

Mesothelioma and asbestos



The information in this factsheet will help you to understand more about mesothelioma. We hope that it answers some of your questions about this cancer, what causes it, its symptoms and how it is diagnosed and treated.

If you have any other questions or concerns, please ask your doctor or nurse. You can also call our **Cancer Nurseline** on Freephone **1800 200 700**, email cancernurseline@cancer.ie or visit a **Daffodil Centre**.

What is mesothelioma?

Mesothelioma (pronounced mee-so-thee-lee-oma) is cancer of your mesothelium. Your mesothelium is a thin layer of cells that lines the outer surface of your organs, the wall of your chest and abdomen.

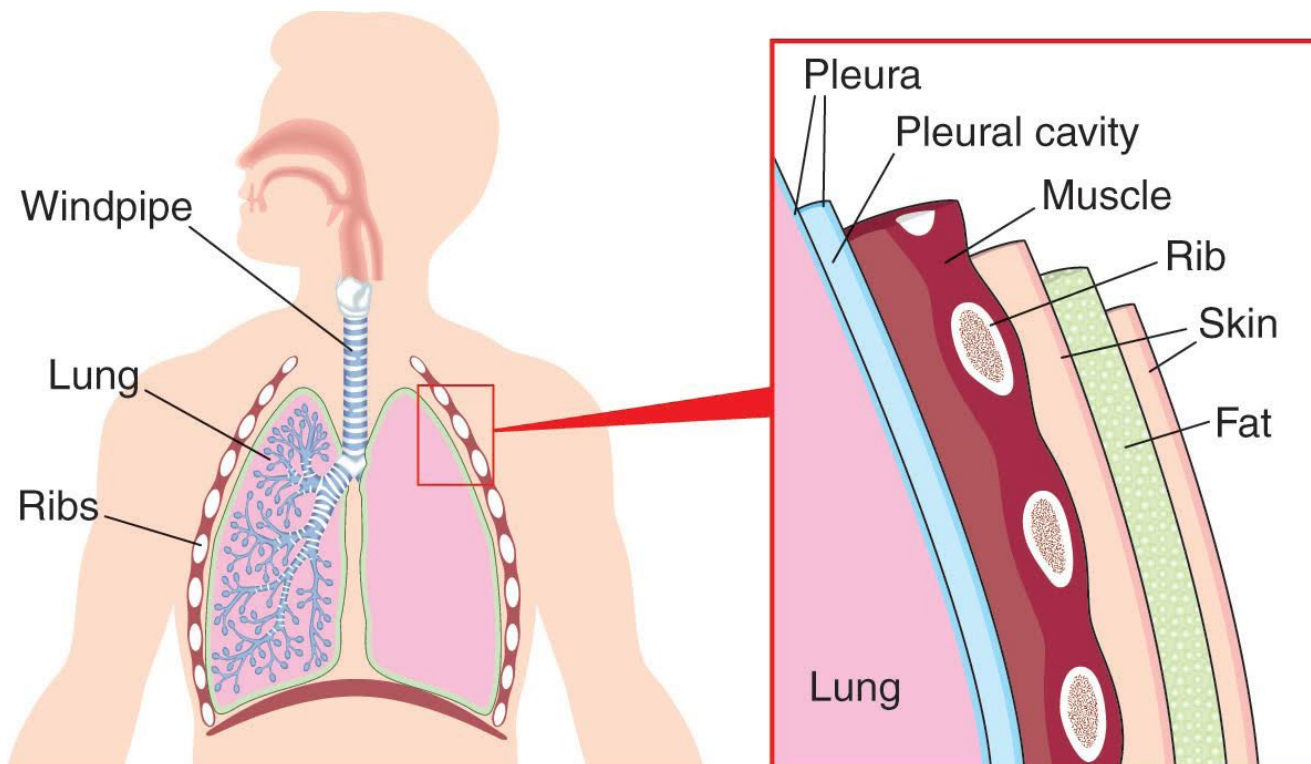
Pleural mesothelioma is a cancer that affects the lining of your lungs.

What is pleural mesothelioma?

Pleural mesothelioma affects the lining of your lungs. Pleural mesothelioma is the most common type of mesothelioma. Mesothelioma can also develop in the lining of your abdomen, testicles or heart, but this is rare.

The information in this factsheet is about pleural mesothelioma.

Cancer Nurseline **1800 200 700**



How does pleural mesothelioma affect the lungs?

Your lungs are covered by two layers called the pleura. The inner layer that surrounds your lung is called the visceral layer. The outer layer attached to your chest wall is called the parietal layer. These layers are separated by a small amount of fluid, which helps them to slide over each other easily. This allows your lungs to expand and contract as you breathe in and out.

Mesothelioma causes the pleura to become hard or thicken. This makes it more difficult for your lungs to expand and contract as normal, making it harder for you to breathe.

Sometimes fluid builds up between the two layers. This is called pleural effusion. The build-up of fluid also makes it harder for your lungs to breathe in and out. As a result, you will feel breathless.

What causes mesothelioma?

Being exposed to asbestos is the main cause of mesothelioma. Research into other causes is also taking place.

What is asbestos?

Asbestos is a natural mineral found in rock. There are many types, which are all harmful. In the past, it was widely used in construction, industry and shipbuilding because it was resistant to heat and chemicals.

Is asbestos still used?

In Ireland it is illegal to use, reuse, sell or supply materials containing asbestos. But there may still be asbestos in buildings, structures and products from the time when it was still legal to use asbestos. Asbestos was mostly used in insulation, fire proofing, roofing and flooring.

Under Irish law, if an employer suspects that asbestos is present, he or she must get a risk assessment done by a licensed company to find out if there is a health risk for the employees.

If material containing asbestos is in a safe condition, it can be left alone. But if material is a health risk to employees, a licensed company must remove the material safely.

Asbestos is the main cause of mesothelioma.

How is asbestos harmful?

When asbestos is broken or damaged, it releases fibres or dust into the air.

Asbestos dust or fibres in the air can cause harm but undisturbed asbestos material is believed not to be harmful.

How does asbestos cause mesothelioma?

If a person is exposed to asbestos fibres in the air, they might breathe them in. The fibres can reach your lungs, stomach or other organs. Your body tries to break the fibres down and remove them, but without success.

In the lungs, the asbestos fibres cause swelling in the nearby lung tissue. The tiny fibres can also move into your pleura, where they can stay and develop into pleural mesothelioma.

Mesothelioma develops very slowly after asbestos exposure. It can take anything from 10 to 60 years for symptoms to appear.

Who gets mesothelioma?

People who are typically affected by asbestos exposure include those who work or have worked as builders, plumbers, electricians and shipbuilders. Some people who lived near an asbestos factory have also developed mesothelioma.

Family members of those who have worked with asbestos have been known to get mesothelioma if they were near work clothes that were covered in asbestos dust.

It is not known how much a person needs to be exposed to asbestos to develop mesothelioma, but it is believed that even a small amount of exposure can be very harmful.

What should I do if I was exposed to asbestos?

Not everyone who has been exposed to asbestos will develop mesothelioma. But if you have been exposed to asbestos fibres in the past, you are at risk of developing mesothelioma. Speak to your GP for advice.

It is not known why some people do and others do not get mesothelioma. It is believed that a person's degree of risk of developing mesothelioma depends on the type of asbestos that they were exposed to and the length of exposure.

Mesothelioma is not infectious and cannot be inherited. Family members do not have a higher risk of getting the disease, unless they themselves have been exposed to asbestos.

If you have been exposed to asbestos fibres in the past, you are at risk of developing mesothelioma.

What are the symptoms of pleural mesothelioma?

Symptoms of mesothelioma can take anything from 10 to 60 years to appear. In the early stages of the disease small lumps appear, but these are unlikely to cause symptoms. Most patients who have mesothelioma will first go to their GP complaining of:

- Breathing problems – usually they come on gradually
- Chest pain – at the side of the tumour

Other symptoms include:

- Coughing
- Loss of appetite
- Difficulty swallowing
- Weight loss
- Tiredness
- Hoarseness
- Sweating

How is pleural mesothelioma diagnosed?

It is not easy to diagnose mesothelioma. This is because many of the symptoms of mesothelioma can be caused by other lung conditions.

If your doctor thinks that you might have mesothelioma, he or she will ask you to go for tests to confirm the diagnosis.

You might be advised to get the following tests:

- Chest X-ray
- CT scan
- Thoracoscopy
- Pleural aspiration
- Biopsy
- Bronchoscopy
- Mediastinoscopy

• Chest X-ray

Mesothelioma does not always show up on a chest X-ray, especially in the early stages. But a chest X-ray can show a build-up of fluid on your lungs (pleural effusion). Your doctor might arrange more tests to find out what is causing the fluid to build up.

• CT scan

A CT scan gives a more accurate picture of what is going on inside your chest. It does this by taking many X-rays inside your body. This allows your doctor to see where your disease is and if it has spread. The test is not painful but you will have to lie very still while you are scanned. A CT scan normally takes 10–30 minutes. Your doctor or nurse will explain it to you in more detail.

Sometimes your doctor will inject a dye into your vein or ask you to drink something that contains a dye. This makes it easier to see the tissues inside your body. You might feel heat rising from your chest into your head after the dye has entered your body. This is a strange sensation but does

not last long. If you have asthma or any drug allergy, it is important that you tell your doctor before you have this test.

A chest X-ray, CT scan, thoracoscopy and other tests can help to diagnose mesothelioma.

• Thoracoscopy

Sometimes your doctor might need to do more tests before making a diagnosis. It is often very useful for your doctor to look inside your chest using a thoracoscope. A thoracoscope is a flexible tube with a light and video camera attached to it. This test is called a thoracoscopy.

You will usually be put to sleep before having a thoracoscopy. During the test, your doctor will make a cut between two ribs and put the thoracoscope in. This allows him or her to see if the pleura appear normal. During a thoracoscopy, your doctor can take biopsies of the tissue and an aspiration of any fluid present.

• Pleural aspiration

A sample of the fluid from inside your chest might be needed to find out if the build-up is due to mesothelioma. Taking the fluid is called a pleural aspiration. If you are having pleural aspiration, your doctor will put a small needle into your chest and inject some local anaesthetic. This numbs the area and makes sure that the test is not too painful. Your doctor will then put another needle into your chest to remove some fluid using a syringe. This fluid is sent to a laboratory to be checked. Based on this, mesothelioma can be diagnosed.

• Biopsy

During a thoracoscopy, your doctor can take small amounts of tissue samples from your pleura. These are called biopsies. Biopsies are then sent to a laboratory and looked at under a microscope. The biopsy will show whether or not you have mesothelioma.

• Bronchoscopy

During a bronchoscopy, a small tube with a camera is passed down your airway through your nose or mouth. Your doctor will give you an injection into your vein to sedate you beforehand. He or she will then pass the tube right down into your lungs and can take biopsies from your lung tissue.

• Mediastinoscopy

A mediastinoscopy is like a thoracoscopy, except your doctor can look at the lymph glands in your chest as well. This is done this to check if the disease has spread. The lymph glands in your chest are the most likely place where mesothelioma will spread.

You will be put to sleep before having a mediastinoscopy. Your doctor will make a small cut at the base of your neck and put in a thin, tube-like instrument (mediastinoscope). The mediastinoscope has a light and a lens for viewing inside your chest. Your doctor might also take a biopsy.

Waiting for results

It will take about a week or so for all the test results to come back.

This can be an anxious time for you. It may help to talk things over with a relative or close friend. You may also like to visit a Daffodil Centre or call the Cancer Nurseline on 1800 200 700 to speak to one of our cancer nurses.

Treatments for pleural mesothelioma include surgery, pleurodesis, radiotherapy and chemotherapy.

How is pleural mesothelioma treated?

For most people treatment for mesothelioma is given to slow down the disease and ease any symptoms. The best treatment for you depends on the staging and grading of your disease. Staging refers to the size of the tumour and if it has spread beyond where it first grew. Grading refers to how quickly the disease might grow. Your doctor can advise you of the best treatment for you.

The types of treatments include:

- Surgery
- Pleurodesis
- Radiotherapy
- Chemotherapy

• Surgery

Mesothelioma can be removed by surgery when diagnosed in early stage. This is normally done under general anaesthetic. Unfortunately, surgery is often not an option because mesothelioma might have spread by the time it is diagnosed.

• Pleurodesis

The build-up of fluid between the pleura can be removed during a thoracoscopy (pleural aspiration). During this treatment, your doctor can put medication into the pleura. The medication makes the pleura stick together. This means there is no space between the pleura for fluid to build up. This is called pleurodesis and it will help you to feel less breathless afterwards.

• Radiotherapy

Radiotherapy uses powerful X-rays to control mesothelioma symptoms and also to shrink the tumour.

You will have to go to hospital to plan your radiotherapy treatment. During planning your medical team will work out the exact area to be treated. Your chest will be marked to show where the radiation will be given. The marks are normally made with tiny tattoos. Your doctor and nurses will discuss with you how much radiotherapy you need.

Having radiotherapy treatment is quick and painless. It only takes a few minutes. You will be asked to sit very still in front of a machine that gives off the X-rays.

More information on radiotherapy is available from the Irish Cancer Society in a booklet called *Understanding Radiotherapy*. Call the Cancer Nurseline on **1800 200 700** or visit a Daffodil Centre for a free copy. You can also download it from **www.cancer.ie**

• Chemotherapy

Chemotherapy is the use of drugs to control the symptoms of the disease or slow down the growth of the tumour. Chemotherapy can be given through a plastic tube (cannula) put into your vein or in tablet form. Sometimes mesothelioma is treated with a combination of drugs.

The side-effects of the chemotherapy drugs can vary a lot from person to person and depend on the drugs being used.

Your doctor or nurses can discuss your chemotherapy drugs with you in more detail. You can also read our booklet *Understanding Chemotherapy*. Call the Cancer Nurseline on **1800 200 700** or visit a Daffodil Centre for a free copy. You can also download it from **www.cancer.ie**

Treatment for mesothelioma is normally to slow its growth and to help control symptoms.

Clinical trials

You may be offered a different treatment as part of a clinical trial.

Clinical trials study the effect of using new drugs or treatments to treat cancer. Or they can look at what happens when existing drugs or treatments are used in new combinations. Trials may be taking place at the hospital you are attending. If you are interested in taking part, talk to your doctor. He or she can tell you if the trial would suit you or not. Your doctor may refer you to another hospital if they feel a clinical trial there may help you. If you want more information read our factsheet, *Cancer and Clinical Trials*. You can download the factsheet from **www.cancer.ie**, pick one up at a Daffodil Centre or call the Cancer Nurseline on 1800 200 700 and ask them to send you a free copy.

Coping with mesothelioma

• Symptoms

Sometimes mesothelioma can cause symptoms that are difficult to manage, such as breathlessness and pain. Your medical team can help you with these, so it is important to let your doctors and nurses know about any symptoms you have. Some hospitals have pain specialists and breathlessness clinics. A palliative care team may also help to control your symptoms. Palliative care specialists are expert in managing symptoms and look after people who cannot be cured from their disease.

If you would like further information or support, you can talk to a cancer nurse by calling our Cancer Nurseline on **1800 200 700** or by visiting a Daffodil Centre. You can also ask for a free copy of our factsheets on cancer pain and breathlessness. You can also download them from **www.cancer.ie**

• Support for you

You might find it very hard to deal with a diagnosis of mesothelioma. But there are a lot of people who can support you and your family at this time. Your GP, hospital doctors and nurses, local cancer support services and counsellors can all give you advice and support.

If you are finding it hard to cope with the fact that you have mesothelioma, your doctor can refer you to special doctors, nurses and counsellors, who are experts in helping cancer patients deal with the anxiety of a diagnosis. There are also medical social workers who can help you deal with any problems and give you advice on benefits and services that you could apply for.

• Compensation and social welfare support

You might be entitled to compensation if it is proved that you got mesothelioma because of exposure to asbestos in the past. Discuss this with your doctor or solicitor.

If you were exposed to asbestos while working in the UK, advice is available. Call the Cancer Nurseline 1800 200 700 or visit a Daffodil Centre for more information and advice on where to get help with UK claims. There is also more information on our website: www.cancer.ie or see the back page of this factsheet for useful contacts.

There are a lot of people who can support you and your family at this time.

Get support

If you need support there are lots of people to help you and your family.



Call our Cancer Nurseline on Freephone **1800 200 700** or visit a Daffodil Centre to:

- Speak to a cancer nurse in confidence
- Ask for free copies of our booklets or a DVD about how to cope with your disease
- Find out how to make contact with a cancer support centre
- Ask about one-to-one support from someone who has been through a cancer diagnosis

You can also email the nurses: cancernurseline@irishcancer.ie or join our online community at: www.cancer.ie/community

Useful organisations and websites

Mesothelioma advice and support

Mesothelioma UK

Specialist mesothelioma information, support and a phone line.

Tel: 00 44 116 258 3739 (International call charge applies)

Web: www.mesothelioma.uk.com

The Australian Lung Foundation

Video for people affected by mesothelioma.

Web: www.lungfoundation.com.au

Advice on compensation

Free Legal Aid Centre

Free legal information and advice.

Web: www.flac.ie

Mesothelioma UK

Help with choosing a solicitor in the UK.

Web: www.mesothelioma.uk.com/information-and-support/legal-advice/finding-a-solicitor

Information on asbestos

Health and Safety Authority (HSA)

Web: www.hsa.ie

Daffodil Centres

The Irish Cancer Society's Daffodil Centres are located in thirteen hospitals nationwide. The centres are staffed by cancer nurses and trained volunteers who provide confidential advice, support and information to anyone affected by cancer. For details of your nearest Daffodil Centre, call our Cancer Nurseline on 1800 200 700 or visit www.cancer.ie



For more information on mesothelioma, or for confidential advice from our cancer nurse specialists, call our **Cancer Nurseline** on **Freephone**

1800 200 700

(Monday–Thursday, 9am–6pm, Friday 9am–5pm) or email cancernurseline@irishcancer.ie
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