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Lung Cancer

Lung Cancer Risk Factors

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People 50 or older who have a history of cigarette, cigar, or pipe smoking are most at risk for lung cancer. People who have never smoked can also develop the disease.

Lung Cancer Risk Factors and Prevention

Smoking and being exposed to cancer-causing (carcinogenic) chemicals greatly increase your risk of lung cancer.

Lung cancer is caused by a mutation in your DNA. When cells reproduce, they divide and replicate, forming identical cells, so that your body is constantly renewing itself. Inhaling harmful carcinogens like cigarette smoke, asbestos, and radon damages the cells that line your lungs. At first your body may be able to repair itself. With repeated exposure, your cells become increasingly damaged. Over time, they begin to act abnormally and grow uncontrollably. This is how cancer can develop.

Several precancerous changes have to occur before cancer actually manifests. The build-up of extra cells causes tumors, which are either benign or malignant. Malignant cancerous lung tumors can be life threatening. They can spread and even return after they have been removed. According to the Centers for Disease Control and Prevention (CDC), about 90 percent of all lung cancer deaths in the United States are due to smoking.

Personal History and Lifestyle Choices

Genetics

Current research suggests that if a member of your immediate family (mother, father, sibling, aunt, uncle, or grandparent) has or had lung cancer you may have a slightly higher risk of developing the disease. This is true even if you don't smoke. At this point, it's unclear whether genetics cause lung cancer or merely increase your susceptibility to it.

Age

According to the Lung Cancer Alliance, the average age in the United States for a lung cancer diagnosis is around 70. Only about 10 percent of lung cancers occur in people younger than 50. The older you are, the longer you have been exposed to harmful chemicals. This naturally increases your risk for cancer.

Past Lung Disease

Past lung diseases can cause inflammation and scarring in the lungs. These include tuberculosis and chronic obstructive pulmonary disease (COPD), which includes chronic bronchitis and emphysema.

If you have a history of chronic illnesses that affect the lungs, you may be at a greater risk of developing lung cancer.

Radiation Therapy to the Chest

Radiation therapy used to treat other cancers may increase your risk of lung cancer. This risk is higher if you smoke.

Secondhand Smoke

You are at risk if you don't smoke but are exposed to cigarette smoke regularly in your daily environment at home or work, or in restaurants and bars. According to the Lung Cancer Alliance, secondhand smoke increases your risk for lung cancer by 20 to 30 percent.

Smoking

Smoking tobacco (cigarettes, cigars, and pipes) is the number one risk factor for lung cancer. According to the Lung Cancer Alliance, smoking is responsible for nearly 90 percent of all lung cancer cases. Tobacco and tobacco smoke contain 7,000 chemicals, many of which are carcinogenic. Inhaling the chemicals in a cigarette immediately triggers a change in lung tissue. Your body is initially able to repair the damage. Its ability to do so decreases as exposure continues. The more frequently and the longer you smoke, the greater your chance becomes for developing lung cancer.

Diet

A balanced diet provides your body with the vitamins and minerals it needs to maintain good health. You may have an increased risk for lung cancer if you don't eat a diverse mix of healthy foods like fruits and vegetables. This is especially true if you are a smoker.

Environmental Factors

Radon

Radon is an odorless, colorless, and tasteless gas that occurs naturally with the breakdown of uranium in rocks and soil. These gases can seep into building foundations and into the living and working spaces. Because radon is difficult to detect, you could be exposed without knowing it. People who smoke have an increased risk from the affects of radon than those who don't smoke. According to the Lung Cancer Alliance, radon is the second-leading cause of lung cancer in the United States.

Asbestos

Asbestos is an industrial material used in construction for insulation and as a fire retardant. When the material is disturbed, small fibers become airborne and can be inhaled. You are at a greater risk for developing lung cancer if you are exposed to asbestos on a regular basis.

Other Chemicals

Other chemical exposures can raise your lung cancer risks. Some examples are:

- arsenic
- beryllium
- cadmium
- vinyl chloride
- nickel compounds
- chromium compounds
- coal products
- mustard gas
- chloromethyl ethers

- diesel exhaust

Prevention

The majority of lung cancer is preventable. You can significantly limit your chances for developing lung cancer by avoiding your exposure to risk factors. Smoking is the number one risk factor for lung cancer.

Quitting Smoking

Because smoking is responsible for 90 percent of lung cancers, quitting is the most important thing you can do. Your lungs will begin to heal themselves almost immediately. The amount of time you smoked and the frequency will affect the ability of the lungs to repair. But even after many years of smoking, quitting can significantly reduce your risk of lung cancer.

Asbestos and Radon

If you work around asbestos or other harmful materials, be careful to limit your exposure as much as possible. Radon testing is available for home and commercial spaces. If you live or work in an old building and suspect the presence of either radon or asbestos, testing for unsafe levels can provide you with peace of mind.

Diet

Nutrition is important for maintaining good health. A diet high in fruits, vegetables, vitamins, and minerals provides your body with the nutrition it needs to function properly and heal damaged cells. Eat five or more servings of fruits and vegetables a day. Include other plant-based foods like beans and grains. Stay away from high-fat foods and avoid or limit your alcohol consumption.

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