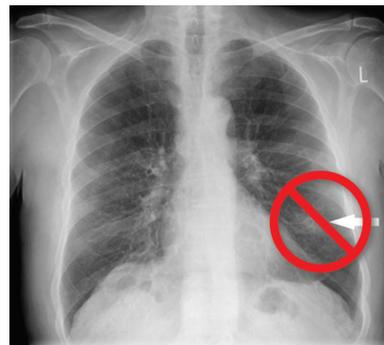


## Lung Cancer Prevention

### What are the chances that I will develop lung cancer?

The #1 cause of lung cancer is exposure to tobacco smoke. Your chances increase with the amount you smoke and the number of years you have smoked. The more you smoke or are exposed to smoke from others (second-hand smoke), the greater your chances of developing lung cancer. People who have never smoked may develop lung cancer, but their chance is much less than people who smoke or who used to smoke.



### What can I do to decrease my risk of developing lung cancer?

The best way to lower your risk is to avoid tobacco smoke. It is never too late to stop smoking, but the sooner you stop, the better. Even if you can't quit completely, cutting back on the number of cigarettes you smoke can help, but cutting down is not as good as quitting completely.

There are many ways to stop smoking including counseling, nicotine replacement and medications. It takes most people several tries before they quit for good. So don't be discouraged. If at first you don't succeed, keep trying! For help in stopping smoking go to [www.thoracic.org/patients](http://www.thoracic.org/patients).

### Are there other ways to decrease my risk of getting lung cancer?

There are many things that may reduce your risk, but none have been proven. These include:

- eating plenty of fruit
- getting regular exercise
- regular use of aspirin or celecoxib (Brand name Celebrex)
- regular use of inhaled corticosteroids (used for emphysema and asthma)

Eating more fruit and exercising are not likely to harm you, but speak with your healthcare provider before making major changes in your diet and activity. Talk to your healthcare provider before

taking any new medications, including regular use of non-prescription medications.

### Are there things that increase my chances of getting lung cancer?

There are several things that we know increase your risk of getting lung cancer. There are other things that may increase your risk but we don't have enough information to say for sure. These things increase your risk for lung cancer and should be avoided if possible:

- tobacco smoke
- exposure to or working with hazardous chemicals such as silica, cadmium, arsenic, beryllium, chromium, diesel fumes, nickel, coal smoke and soot
- exposure to particle pollution—like exhaust smoke.
- asbestos, a mineral formerly used in building materials that is still in some environments and products like old brake pads.
- radon, a radioactive gas that can be found in the environment. You can have levels checked if you live in a high risk area.
- high doses of supplemental beta-carotene (a pigment found in plants and fruits) above the Recommended Daily Allowance. Risk with high levels is mainly seen in former and current smokers.

Things that may increase your risk of getting lung cancer include:

- supplements with high doses of vitamin E (above the Recommended Daily Allowance)
- hormone replacement therapy (estrogen plus progestin)
- heavy alcohol use
- vaping has been shown to cause lung injury, but it is not known if it increases risk of lung cancer.

Talk to your healthcare provider about the risks and benefits before starting or stopping any medication or vitamin.

There are some other risks to lung cancer that you cannot avoid. You can discuss with your healthcare provider. These include:

- family history of lung cancer
- a personal history of other cancer
- a personal history of COPD or pulmonary fibrosis.

### What about screening for lung cancer?

The most effective way to reduce the chance of getting lung cancer is to stop smoking. There is also considerable interest in diagnosing lung cancer at an early stage, before it causes symptoms and when it is most treatable. This is called screening.

Research has found that using CT ("cat") scans, computerized imaging of the chest or lungs, for screening reduced the number of people who died from lung cancer. As a result, several organizations, including the American Thoracic Society and the United States Preventive Services Task Force now recommend that healthcare providers consider ordering a chest CT for lung cancer screening for adults with a history of cigarette smoking. Talk to your healthcare provider about the risks and benefits of screening for you. There are decision guides that can help you weigh the risks and benefits of having a CT for lung cancer screening. You can find one of these on AHRQ website listed under resources.

For more information about the risks and benefits of CT scan screening for lung cancer, go to [www.thoracic.org/patients](http://www.thoracic.org/patients).

### Summary

Lung cancer is a common form of cancer. There are things you can do to lower your risk of lung cancer.

- stop smoking tobacco
- ask your health care provider for help in quitting, including use of medicines to help with nicotine dependence
- discuss with your healthcare provider, what you are taking or doing to decrease your risk for lung cancer



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### For More Information

**Agency for Healthcare Research and Quality (AHRQ)—US Dept of Health and Human Services—Lung Cancer Screening Tools**

- <https://effectivehealthcare.ahrq.gov/decision-aids/lung-cancer-screening/home.html>

**American Lung Association**

- [www.lungusa.org](http://www.lungusa.org)

**American Thoracic Society**

- [thoracic.org/patients](http://thoracic.org/patients)

**National Cancer Institute**

- [www.cancer.gov/cancertopics/tobacco/smoking](http://www.cancer.gov/cancertopics/tobacco/smoking)
- <http://www.cancer.gov/newscenter/qa/2002/NLSTstudyGuidePatientsPhysicians>

**National Cancer Institute's guide to the risks and benefits of lung cancer screening**

**Lung Cancer Research Foundation**

- [www.freetobreathe.org](http://www.freetobreathe.org)

This information is a public service of the American Thoracic Society. The content is for educational purposes only. It should not be used as a substitute for the medical advice of one's healthcare provider.

