LUNG CANCER SCREENING EDUCATION MATERIAL

What is lung cancer?

Cancer is a disease in which cells become abnormal and form more cells in an uncontrolled way. Lung Cancer is cancer that forms in tissues of the lung, usually in the cells lining air passages. These abnormal cells do not carry out the functions of normal lung cells and do not develop into healthy lung tissue. As they grow, the abnormal cells can form tumors and interfere with the function of the lung.

Symptoms of lung cancer

The signs and symptoms of lung cancer can take years to develop and may not appear until the disease is advanced.

Symptoms of lung cancer in the chest:

- Coughing, especially if it persists or becomes intense
- Pain in the chest, shoulder, or back, unrelated to pain from coughing
- A change in color or volume of sputum
- Shortness of breath
- Changes in the voice or being hoarse
- Harsh sound with each breath (stridor)
- Recurrent lung problems, such as bronchitis or pneumonia
- Coughing up phlegm or mucus, especially if it tinged with blood
- Coughing up blood

If the original lung cancer has spread, a person may feel symptoms in other places in the body. Common places for lung cancer to spread include other parts of the lungs, lymph nodes, bones, brain, liver, and other organs in the body.

Risk factors for lung cancer

Smoking

Smoking causes nearly 9 out 10 cases of lung cancer. Tobacco smoke contains over 4,000 chemical compounds, many of which have been shown to be carcinogenic. The two primary carcinogens in tobacco smoke are chemicals known as nitrosamines and polycyclic aromatic hydrocarbons.
Passive smoking, or the inhalation of tobacco smoke from other smokers, increases the risk of lung cancer by 20-30%. Radon is the second biggest cause of lung cancer after smoking. Radon gas is a naturally occurring present in all rocks and soils. The radon gas can build up in homes and other buildings. A number of substances that occur in the workplace may cause lung cancer. In particular, these include asbestos, silica, and diesel exhaust.

Air pollution

5-7% of lung cancers in non-smokers are due to outdoor air pollution. The use of coal for cooking and for heating the home, and a high level of smokiness in the home has been shown to increase lung cancer risk.

Previous lung disease

Having had a disease that caused scarring in the lungs may be a risk factor for a type of lung cancer called adenocarcinoma of the lung.

Chronic Obstructive Pulmonary Disease

It is associated with a slightly increased risk (4-6 times the risk of a nonsmoker) for the development of lung cancer even after the effects of concomitant tobacco use are excluded.

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Prevention

The best way to prevent lung cancer is to **never smoke.**

Quitting smoking

Smokers can decrease their risk of lung cancer by quitting.
In a person who has quit smoking, the chance of preventing lung cancer depends on age of initiation of smoking, duration in years and amount of smoking, and the length of time since quitting. After a person has quit smoking for 10 years, the risk of lung cancer decreases 30% to 50%.

Screening and early detection

Screening is the process of looking for the cancer in people who have no symptoms of the disease. Screening can save lives.
The new lung cancer screening guidelines recommends annual scans with low-dose computed tomography (LDCT) scans, which is a special kind of X-ray that can detect early stage
lung cancer, for people over 55yrs and are current or former heavy smokers.

Screening for lung cancer saves lives, however, it is not an alternative to quitting smoking.