Lung Cancer - Non-Small Cell - Risk Factors and Prevention [1]

This section has been reviewed and approved by the Cancer.Net Editorial Board [2], 08/2015

ON THIS PAGE: You will find out more about the factors that increase the chance of developing this type of cancer. To see other pages, use the menu on the side of your screen.

A risk factor is anything that increases a person’s chance of developing cancer. Although risk factors often influence the development of cancer, most do not directly cause cancer. Some people with several risk factors never develop cancer, while others with no known risk factors do. However, knowing your risk factors and talking about them with your doctor may help you make more informed lifestyle and health care choices.

NSCLC occurs most often in people who smoke or in those who have smoked in the past. However, people who don’t smoke can also develop NSCLC, so it is important for all people to learn about the risk factors and signs and symptoms [3] of NSCLC.

The following factors may raise a person’s risk of developing NSCLC:

- **Tobacco and smoking.** Tobacco smoke [4] damages cells in the lungs, causing the cells to grow abnormally. The risk that smoking will lead to cancer is higher for people who smoke heavily and/or for a long time. Regular exposure to smoke from someone else’s cigarettes, cigars, or pipes can increase a person’s risk of lung cancer, even if that person does not smoke. This is called environmental or secondhand tobacco smoke [5].

  Smoking marijuana and using electronic cigarettes may also increase the risk of lung cancer, but the actual risk is unknown.

- **Asbestos.** These are hair-like crystals found in many types of rock and are often used as fireproof insulation in buildings. When asbestos fibers are inhaled, they can irritate the lungs. Many studies show that the combination of smoking and asbestos exposure is particularly dangerous. People who work with asbestos in a job such as shipbuilding, asbestos mining, insulation, or automotive brake repair and who smoke have a higher risk of developing NSCLC. Using protective breathing equipment reduces this risk.

- **Radon.** This is an invisible, odorless gas naturally released by some soil and rocks. Exposure to radon has
been associated with an increased risk of some types of cancer, including lung cancer. Most hardware stores have kits that test home radon levels, and basements can be ventilated to reduce radon exposure.

- **Other substances.** Other substances at work or in the environment can increase a person’s risk of developing lung cancer. In some parts of the world, people exposed to cooking flames from coal or wood might have increased risk of lung cancer. Other factors that may increase the risk of lung cancer include radiation, arsenic, nickel, and chromium.

- **Genetics.** Some people have a genetic predisposition for lung cancer. People with parents, brothers, or sisters with lung cancer could have a higher risk of developing lung cancer themselves.

**Prevention**

Different factors cause different types of cancer. Researchers continue to look into what factors cause this type of cancer. Although there is no proven way to completely prevent this disease, you may be able to lower your risk. Talk with your doctor for more information about your personal risk of cancer.

The most important way to prevent lung cancer is to avoid tobacco smoke. People who never smoke have the lowest risk of lung cancer. People who smoke can reduce their risk of lung cancer by stopping smoking [6], but their risk of lung cancer will still be higher than people who never smoked.

Attempts to prevent lung cancer with vitamins or other treatments have not worked. For instance, beta-carotene, a drug related to vitamin A, has been tested for the prevention of lung cancer. It did not reduce the risk of cancer. In people who continued to smoke, beta-carotene actually increased the risk of lung cancer.

*The next section in this guide is Screening[7] and it explains how tests may find cancer before signs or symptoms appear. Or, use the menu on the side of your screen to choose another section to continue reading this guide.*

**Links:**