WHAT YOU NEED TO KNOW ABOUT LUNG CANCER SCREENINGS

Your provider has determined that you may benefit from a Low-Dose Computed Tomography (LDCT) Lung Cancer Screening, as you have met all of the following criteria: age 55 to 77 years; asymptomatic for lung cancer and pneumonia; tobacco smoking history of at least 30 pack-years and current smoker or have quit smoking within the last 15 years.

As you make the decision to participate in this screening, it is important that you understand the benefits, potential harms and importance of adhering to the recommended follow-up annual screenings and any necessary diagnostic testing and treatment. It is also essential that you understand the importance of smoking cessation.

What is a LDCT lung screening?
A LDCT lung screening is a non-invasive medical test that uses a reduced radiation dose and is designed to find small lung masses (nodules) that may be the earliest sign of lung cancer. The CT scan detects potentially pre-cancerous lung nodules more effectively than regular chest x-rays. The screening will last approximately 15 minutes. During the procedure, you will be asked to place your arms over your head and hold your breath for 15 to 20 seconds.

What are the benefits of having a LDCT lung screening?
LDCT screenings of asymptomatic, high risk patients create an avenue to diagnose lung cancer in its earliest, most treatable stage. Early detection increases the number of therapy options to improve survival.

What is lung cancer?
Lung cancer is an uncontrolled growth of abnormal cells in the lungs. These cells often grow together in clumps called tumors. The tumors destroy and replace normal, healthy tissue and interfere with organ function. In early stages, lung cancer often has no symptoms. Many times it is diagnosed in later stages, which can make it harder, or impossible, to treat or cure. Approximately 90 percent of lung cancer cases are diagnosed in current or former smokers.
False Positive Rate: False positive results occur when a test appears to be abnormal but no lung cancer is found. CT lung screenings find abnormalities in smokers and former smokers, but most of these abnormalities are not lung cancer. However, these abnormal findings – old smoking scars, areas of inflammation, noncancerous conditions – can mimic lung cancer and require additional testing. Additional testing could include a second CT scan of the chest or biopsy (removal of tissue). The biopsy has associated risks and can cause increased anxiety. Understanding that the vast majority of lung nodules found on CT screening do not represent cancer helps most patients avoid significant anxiety while they wait for follow-up testing.

Over-Diagnosis: LDCT lung screening can lead to the detection and treatment of slow growing cancer which may never have harmed you, depending on your other health problems. This can result in unnecessary treatment, complications and cost.

False Negative Results: Sometimes test results can appear to be normal even when a lung cancer is present. False negative results can delay someone from seeking medical care. A single negative result does not mean you will not get cancer. The current recommendation is for yearly exams for high risk individuals.

Advanced Findings: Not all cancers found by LDCT lung screening will be found in the early stage of disease. A screening that detects lung cancer may not improve your health or help you live longer, if the disease is advanced.

Radiation Exposure: Some people worry about radiation exposure from lung cancer screening. Compared to other parts of the body, lungs have greater potential for developing a radiation-induced cancer. The risk is small, but it’s a reminder of the importance of weighing the risks versus benefit of any medical test.

LDCT screenings are given at a reduced radiation dose, which means that the level of radiation used is very low (similar to the radiation dose in a mammogram). Most follow-up screenings done to determine if any change or growth has occurred are at the same low dose. Subsequent screenings to further evaluate an abnormal finding may use higher levels of radiation.

The radiation dose used in a low dose CT scan is a fraction of that used in a regular CT scan. The CT dose index (CTDivol) of ≤ 3 mGy (milligray) is used for standard size patients and is less radiation than a typical person receives from normal environmental radiation exposure (airplane travel, sun/cosmic radiation, radiation in the ground). Radiation does not remain in your body after the scan.
HOW WILL I KNOW MY RESULTS?
The results of your LDCT lung cancer screening will be sent to the physician or provider who ordered your test. A follow-up office visit with this physician / provider might be necessary to discuss the results and next steps, if any are needed.

WHAT DO THE RESULTS OF THE LDCT LUNG SCREENING MEAN?

• **Negative**: Indicates that no nodule or definitively benign nodules were noted on your exam; recommend annual screening with LDCT in 12 months.

• **Benign Appearance or Behavior**: Indicates nodules with very low (1 – 2 %) likelihood of cancer; recommend annual screening with LDCT in 12 months.

• **Probably Benign**: Indicates probably benign finding(s); nodules with a low likelihood (5 – 15 %) of becoming a clinically active cancer; recommend follow-up LDCT lung screening in six months.

• **Suspicious**: Indicates nodule is suspicious for cancer (>15 % chance); additional testing and / or tissue sampling is recommended. This could include a three month LDCT, PET / CT, chest CT or biopsy.

WHAT FOLLOW-UP MIGHT BE NECESSARY?

If you plan to begin the lung cancer screening process, it is expected that you will comply with the recommended annual screenings and necessary follow-up diagnostic tests and procedures. Although a firm commitment is not necessary to begin the screening process, if you feel you would not accept the follow-up recommendations, you may not be an appropriate candidate for the lung cancer screening program.

**Annual Lung Cancer LDCT Screening.** Follow-up screenings are recommended for patients who remain at high risk. Your willingness to have continued screenings at the recommended times is very important.

**Follow-up testing for diagnosis and treatment.** A positive result means that a nodule on the lung was detected that may require additional follow-up or further testing. Over time, 20 – 30 % of high risk patients who have a lung cancer screening are found to have one or more concerning abnormalities identified on their scans. Usually, follow-up tests or procedures are necessary to further evaluate these findings. In the 2011 National Lung Screening Trial (NLST) study, the vast majority of these abnormalities (97.5%) were excused simply with further imaging. A minority (3 - 4%) required more invasive procedures, sometimes even an operation, to diagnose and / or treat the concerning abnormality.

If you are found to have lung cancer or some other serious condition, your doctor and a team of experts will discuss all possible treatment options with you.
WHAT IMPACT DO MY OTHER HEALTH ISSUES HAVE ON MY CARE?

Because other health issues generally exist among the heaviest smokers and those who have smoked for long periods of time, complications associated with invasive diagnostic procedures and therapies may be more frequent in these groups. These conditions may even prevent additional work-up or treatment.

WHAT CAN BE DONE TO DECREASE MY RISK OF GETTING LUNG CANCER?

You can decrease your risk of lung cancer by not smoking. If you are a current smoker, the best thing you can do is stop smoking. Everyone should avoid secondhand smoke, make their home smoke free, test their home for radon and avoid carcinogens at work. It is also important to eat a diet full of fruits and vegetables and exercise several days a week.

WHAT STEPS CAN I TAKE TO QUIT SMOKING?

We have tips to help you quit smoking. Resources and counselors are available to you 24 hours a day through the Ohio Tobacco Quit Line (1-800-QUIT NOW) or the American Cancer Society’s Quit for Life Program (1-866-784-8454).

DOES MY INSURANCE PAY FOR A LDCT LUNG SCREENING?

If you are a Medicare patient meeting all of the screening guideline criteria, your LDCT lung screening is usually covered. If you have commercial insurance, please check with your carrier to see if the screening will be covered and what requirements need to be met to qualify for coverage.

For more information, please call 419-226-5055.