LOW DOSE LUNG CANCER CT SCREENING FOR EARLY DETECTION - A PATIENTS GUIDE

There is now renewed hope in the possibility of early detection when lung cancer is in its most curable stage with the most promising scientific advances of CT (Computed Tomography). CT Lung Screening identifies lung cancers much earlier in their development than previously possible with conventional techniques. There is compelling evidence that use of this approach can lead to high cure rates of lung cancer.

Lung cancer has a bad reputation. The **second most diagnosed cancer in both women and men,** lung cancer is also the leading cause of cancer death in the country. Lung cancer accounts for **30 percent of all cancer deaths in America,** killing more than 150,000 people a year. A five-year survival rate of less than 16 percent continues to be substantially lower than that seen for other major cancers such as breast, colon and prostate cancer, each at 90 percent or greater.

Cancer of the lung is the leading cause of death from cancer in both men and women in the United States.

Lung cancer kills more individuals than cancers of the breast, colon, cervix and prostate combined.

Lung cancer is usually asymptomatic until it has reached an advanced stage, when the treatment outcome is poor. The five-year survival rate for all stages is 11-14%.

CT Scan for Lung Cancer?

Talk to your own doctor about getting a CT scan to screen for lung cancer. Screening for lung cancer may save your life. Be sure to discuss your complete health history. There are some risks and not everyone should be screened for lung cancer. Only Low Dose CT scans are recommended for screening. Chest X-rays are not recommended for lung cancer screening.

Recommendations

According to the American Lung Society, the best way to prevent lung cancer caused by tobacco use is to quit smoking or to never start smoking.

Low-dose CT screening should be recommended for those people who meet NLST criteria:

- Current or former smokers aged 55 to 74 years
- A smoking history of at least 30 pack-years
- No history of lung cancer

*A pack year is smoking an average of one pack of cigarettes per day for one year. For example, a person could have a 30 pack year history by smoking one pack a day for 30 years or two packs a day for 15 years.

How much radiation is used in the CT Lung Screen?

The CT screening is a low-dose scan. The radiation dosage is approximately that of a standard chest x-ray. The risk is equivalent to smoking one pack of cigarettes in a life time.

Lung screenings done using Lose Dose CT (LDCT) have been **90% effective** in detecting lung cancer at an early stage.

People in the National Lung Screening (NLST) study got either 3 LDCT scans or 3 chest x-rays, each a year apart, to look for abnormal areas in the lungs that might be cancer. After several years, the study found that people who got LDCT had a **16%** lower chance of dying from lung cancer than those who got chest x-rays. They were also **7%** less likely to die overall (from any cause) than those who got chest x-rays.

I've had chest x-rays before, why would I want to have the CT Lung Screen?

A chest x-ray only shows two views of your chest (front and side), while a CT scan shows cross-sectional images all through your chest-from the tips of your lungs through the lung bases. Thus, tiny abnormalities (that could be early stage lung cancer) can be found which would never have been seen on a chest x-ray.

Benefits

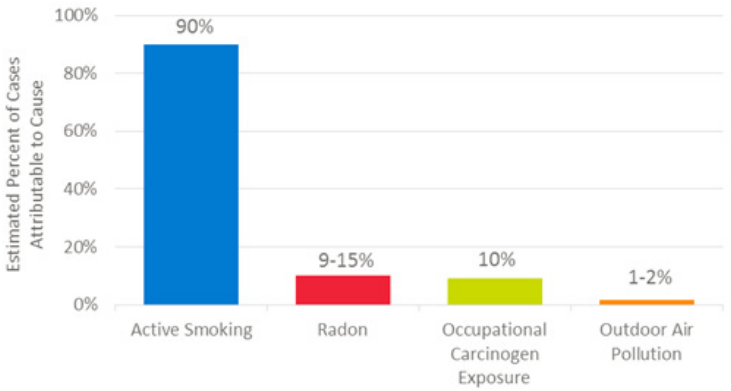
- Because CT scans are able to detect even very small nodules in the lung, LDCT of the chest is especially effective for diagnosing lung cancer at its earliest, most treatable stage.
- CT is fast, which is important for patients who have trouble holding their breath.
- CT scanning is **painless and noninvasive.**
- **No radiation remains** in a patient's body after a CT examination.
- X-rays used in LDCT of the chest scans have **no immediate side effects.**
- **Low-dose CT** scans of the chest produce images of sufficient image quality to detect many lung diseases and abnormalities using up to 90 percent less ionizing radiation than a conventional chest CT scan.
- Lung cancer screening with **LDCT has been proven to reduce the number of deaths** from lung cancer in patients at high risk.
- Lung cancer found by screening with LDCT is often at an earlier stage of disease.

PROTECT YOUR HEALTH - GET SCREENED
EARLY DETECTION SAVES LIVES

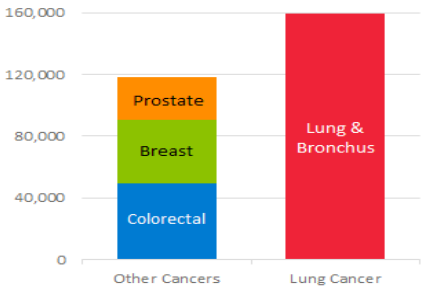
- When cancer is found with screening, patients can more often undergo minimally invasive surgery and have less lung tissue removed.

Please discuss the risks with your doctor.

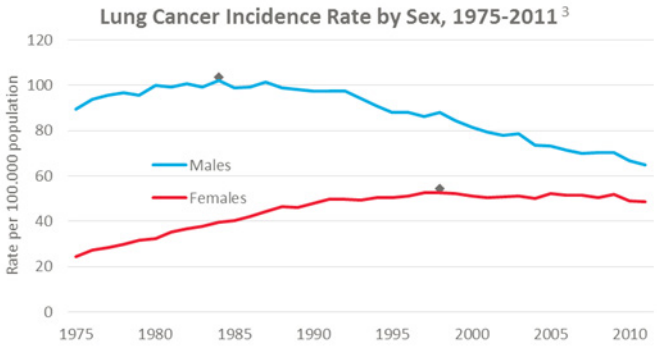
Estimated Attributable Portion of Lung Cancer Cases by Cause [11]



Estimated Cancer Deaths by Site, 2015 [2]



Lung Cancer Incidence Rate by Sex, 1975-2011 [3]



Graphs Courtesy of:
2. American Cancer Society. Cancer Facts and Figures, 2015.
3. U.S. National Institutes of Health. National Cancer Institute. SEER Cancer Statistics Review, 1975-2011.
11. Alberg AJ, Samet JM. Epidemiology of Lung Cancer. Chest. 2003; 123:21-49.

Lung Screenings offered at the following DIA Locations:

Brandywine Office
3206 Concord Pike (302) 654-5300

Omega Imaging & MRI
L-6 Omega Drive (302) 738-9300

Glasgow Office
100 Peoples Plaza (302) 392-5600

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