

Lung Cancer

American Cancer Society





What we'll be talking about

- How common is lung cancer?
- What is lung cancer?
- The 2 major types of lung cancer
- Causes of lung cancer
- What are the risk factors?
- Can lung cancer be prevented?
- ACS guidelines for lung cancer screening
- What you can do
- More information



Lung cancer: How common is it?

- Lung cancer is the second most common cancer in both men and women.
- It accounts for an estimated 25% of all cancer diagnoses.
- Lung cancer mainly occurs in older people.
- For smokers the risk is **much** higher.



Lung cancer: How common is it?

- Lung cancer is the leading cause of cancer death among both men and women in the U.S.
- Lung cancer accounts for about 1 in 4 cancer deaths each year.

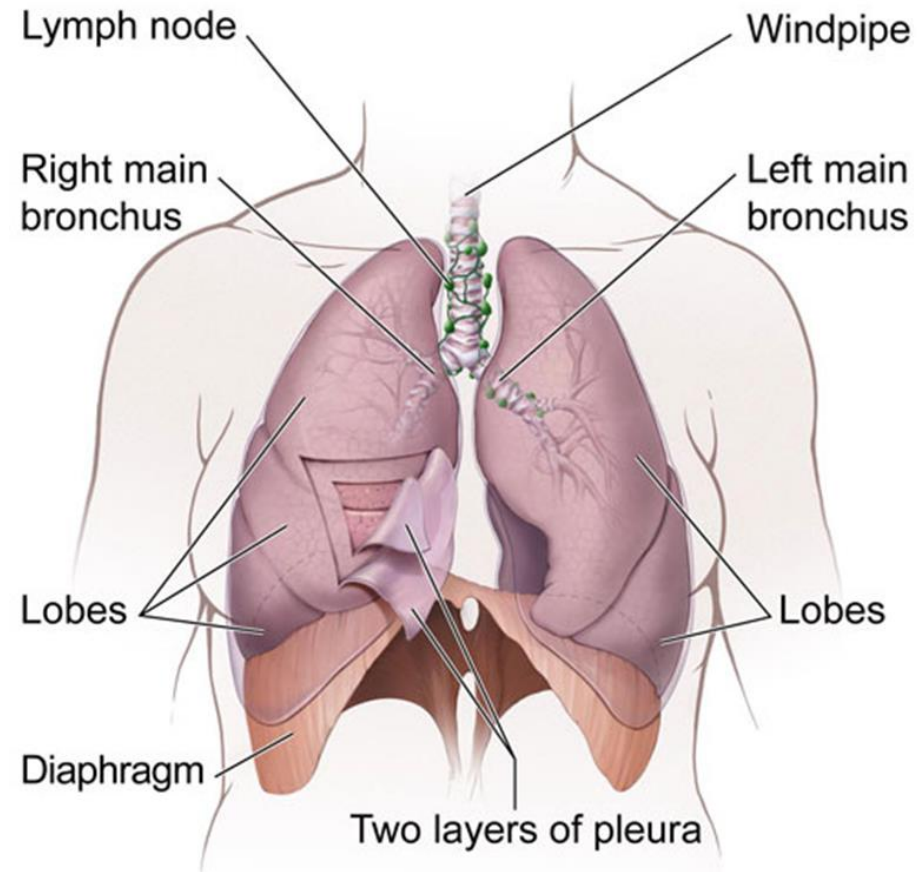


What is lung cancer?

- Lung cancer is a cancer that starts in the lungs.
- Lung cancers are thought to develop over many years.
- To understand lung cancer, it helps to know about the normal structure of the lungs and how they work.

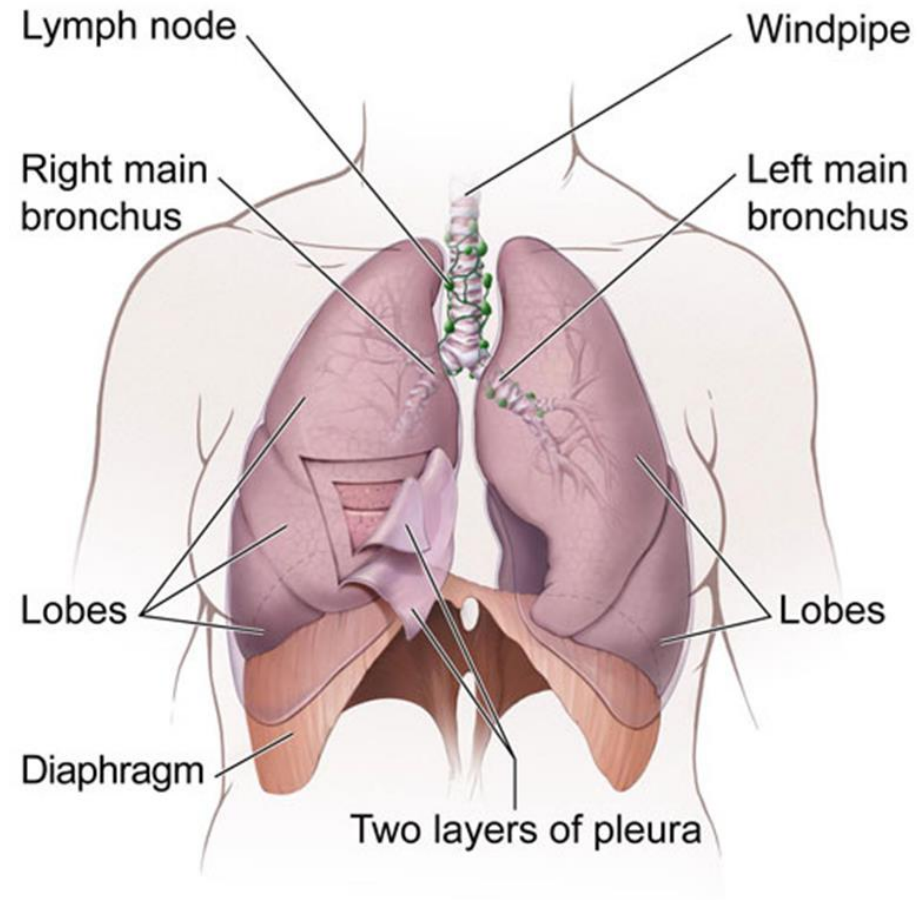
The lungs

- The lungs are 2 sponge-like organs found in the chest.
- When you breathe in, air enters through your mouth or nose and goes into your lungs through the trachea (windpipe).



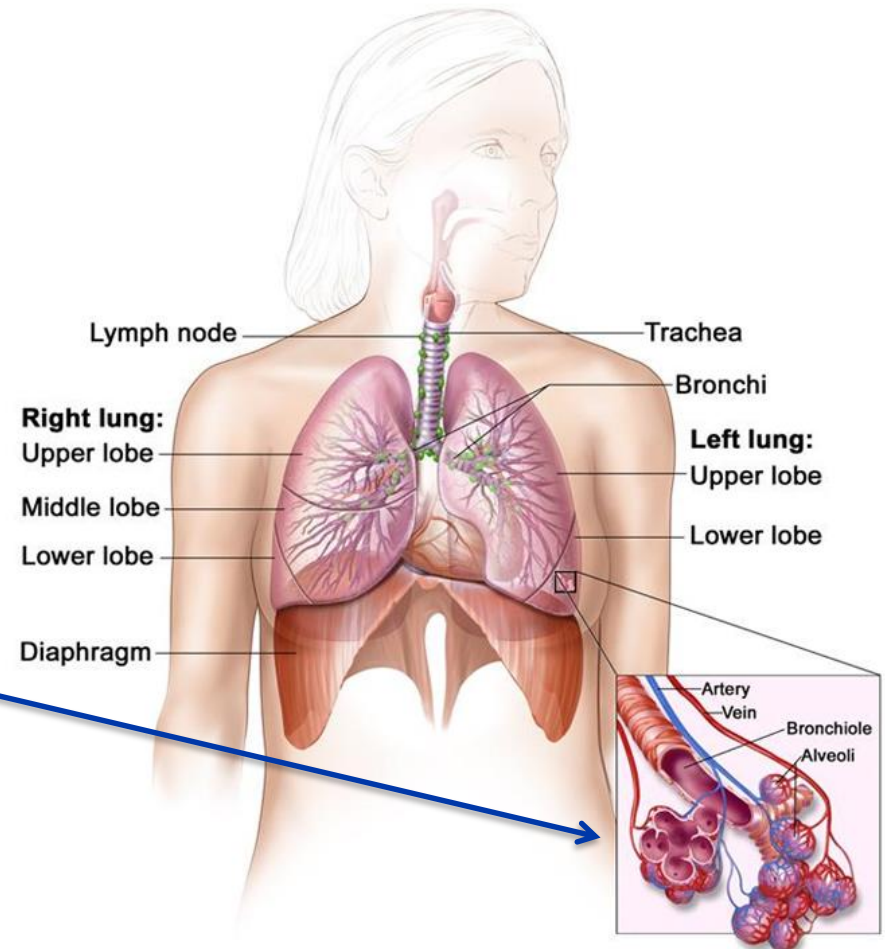
The lungs

- The trachea divides into 2 tubes called the bronchi which divide into smaller branches called bronchioles.
- At the end of the bronchioles are tiny air sacs known as alveoli.



The lungs

- Alveoli absorb oxygen from the inhaled air into your blood and move carbon dioxide out of the blood into the air in the sacs. The carbon dioxide is then expelled from the body when you exhale.





2 major types of lung cancer

- There are 2 major types of lung cancer:
 - Small Cell Lung Cancer (SCLC)
 - Non-Small Cell Lung Cancer (NSCLC)
- 85 - 90% of all lung cancers are NSCLC.
- If a lung cancer has characteristics of both types it is called a mixed small cell/large cell cancer -- this is not common.



Causes of lung cancer

- Smoking is the leading cause of lung cancer.
 - About 80% of lung cancer deaths are linked to smoking.
 - Many others are caused by exposure to secondhand smoke.
- There are other known causes of lung cancer, but they are much less common.
- A small percentage of lung cancers occur in people with no apparent risk factors.



Lung cancer risk factors

Risk factors are anything that can increase or decrease a person's chance of getting a disease, such as cancer.

There are many known risk factors for lung cancer. Some of these cannot be changed, but many can...



Lung cancer risk factors

- Tobacco smoke
 - Smoking is the leading risk factor for lung cancer.
 - Cigar smoking and pipe smoking also increase the risk for lung cancer.



Lung cancer risk factors

- Secondhand smoke
 - Even if you don't smoke, breathing in the smoke from others (called secondhand smoke or environmental tobacco smoke [ETS]) can increase your risk of lung cancer.
- Hookah smoking
 - Has become popular among young people
 - Studies have shown that hookah smoke contains the same cancer-causing substances as cigarettes.



Lung cancer risk factors

- Radon

- A naturally occurring radioactive gas that results from the breakdown of uranium in soil and rocks.
- Cannot be seen, tasted, or smelled
- According to the U.S. Environmental Protection Agency (EPA), radon is the second leading cause of lung cancer, and is the leading cause among non-smokers.



Lung cancer risk factors

- Asbestos

- Workplace exposure to asbestos fibers is also a risk factor for lung cancer.
- Government regulations have greatly reduced the use of asbestos in commercial and industrial products in the U.S.

- Arsenic

- High levels in drinking water may increase the risk of lung cancer, especially in smokers.



Lung cancer risk factors

- Other cancer-causing agents in the workplace
 - Radioactive ores such as uranium
 - Inhaled chemicals or minerals such as:
 - Coal products
 - Beryllium
 - Cadmium
 - Vinyl chloride
 - Chromium compounds
 - Chloromethyl ethers
 - Mustard gas
 - Silica
 - Nickel compounds
 - Diesel exhaust



Lung cancer risk factors

- Radiation therapy to the chest
- A history of lung cancer yourself or lung cancer in a family member
- Air pollution
 - Especially from heavily traveled roads in cities → slightly increased risk

So what can you do to
prevent lung cancer?



Preventing lung cancer

There is no sure way to prevent lung cancer.

But there are things everyone can do to reduce their risk of both small cell and non-small cell lung cancers

Preventing lung cancer

- The best way for most people to reduce their risk of lung cancer is to not smoke and also avoid breathing in other people's smoke.

for more
information
on lung cancer,
keep smoking.



NO SMOKING

IT IS AGAINST THE
LAW TO SMOKE IN
THESE PREMISES

NOTICE

**NO SMOKING
UNLESS YOU'RE ON FIRE**



Preventing lung cancer

- Reduce or eliminate radon exposure
 - Talk with your local EPA office about home testing
- Avoid exposure to known cancer-causing chemicals
- Follow a healthy diet



Lung cancer screening

Screening is the use of tests or exams to find a disease in people without symptoms of that disease.



Low-dose CT machine used to screen for lung cancer



American Cancer Society Guidelines for Lung Cancer Screening

Patients should be asked about their smoking history; those who meet ALL of these criteria may be candidates for lung cancer screening:

- 55 to 74 years old
- In fairly good health
- Have at least a 30 pack-year smoking history
- Are either still smoking or have quit smoking within the last 15 years



American Cancer Society Guidelines for Lung Cancer Screening

Doctors should talk to patients who meet the criteria about the benefits, limitations, and potential harms of lung cancer screening.

Screening should only be done at facilities that have:

- The right type of CT scan
- Experience in using low-dose CT scans for lung cancer screening
- A team of specialists that can provide the appropriate care and follow-up of patients with abnormal scans.



American Cancer Society Guidelines for Lung Cancer Screening

What patients need to know:


- If you fit all of the criteria for lung cancer screening, you and your health care provider should talk about whether you want to be screened. You should talk about what you can expect from screening, including possible benefits and harms, as well as the limitations of screening.
- It's important to find out if your health insurance will cover the cost of annual low-dose CTs for lung cancer screening.



American Cancer Society Guidelines for Lung Cancer Screening

What patients need to know:

- If you decide, along with your doctor, that you want be screened, you should get a low-dose CT every year until you reach the age of 74 as long as you remain in good health.
- A facility that can do lung cancer screening may not be nearby, so you may need to travel some distance to be screened.
- Screening is not a good alternative to stopping smoking. If you smoke, you should get help to quit.



Some people who get lung cancer have no apparent risk factors. Although we know how to prevent most lung cancers, at this time we don't know how to prevent all of them. And screening will not find all of them.

One thing we know for sure—the best step a person can take to prevent lung cancer is to avoid any form of tobacco and tobacco smoke.



More information

You can get more information on lung cancer and lung cancer screening on our website, cancer.org, or call 1-800-227-2345 and talk with one of our Cancer Information Specialists.

We also have a lot of information on how to quit using tobacco.

Thank you!