

UNIVERSITY OF MIAMI HEALTH SYSTEM

LUNG CANCER SCREENING

Lung cancer is the number one killer among all cancers in the United States for both men and women. An early diagnosis is now possible through a chest computed tomography (CT) scan screening. The American Cancer Society (ACS), the US Preventive Services Task Force (USPSTF), Medicare and many other health organizations recommend CT screening for individuals at high risk for lung cancer.

How Do You Screen for Lung Cancer?

CT Screening is the only method proven effective in finding early lung cancer.

Why Do You Screen for Lung Cancer?

CT screening for lung cancer is the only method of detection proven effective in finding early lung cancer. Early stage lung cancer of any type is the most curable.

Early detection of lung cancer with low-dose CT scans enables health care providers to treat lung cancer effectively before it spreads to other parts of the body. More than 80 percent of patients who have lung cancer detected by CT screening are treated successfully. When lung cancer is found early and the patient receives treatment right away, the cure rate exceeds 90 percent. Without early detection through screening, more than 85 percent of patients with lung cancer are diagnosed at a late stage. Research findings reveal that participants who received low-dose CT scans had a 20 percent lower risk of mortality from lung cancer than those who received standard chest radiographs (X-rays).

Who is at High Risk for Lung Cancer?

- Former or current smokers with a pack-year history greater than 15 (this is the number of packs per day multiplied by the number of years smoked)
- Family history of lung cancer
- History of chronic obstructive pulmonary disease (COPD), emphysema or pulmonary fibrosis
- Exposure to asbestos, radon, or other chemicals
- Significant exposure to secondhand smoke

What is the Eligibility for Lung Cancer Screening?

Adults between the ages of 55 to 80 years:

- Who have no signs or symptoms of lung cancer and who have a 30 pack-year smoking history
- Who either currently smoke or have quit smoking within the past 15 years

Medicare covers chest CT screening for high risks individuals up to 77 years. There may be financial assistance for others who fit the criteria for screening but do not fall under Medicare coverage.

What are the Possible Findings to Expect when Screening for Lung Cancer?

A chest CT screening can identify abnormalities in the entire chest and the upper part of the abdomen that could be cancer. There is a possibility to find a nodule, a growth that can be cancerous or noncancerous. A lung nodule suspicious for lung cancer will require additional tests. The additional steps





IN PURSUIT OF YOUR CURE."

may include a repeat CT scan, a positron emission tomography computed tomography (PET-CT) and a biopsy. During a biopsy, a piece of tissue is removed and inspected under a microscope. This is the only way to determine if a nodule is cancer.

How Often Do You Screen for Lung Cancer?

CT screening for lung cancer is not a one-time test. Screening is a process that may involve annual follow-up and possible additional tests if indicated.

What is a Computed Tomography (CT) scan?

The computed tomography scan, also known as a CT scan or computer-aided tomography (CAT) scan, is a diagnostic procedure that takes detailed pictures in a series of cross-sections of the body. A computer then reassembles the slices in a way that allows health care providers to view the shape, size and exact location of organs and tissues of the body. CT scans are more accurate in identifying early lung cancers than chest X-rays.

How to Schedule a Chest CT Screening?

The US PSTF recommends a shared decision-making visit in a face-to-face encounter with a provider to discuss the screening process. Medicare requires this to ensure coverage for the screening. To schedule an appointment at Sylvester Comprehensive Cancer Center call the Oncology Scheduling Line at 305-243-5302.

What to Expect when You Come in for your Chest CT Screening?

- The patient lies very still on a table that moves slowly through the scanner.
- The CT machine rotates around the patient and takes pictures from many angles.
- The time of the procedure depends on the areas to be imaged. For the chest area, the procedure takes about 20 seconds.
- This test is fast, painless and non-constricting.

In addition to identifying early cancers that originate in the lungs, a CT scan can help find enlarged lymph nodes.

What Are the Benefits and Risks of Chest CT screening?

Benefits:

• Lung cancer found early has the best chance for cure. The treatment for stage 1 lung cancer is surgery.

Risks:

- False Positive results: There is a 25 percent chance that a nodule detected will be benign.
- Additional Testing: Detecting a nodule may require additional testing.
- Radiation Exposure
- Emotional Stress: A nodule that requires further follow-up may trigger anxiety in some individuals.

References:

- 1. Survival of patients with stage I lung cancer detected on CT screening https://www.ncbi.nlm.nih.gov/pubmed/17065637
- 2. Reduced lung-cancer mortality with low-dose computed tomographic screening https://www.ncbi.nlm.nih.gov/pubmed/21714641
- 3. Get Screened https://www.ielcap.org/getting-screened





IN PURSUIT OF YOUR CURE."