

Secondary cancer in the lung



This Information Sheet is about cancer that has spread from the part of the body where it started, called the **primary site**, to the **lung(s)**. Words in the text that are **bold** are explained in the glossary at the end of this Information Sheet.

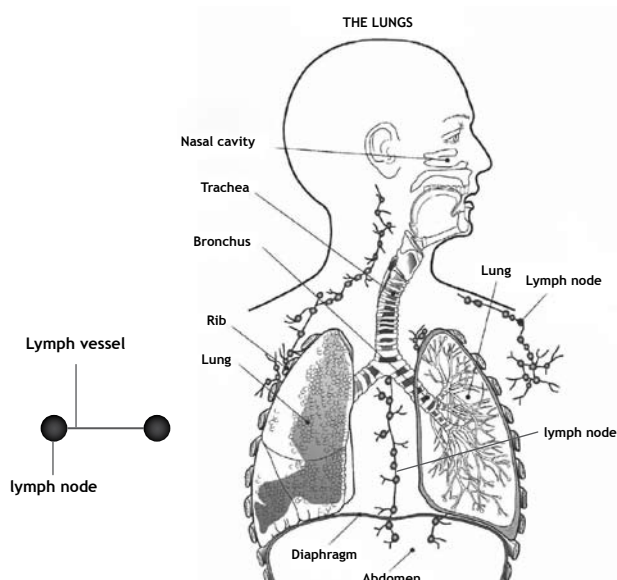
What is secondary cancer in the lung?

Secondary cancer in the lung(s) occurs when cancer cells spread from the original cancer through the blood stream or lymphatic system and settle in the lung(s). This type of spread is called **metastasis**, secondary cancer or secondaries. It is not the same as having primary brain cancer

Sometimes secondary cancer in the lung is found before a primary cancer has been diagnosed. It is not always possible to find the original cancer – this is called an **unknown primary**.

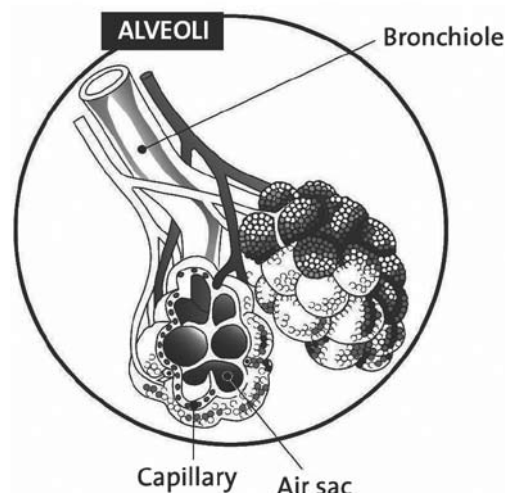
Although many types of cancer can spread to the lungs, it more often happens in breast, bowel (colon and rectum), kidney, melanoma and sarcoma.

Structure of the lungs and pleura



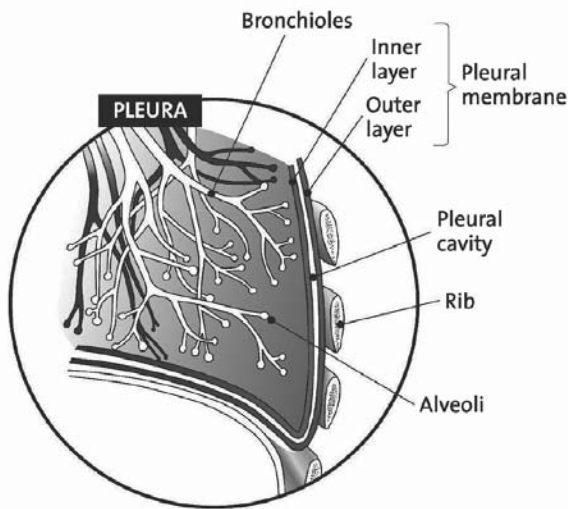
How the lungs work

Lungs are a pair of organs on both sides of the chest. They fill most of the chest and are protected by the rib cage. They are spongy and roughly cone-shaped, and are made up of sections or lobes. The left lung has two and the right lung has three. When we breathe in, air goes through the nose or mouth, into the throat and down the windpipe (trachea) into the lungs via two tubes known as the left and right bronchus that divide into smaller tubes called bronchioles. Each bronchiole ends up at tiny bubble – like air sacs (alveoli) – these make the lungs spongy.



Blood flows between the thin walls of adjacent air sacs. This allows oxygen to move from the air into the bloodstream (in order to make energy), and carbon dioxide – a waste product from the body, to move from the bloodstream into the air, to be breathed out.

The lungs are lined with two layers of thin membrane called the pleura which are about the thickness of plastic food wrap. The inner layer is attached to the outside of the lungs and the outer layer lines the inside of the chest wall. There is a small space (the pleural space or pleural cavity) between the pleura. The space contains a small amount of fluid produced by the pleura that acts as a lubricant so the two layers slide easily over one another as we breathe in and out.



Symptoms of secondary cancer in the lung

Breathlessness

This is a common and frightening symptom. Breathlessness can occur if the secondary cancer narrows or blocks the airways. You may have a feeling of not being able to get enough air into the lungs and this can make you feel anxious and panicky. Breathing exercises and relaxation techniques can be helpful. Sometimes the cancer may cause swelling or inflammation that can add to the breathlessness. Steroids prescribed by your doctor may reduce this. A chest infection can also add to breathlessness and antibiotics may be helpful.

Cough and chest pain

This can be caused by the cancer or by an infection. These can be relieved by medicines such as a cough linctus and pain relieving drugs – sometimes a low dose of morphine (prescribed by your doctor) helps an irritating cough. Steam inhalation or nebulised salt-water can help you cough up sputum (saliva and phlegm that is coughed up) if this is a problem.

Coughing up blood (haemoptysis)

Sputum may be blood-streaked or if larger amounts are coughed up, a course of radiation therapy may be suggested.

Fluid on the lung (pleural effusion).

Sometimes when cancer spreads, little seedlings or plaques of secondary cancer are formed on the surface of the pleura. These irritate the pleural

membrane and make it inflamed. The pleura then produce more of its lubricant fluid to try and soothe this inflammation. The pleural fluid builds up and is trapped between the two layers of membrane and begins to press on the lungs. The pressure will lead to symptoms of breathlessness, chest pain and cough. The fluid can be drained in hospital by inserting a tube into the chest. Sometimes a drug is instilled into the tube to stick the two layers of the pleura together so there is no space for fluid to build up again.

How secondary lung cancer is diagnosed

A chest X-ray is usually the first investigation done if someone has symptoms indicating secondary cancer in the lung. If the X-ray is not clear a **CT Scan** may be done and in some cases an **MRI Scan** or a **PET Scan** may be suggested. If a pleural effusion is present it may be possible to remove some of the fluid and examine it for cancer cells. A sample of an abnormal lump in the lung can be taken by guiding a needle into the middle of the lump under CT Scan vision

How secondary lung cancer is treated

The aim of treatment is usually to relieve symptoms and slow down further spread of the cancer.

Treatment will depend on the primary site of cancer and may include chemotherapy and for some cancers eg. hormone-sensitive breast cancer; hormone therapy may be used. A short course of radiation therapy may be given to relieve symptoms such as pain, breathlessness or coughing up blood. Surgery to remove the secondary cancer in the lung may be possible in some people, especially if the secondary cancer is only in one place and not attached to important blood vessels and nerves. This may be an option only if the primary cancer has been controlled and there is no evidence of spread elsewhere in the body.

In addition, expert symptom management often using a combination of drugs and supportive therapies, such as relaxation and massage will be helpful. You may be referred to a palliative care service.

Living with secondary cancer in the lung

If you are diagnosed with secondary lung cancer you may experience a range of emotions including anger, fear, anxiety, resentment, and sadness. You may find it helpful to talk over how you are feeling with others, such as family, friends, your GP, cancer care team or a counsellor.

Helpful resources

The Cancer Society offers a range of support and information services to assist those diagnosed with secondary lung cancer. Phone the Cancer Helpline 0800 226 237 and speak to our cancer information nurses. Also available are the Cancer Society's free booklets – *Advanced Cancer/Matepukupuku Maukaha* and *Living with Cancer-Related Breathlessness* (has accompanying CD).

Suggested reading and websites

Reading

- *Another Morning: Voices of hope and truth from mothers with cancer.* Linda Blachman. Seal Press, USA. 2006.
- *Care of the Soul: A guide for celebrating depth and sacredness in everyday life.* Thomas Moore. HarperPerennial, USA. 1994.
- *Close to the Bone: Life-threatening illness and the search for meaning.* Jean Shinoda Bolen . Touchstone Books. USA. 1998.
- *Handbook for Mortals: Guidance for people living with serious illness.* Joanne Lynn and Joan Harrold. Oxford University Press. USA. 1999.
- *QuickFacts. Advanced Cancer,* American Cancer Society, USA. 2008
- *The Human Side of Cancer: Living with hope, coping with uncertainty.* Jimmie Holland and Sheldon Lewis. HarperCollins, USA. 2000.

Websites

- Breast Cancer Care www.breastcancercare.org.uk has information for those with lung cancer secondaries from breast cancer and an online forum for those living with secondary breast cancer
- CancerBackup – coping with advanced cancer: www.cancerbackup.org.uk/ResourceSupport/Advancedcancer/Copingwithadvancedcancer
- CancerBackup – secondary lung cancer www.cancerbackup.org.uk/Cancertype/Lungsecondary/.
- National Cancer Institute – when cancer returns: www.cancer.gov/cancertopics/When-Cancer-Returns
- Palliative Care Australia – 'Asking Questions Can Help' – An online booklet for patients and families – to view this click 'publications' to link to the booklet: www.pallcare.org.au
- Skylight – Skylight helps children and young people deal with change, loss and grief. www.skylight.org.nz

Glossary

CT Scan – A technique for constructing pictures from cross sections of the body by X-raying the part of the body to be examined from many different angles.

MRI Scan – A scan that uses magnetic resonance to detect abnormalities.

PET Scan – A scan technique that is used to build up clear and very detailed pictures of the body. The person is injected with a glucose solution containing a very small amount of radioactive material. The scanner can 'see' the radioactive substance. Damaged or cancerous cells show up as area where the glucose is being taken up indicating more rapidly dividing (cancer) cells.