to:

- use plain English
- explain medical words
- use short sentences
- use illustrations to explain text
- structure the information clearly
- make sure important points are clear.

We use gender-inclusive language and talk to our readers as 'you' so that everyone feels included. Where clinically necessary we use the terms 'men' and 'women' or 'male' and 'female'. For example, we do so when talking about parts of the body or mentioning statistics or research about who is affected.

To find out more about how we produce our information, visit **macmillan.org.uk/ourinfo**

Other ways we can help you

At Macmillan, we know how a cancer diagnosis can affect everything, and we are here to support you.

Talk to us

If you or someone you know is affected by cancer, talking about how you feel and sharing your concerns can really help.

Macmillan Support Line

Our support line is made up of specialist teams who can help you with:

- emotional and practical support if you or someone you know has been diagnosed with cancer
- clinical information from our specialist nurses about things like diagnosis and treatments
- welfare rights advice, for information about benefits and general money worries.

To contact any of our teams, call the Macmillan Support Line for free on **0808 808 00 00**. Or visit **macmillan.org.uk/support-line** to chat online and see the options and opening times.

Our trained cancer information advisers can listen and signpost you to further support.

Our cancer information nurse specialists can talk you through information about your diagnosis and treatment. They can help you understand what to expect from your diagnosis and provide information to help you manage symptoms and side effects.

If you are deaf or hard of hearing, call us using Relay UK on **18001 0808 808 00 00**, or use the Relay UK app.

You can also email us, or use the Macmillan Chat Service via our website. You can use the chat service to ask our advisers about anything that is worrying you. Tell them what you would like to talk about so they can direct your chat to the right person. Click on the 'Chat to us' button, which appears on pages across the website. Or go to **macmillan.org.uk/talktous**

If you would like to talk to someone in a language other than English, we also offer an interpreter service for our Macmillan Support Line. Call **0808 808 00 00** and say, in English, the language you want to use. Or send us a web chat message saying you would like an interpreter. Let us know the language you need and we'll arrange for an interpreter to contact you.

Macmillan Information and Support Centres

Our Information and Support Centres are based in hospitals, libraries and mobile centres. Visit one to get the information you need and speak with someone face to face. If you would like a private chat, most centres have a room where you can speak with someone confidentially.

Find your nearest centre at **macmillan.org.uk/informationcentres** or call us on **0808 808 00 00**.

Help with money worries

Having cancer can bring extra costs such as hospital parking, travel fares and higher heating bills. If you have been affected in this way, we can help. Please note the opening times may vary by service.

Financial advice

Our expert money advisers on the Macmillan Support Line can help you deal with money worries and recommend other useful organisations that can help.

Help accessing benefits

You can speak to our money advisers for more information. Call us free on **0808 808 00 00**. Visit **macmillan.org.uk/financialsupport** for more information about benefits.

Grants

You may be able to get some financial help from other charities, for example one-off grants. For further information, contact the Macmillan Support Line.

Help with work and cancer

Whether you are an employee, a carer, an employer or are self-employed, we can provide support and information to help you manage cancer at work. Visit **macmillan.org.uk/work**

Talk to others

No one knows more about the impact cancer can have on your life than those who have been through it themselves. That is why we help bring people together in their communities and online.

Support groups

Whether you are someone living with cancer or a carer, family member or friend, we can help you find support in your local area, so you can speak face to face with people who understand. Find out about support groups in your area by calling us or by visiting **macmillan.org.uk/selfhelpandsupport**

Online Community

Thousands of people use our Online Community to make friends, blog about their experiences and join groups to meet other people going through the same things. You can access it any time of day or night. Share your experiences, ask questions, or just read through people's posts at **macmillan.org.uk/community**

You can also use our Ask an Expert service on the Online Community. You can ask a money adviser, cancer information nurse or an information and support adviser any questions you have.

Macmillan healthcare professionals

Our nurses, doctors and other health and social care professionals give expert care and support to individuals and their families. Call us or ask your GP, consultant, district nurse or hospital ward sister if there are any Macmillan professionals near you.

Other useful organisations

There are lots of other organisations that can give you information or support. Details correct at time of printing.

Lung cancer support organisations

ALK Positive UK

www.alkpositive.org.uk

Provides support and advocacy and aims to improve the survival and quality of life of ALK positive lung cancer patients in the UK.

Asthma + Lung UK

Helpline **0300 222 5800**
www.asthmaandlung.org.uk
Supports people affected by any type of lung disease.

EGFR Positive UK

www.egfrpositive.org.uk
Provides support and advocacy and aims to improve the overall survival and quality of life of EGFR positive lung cancer patients across the UK.

Roy Castle Lung Cancer Foundation

Helpline **0333 323 7200**
www.roycastle.org
Provides information and practical and emotional support for anyone affected by lung cancer.

The Ruth Strauss Foundation

www.ruthstraussfoundation.com
Provides emotional support for families to prepare for the death of a parent. Raises awareness of the need for more research and collaboration for non-smoking lung cancers.

General cancer support organisations

Black Women Rising

www.blackwomenrisinguk.org
Aims to educate, inspire and bring opportunities for women from the BAME community. Shares stories and supports Black cancer patients and survivors through treatment and remission.

Cancer Black Care

Tel **0734 047 1970**
www.cancerblackcare.org.uk
Provides support for all those living with and affected by cancer, with an emphasis on Black people and people of colour.

Cancer Focus Northern Ireland

Helpline **0800 783 3339**
www.cancerfocusni.org
Offers a variety of services to people affected by cancer in Northern Ireland.

Cancer Research UK

Helpline **0808 800 4040**
www.cancerresearchuk.org
A UK-wide organisation that has patient information on all types of cancer. Also has a clinical trials database.

Macmillan Cancer Voices

www.macmillan.org.uk/cancervoices
A UK-wide network that enables people who have or have had cancer, and those close to them such as family and carers, to speak out about their experience of cancer.

Maggie's

Tel **0300 123 1801**
www.maggies.org
Has a network of centres in many locations throughout the UK. Provides free information about cancer and financial benefits. Also offers emotional and social support to people with cancer, their family, and friends.

Penny Brohn UK

Helpline **0303 3000 118**
www.pennybrohn.org.uk
Offers physical, emotional and spiritual support across the UK, using complementary therapies and self-help techniques.

Tenovus

Helpline **0808 808 1010**
www.tenovuscancercare.org.uk
Aims to help everyone in the UK get equal access to cancer treatment and support. Funds research and provides support such as mobile cancer support units, a free helpline, benefits advice and an online 'Ask the nurse' service.

General health information

Northern Health and Social Care Trust

www.northerntrust.hscni.net
Provides information about health and social care services in Northern Ireland.

NHS.UK

www.nhs.uk
The UK's biggest health information website. Has service information for England.

NHS 111 Wales

111.wales.nhs.uk
NHS health information site for Wales.

NHS Inform

Helpline **0800 22 44 88**
www.nhsinform.scot
NHS health information site for Scotland.

Patient

www.patient.info
Provides people in the UK with information about health and disease. Includes evidence-based information leaflets on a wide variety of medical and health topics. Also reviews and links to many health-related and illness-related websites.

Stop smoking services

NHS Smokefree Helpline (England)

Tel **0300 123 1044**
www.nhs.uk/better-health/quit-smoking
Offers information, advice and support to people who want to stop smoking or have already stopped and do not want to start again.

Quit Your Way (Scotland)

Tel **0800 84 84 84**
www.nhsinform.scot/quit-your-way-scotland
Scotland's national stop smoking support service. Offers advice and information about how to stop smoking. You can also chat online to an adviser.

Help Me Quit (Wales)

Tel **0800 085 2219**
Text 'HMQ' to **80818**
www.helpmequit.wales
Offers information, advice and support on stopping smoking in English and Welsh.

Stop Smoking NI (Northern Ireland)

www.stopsmokingni.info
Has information and advice about stopping smoking. Also links to other support organisations for people in Northern Ireland who want to give up smoking.

Counselling

British Association for Counselling and Psychotherapy (BACP)

Tel **0145 588 3300**
www.bacp.co.uk
Promotes awareness of counselling and signposts people to appropriate services across the UK. You can also search for a qualified counsellor on the 'Therapist directory' page.

UK Council for Psychotherapy (UKCP)

Tel **0207 014 9955**
www.psychotherapy.org.uk
Holds the national register of psychotherapists and psychotherapeutic counsellors, listing practitioners who meet exacting standards and training requirements.

Emotional and mental health support

Mind

Helpline **0300 123 3393**
www.mind.org.uk
Provides information, advice and support to anyone with a mental health problem through its helpline and website.

Samaritans

Helpline **116 123**
Email **jo@samaritans.org**
www.samaritans.org
Provides confidential and non-judgemental emotional support, 24 hours a day, 365 days a year, for people experiencing feelings of distress or despair.

Financial support or legal advice and information

Advice NI

Helpline **0800 915 4604**
adviceni.net
Provides advice on a variety of issues including financial, legal, housing and employment issues.

Carer's Allowance Unit

Tel **0800 731 0297**
Textphone **0800 731 0317**
www.gov.uk/carers-allowance
Manages state benefits in England, Scotland and Wales. You can apply for benefits and find information online or through its helplines.

Citizens Advice

Provides advice on a variety of issues including financial, legal, housing and employment issues. Use its online webchat or find details for your local office by contacting:

England

Helpline **0800 144 8848**
www.citizensadvice.org.uk

Scotland

Helpline **0800 028 1456**
www.cas.org.uk

Wales

Helpline **0800 702 2020**
www.citizensadvice.org.uk/wales

Civil Legal Advice

Helpline **0345 345 4345**
Textphone **0345 609 6677**
www.gov.uk/civil-legal-advice
Has a list of legal advice centres in England and Wales and solicitors that take legal aid cases. Offers a free translation service if English is not your first language.

Disability and Carers Service

Tel **0800 587 0912**
Textphone **0800 012 1574**
nidirect.gov.uk/contacts/disability-and-carers-service
Manages Disability Living Allowance, Attendance Allowance, Carer's Allowance and Carer's Credit in Northern Ireland. You can apply for these benefits and find information online or through its helplines.

DVA

Helpline **0300 200 7861**
www.nidirect.gov.uk/contacts/driver-vehicle-agency-dva-northern-ireland
The official agency for licensing and testing vehicles and drivers in Northern Ireland.

DVLA

Helpline **0300 790 6809**
www.gov.uk/government/organisations/driver-and-vehicle-licensing-agency
The government agency that deals with vehicle tax, registration, driving licences and medical condition

GOV.UK

www.gov.uk
Has information about social security benefits and public services in England, Scotland and Wales.

NI Direct

Make the Call helpline **0800 232 1271**
Text ADVICE to **0798 440 5248**
nidirect.gov.uk
nidirect.gov.uk/make-the-call
Has information about benefits and public services in Northern Ireland. You can also use the Make the Call service to check if you or someone you care for may be entitled to extra benefits

Equipment and advice on living with a disability

British Red Cross

Tel **0344 871 11 11**
www.redcross.org.uk
Offers a range of health and social care services across the UK, such as care in the home, a medical equipment loan service and a transport service.

Disability Rights UK

Tel **0330 995 0400** (not an advice line)
www.disabilityrightsuk.org
Provides information on social security benefits and disability rights in the UK. Has a number of helplines for specific support, including information on going back to work, direct payments, human rights issues, and advice for disabled students.

LGBT-specific support

LGBT Foundation

Tel **0345 330 3030**
lgbt.foundation
Provides a range of services to the LGBT community, including a helpline, email advice and counselling. The website has information on various topics including sexual health, relationships, mental health, community groups and events.

OUTpatients

www.outpatients.org.uk
A safe space for anybody who identifies as part of the queer spectrum and has had an experience with any kind of cancer at any stage. Also produces resources about LGBT cancer experiences. OUTpatients runs a peer support group with Maggie's Barts.

Support for carers

Carers Trust

Tel **0300 772 9600**
www.carers.org
Provides support, information, advice and services for people caring at home for a family member or friend. You can find details for UK offices and search for local support on the website.

Carers UK

Helpline **0808 808 7777**
www.carersuk.org
Offers information and support to carers across the UK. Has an online forum and can put people in contact with local support groups for carers.

Your notes and questions

Disclaimer

We make every effort to ensure that the information we provide is accurate and up to date but it should not be relied upon as a substitute for specialist professional advice tailored to your situation. So far as is permitted by law, Macmillan does not accept liability in relation to the use of any information contained in this publication, or third-party information or websites included or referred to in it. Some photos are of models.

Thanks

This booklet has been written, revised and edited by Macmillan Cancer Support's Cancer Information Development team. It has been approved by our Senior Medical Editor, Dr David Gilligan, Consultant Oncologist.

With thanks to the following professionals who reviewed our lung cancer information:

Sarah Berwick, Macmillan Advanced Lung Cancer Clinical Nurse Specialist; Dr Joanna Coote, Consultant Clinical Oncologist; Dr Qamar Ghafoor, Clinical Oncology Consultant; Mr Alan Kirk, Consultant Cardiothoracic Surgeon; Mr David Lawrence, Consultant Thoracic Surgeon; Dr Tuck-Kay Loke, Consultant Respiratory Physician; Dr Ceri Powell, Consultant in Clinical Oncology; Dr Ian Woolhouse, Consultant Respiratory Physician; and Dr Kent Yip, Consultant in Clinical Oncology.

Thanks also to the people affected by cancer who reviewed this edition, and those who shared their stories.

We welcome feedback on our information. If you have any, please contact **informationproductionteam@macmillan.org.uk**

Sources

Below is a sample of the sources used in our lung information. If you would like more information about the sources we use, please contact us at **informationproductionteam@macmillan.org.uk**

National Institute for Health and Care Excellence (NICE). Lung cancer Diagnosis and management. Clinical guideline 2019. Last updated 2023 (accessed Nov 2023). Available at: https://www.nice.org.uk/guidance/ng122

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European Society for Medical Oncology (ESMO). Early and locally advanced non-small-cell lung cancer (NSCLC): ESMO clinical practice guidelines for diagnosis, treatment and follow-up. 2017. eUpdate 01 September 2021: New Locally Advanced NSCLC Treatment Recommendations (accessed Nov 2023) Available at: https://www.esmo.org/guidelines/guidelines-by-topic/esmo-clinical-practice-guidelines-lung-and-chest-tumours/early-stage-and-locally-advanced-non-metastatic-non-small-cell-lung-cancer-esmo-clinical-practice-guidelines

European Society for Medical Oncology (ESMO). ESMO expert consensus statements on the management of EGFR mutant non-small-cell lung cancer. 2022 (accessed Nov 2023). Available at: https://pubmed.ncbi.nlm.nih.gov/35176458/

Can you do something to help?

We hope this booklet has been useful to you. It is just one of our many publications that are available free to anyone affected by cancer. They are produced by our cancer information specialists who, along with our nurses, benefits advisers, campaigners and volunteers, are part of the Macmillan team. When people are facing the toughest fight of their lives, we are here to support them every step of the way.

We want to make sure no one has to go through cancer alone, so we need more people to help us. When the time is right for you, here are some ways in which you can become a part of our team.

5 ways you can help someone with cancer

1. **Share your cancer experience**
   Support people living with cancer by telling your story, online, in the media or face to face.

2. **Campaign for change**
   We need your help to make sure everyone gets the right support. Take an action, big or small, for better cancer care.

3. **Help someone in your community**
   A lift to an appointment. Help with the shopping. Or just a cup of tea and a chat. Could you lend a hand?

4. **Raise money**
   Whatever you like doing you can raise money to help. Take part in one of our events or create your own.

5. **Give money**
   Big or small, every penny helps. To make a one-off donation see over.

Please fill in your personal details

Mr/Mrs/Miss/Other

Name

Surname

Address

Postcode

Phone

Email

Please accept my gift of £
(Please delete as appropriate)

I enclose a cheque / postal order / Charity Voucher made payable to Macmillan Cancer Support
OR debit my:
Visa / MasterCard / CAF Charity Card / Switch / Maestro

Card number
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Security number
☐☐☐

Signature

Date / /

Do not let the taxman keep your money

Do you pay tax? If so, your gift will be worth 25% more to us – at no extra cost to you. All you have to do is tick the box below, and the tax office will give 25p for every pound you give.

☐ I am a UK tax payer and I would like Macmillan Cancer Support to treat all donations I make or have made to Macmillan Cancer Support in the last 4 years as Gift Aid donations, until I notify you otherwise.

I understand that if I pay less Income Tax and/or Capital Gains Tax than the amount of Gift Aid claimed on all my donations in that tax year it is my responsibility to pay any difference. I understand Macmillan Cancer Support will reclaim 25p of tax on every £1 that I give.

Macmillan Cancer Support and our trading companies would like to hold your details in order to contact you about our fundraising, campaigning and services for people affected by cancer. If you would prefer us not to use your details in this way please tick this box. ☐

In order to carry out our work we may need to pass your details to agents or partners who act on our behalf.

If you would rather donate online go to **macmillan.org.uk/donate**

Registered with FUNDRAISING REGULATOR

Please cut out this form and return it in an envelope (no stamp required) to: Supporter Donations, Freepost RUCY-XGCA-XTHU, Macmillan Cancer Support, PO Box 791, York House, York YO1 0NJ

MACMILLAN
CANCER SUPPORT

This booklet is about radiotherapy for lung cancer. It is for anyone who has been diagnosed with lung cancer and is having radiotherapy to treat it. There is also information for carers, family members and friends.

The booklet explains how radiotherapy is given, its side effects and how they can be treated and managed. It also has information about feelings, practical issues and money.

At Macmillan we know cancer can disrupt your whole life. We'll do whatever it takes to help everyone living with cancer in the UK get the support they need right now, and transform cancer care for the future.

For information, support or just someone to talk to, call **0808 808 00 00** or visit **macmillan.org.uk**

Would you prefer to speak to us in another language? Interpreters are available. Please tell us in English the language you would like to use. Are you deaf or hard of hearing? Call us using Relay UK on **18001 0808 808 00 00**, or use the Relay UK app.

Need information in different languages or formats? We produce information in audio, interactive PDFs, easy read, Braille, large print and translations. To order these, visit **macmillan.org.uk/otherformats** or call our support line.

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