

# What Is Lung Cancer?

Lung cancer is a type of cancer that starts in the lungs

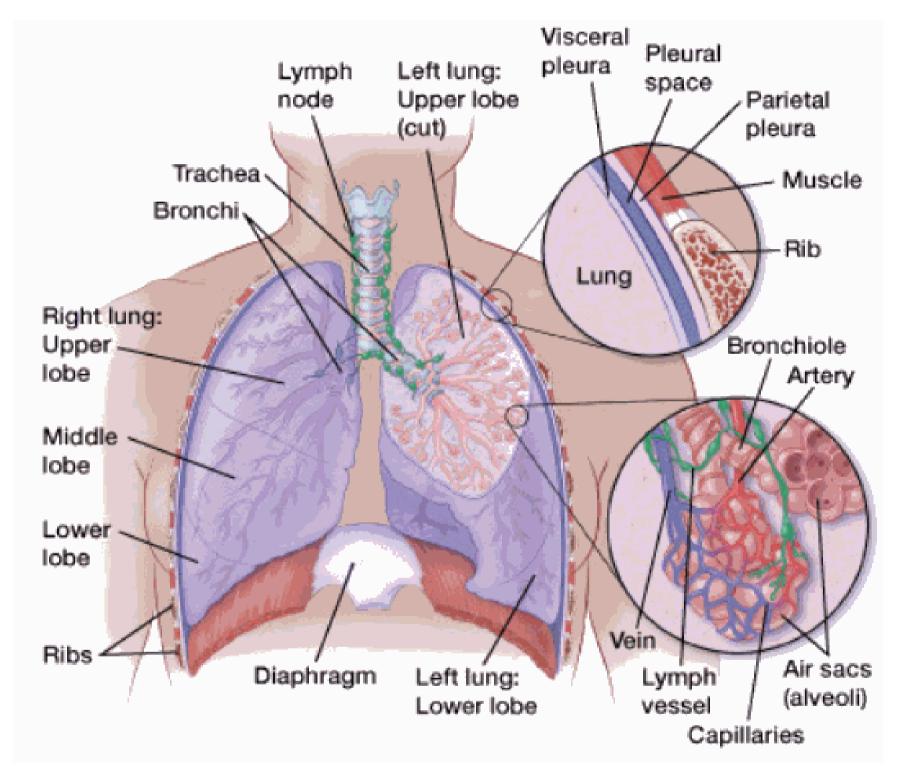
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## Normal structure and function of the lungs

Your lungs are 2 sponge-like organs in your chest that are separated into sections called lobes. Your right lung has 3 lobes. Your left lung has 2 lobes. The left lung is smaller because the heart takes up more room on that side of the body.

When you inhale (breathe in), air enters through your mouth or nose and goes into your lungs through the **trachea** (windpipe). The trachea divides into tubes called **bronchi**, which enter the lungs and divide into smaller bronchi. These divides to form smaller branches called **bronchioles**. At the end of the bronchioles are tiny air sacs known as **alveoli**.

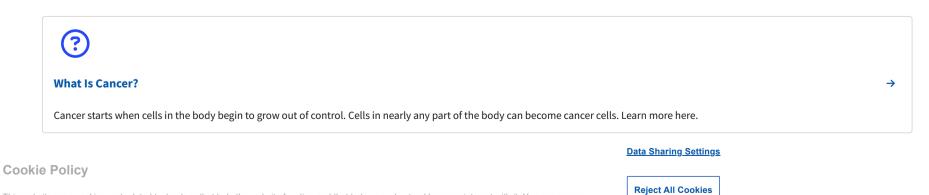
The alveoli absorb oxygen into your blood from the inhaled air and remove carbon dioxide from the blood when you exhale (breathe out). Taking in oxygen and getting rid of carbon dioxide are your lungs' main functions.



A thin lining layer called the pleura surrounds the lungs. The pleura protects your lungs and helps them slide back and forth against the chest wall as they expand and contract during breathing

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Below the lungs, a thin, dome-shaped muscle called the **diaphragm** separates the chest from the abdomen. When you breathe, the diaphragm moves up and down, forcing air in and out of the lungs.



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There are 2 main types of lung cancer: non-small cell lung cancer and (NSCLC) and small cell lung cancer (SCLC).

#### Non-small cell lung cancer (NSCLC)

About 80% to 85% of lung cancers are NSCLC. The main subtypes of NSCLC are adenocarcinoma, squamous cell carcinoma, and large cell carcinoma. These subtypes, which start from different types of lung cells, are grouped together as NSCLC because their treatment and prognoses (outlooks) are often similar.

Adenocarcinoma: Lung adenocarcinoma starts in cells in the lung that make mucus, called epithelial cells. Epithelial cells line the surface of the lungs. Adenocarcinoma is the most common type of non-small cell lung cancer

Lung adenocarcinoma occurs mainly in people who smoke or used to smoke, but it is also the most common type of lung cancer seen in people who don't smoke. It is more common in women than in men, and it is more likely to occur in younger people than other types of lung cancer.

Squamous cell carcinoma: Squamous cell carcinoma starts in squamous cells, which are flat cells that line the inside of the airways in the lungs. They are often linked to a history of smoking and tend to be found in the central part of the lungs, near a main airway (bronchus)

Large cell (undifferentiated) carcinoma: Large cell carcinoma can appear in any part of the lung. It tends to grow and spread quickly, which can make it harder to treat. A subtype of large cell carcinoma, known as large cell neuroendocrine carcinoma (LCNEC), is a fast-growing cancer that is very similar to small cell lung cancer.

Other subtypes: A few other subtypes of NSCLC, such as adenosquamous carcinoma and sarcomatoid carcinoma, are much less common.

#### Small cell lung cancer (SCLC)

About 10% to 15% of all lung cancers are SCLC.

### Other types of lung tumors

Along with the main types of lung cancer, other tumors can occur in the lungs.

Lung carcinoid tumors: Carcinoid tumors of the lung account for fewer than 5% of lung tumors. Most of these grow slowly. For more information about these tumors, see <u>Lung Carcinoid Tumor</u>.

Other lung tumors: Other types of lung cancer, such as adenoid cystic carcinomas, lymphomas, and sarcomas, as well as benign lung tumors such as hamartomas, are rare. These are treated differently from the more common lung cancers and are not discussed here

Cancers that spread to the lungs: Cancers that start in other organs (such as the <u>breast</u>, <u>pancreas</u>, <u>kidney</u>, or <u>skin</u>) can sometimes spread (metastasize) to the lungs, but these are not lung cancers. For example, cancer that starts in the breast and spreads to the lungs is still breast cancer, not lung cancer. Treatment for metastatic cancer to the lungs is based on where it started (the primary cancer site).

#### Written by References



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Our team is made up of doctors and oncology certified nurses with deep knowledge of cancer care as well as journalists, editors, and translators with extensive experience in medical writing.

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