Lung Cancer Screening: Helping you make a decision

Lung cancer is the leading cause of cancer death in the United States. Many times lung cancer does not cause symptoms until it has spread to other parts of the body. However, it can sometimes be cured if it is found early enough.

If you have smoked for many years, you might want to consider annual screening (testing) for lung cancer with low-dose computed tomography (LDCT), a special type of X-ray. Before deciding, you should think about the possible benefits and harms of screening. The following information will help you make a decision with your doctor about whether lung cancer screening is right for you.

Remember, the best way to lower your chances of dying from lung cancer is to stop smoking. Talk with your care team about our Quit for Life® Program or call 1-800-462-5327.

Should I be screened for lung cancer?
You should consider being screened if you are age 55 to 74 and all of the following are true for you:

- Currently smoke or quit smoking within the last 15 years.
- Have a smoking history of at least 30 pack-years. Pack-years means how much you’ve smoked and for how long. For example, 30 pack-years could be smoking 1 pack a day for 30 years or 2 packs a day for 15 years, or any combination equal to smoking a pack a day for 30 years. Calculate your pack-years below.
- Have no significant health problems that could interfere with screening or treatment if needed.

If you are between 75-77 years of age and meet the factors above, please talk with your doctor to see if screening is right for you. Annual lung cancer screening is not recommended for people age 78 and older.

Why screen for lung cancer?
Screening is looking for a disease before a person has any symptoms. Screening helps find lung cancer in an early stage, when it is more easily treated.

Research shows the following:
- In 1000 people who get screened, 18 will die from lung cancer.
- In 1000 people who do not get screened, 21 will die from lung cancer.
- Screening saves 3 lives for every 1000 people who are at high risk of lung cancer.

How do we screen for lung cancer?
We screen for lung cancer using a low-dose CT scan, also called LDCT scan. A LDCT scan gives a detailed picture of your lungs. If you decide to start lung cancer screening, you will go to Radiology for your LDCT scan. The X-ray machine uses a low dose of radiation to make detailed images of your lungs. The scan only takes a few minutes and is not painful.

How often should screening be done?
Screening should be done once a year for as long as recommended by your doctor.

Calculate your pack years
(20 cigarettes = 1 pack)

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<thead>
<tr>
<th>Number of years smoked</th>
<th>Average number of packs smoked per day</th>
<th>Pack-years</th>
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Page 1 of 4

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Is there a downside to screening?
All screening tests have both benefits and harms. LDCT screening has some possible harms that are important for you to consider when you think about whether it’s right for you.

False alarms
Screening may find something that looks like cancer but, after further testing, turns out not to be cancer. This is called a false positive or a false alarm.
Based on research, in a group of 1000 people screened once a year for 3 years:
- 391 will get a positive result
- 365 of the 391 with a positive result will have a false positive result (they do not have lung cancer). Most false positive results are resolved with further LDCT testing.
- 26 of the 391 with a positive result will have a true positive test (they do have lung cancer).

Complications of further testing
People who have a false positive result will need further testing. The extra tests might cause harm. Of the 365 people who get a false positive result:
- 25 will need extra testing that involves invasive procedures, such as a biopsy. A lung biopsy involves inserting a tube into the lung and taking a tiny piece of lung tissue to check for cancer.
- 3 out of the 25 people who have extra testing will have at least one major complication from testing or surgery. Major complications can include bleeding, infections, or rarely, a collapsed lung.

Over-diagnosis
Sometimes screening tests find cancers that would have never caused symptoms or harm. This is called over-diagnosis. Unfortunately, it is often impossible to tell which cancers fall into this category. So there is a small chance someone might be treated for a cancer that would not have harmed them.

Researchers found that out of every 10 people diagnosed with lung cancer after a LDCT scan, 1 or 2 of those people are treated for cancer that likely wouldn’t have harmed them.

Radiation
Exposure to radiation from LDCT scans increases your risk of cancer by a very small amount. For comparison, the radiation from one LDCT scan of the chest is about the same exposure as 6 months of natural background radiation. A regular dose CT scan is about the same amount of exposure as 2 years of natural background radiation. We want to keep your risk low, so we use low-dose CTs that use much less radiation than a standard CT.

Stress and anxiety
It is normal to feel stressed or anxious while waiting for your results or if you have something that is suspicious for lung cancer. Most patients with suspicious findings are reassured when they learn that most of these are false positives. Your health care team wants to hear from you if you have stress and anxiety about your results so that we can help.
The following graphic shows benefits and harms in people ages 55-74 who were screened for lung cancer with LDCT scans once a year for 3 years compared to people who were not screened*:

*Benefits and harms were measured after an average of 6.5 years.  

Is screening a covered benefit?
Most people who meet the specific screening guidelines have coverage for lung cancer screening once every 12 months. This does not include follow-up tests or diagnostic exams that might follow screening. Check your coverage agreement or call Customer Service at 1-888-901-4636 to find out what your benefit plan covers for lung cancer screening and additional diagnostic testing that might be needed.

What else should I think about when making a decision?
- Lung cancer screening is not a substitute for quitting smoking.
- Lung cancer screening should be done every year until 15 years after your quit date.
- Lung cancer screening might not be right for you if you have any major health problems.
- Lung cancer screening might not be right for you if you’re not willing to have lung surgery.
Helping you make a decision

Read through the following and select the answer that best describes how you’re feeling.

<table>
<thead>
<tr>
<th>How important is:</th>
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<tbody>
<tr>
<td>Finding lung cancer early when it may be more easily treated?</td>
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<td>○ Very important</td>
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<table>
<thead>
<tr>
<th>How concerned are you about:</th>
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<tbody>
<tr>
<td>Having a false alarm?</td>
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<tr>
<td>○ Not concerned</td>
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<tr>
<td>Having other tests if you have a positive screening test?</td>
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<td>○ Not concerned</td>
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<tr>
<td>Being exposed to radiation from lung cancer screening?</td>
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<td>○ Not concerned</td>
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<tbody>
<tr>
<td>Being treated for lung cancer that never would have harmed you?</td>
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<td>○ Not concerned</td>
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<tbody>
<tr>
<td>Being harmed by the treatments you receive for lung cancer?</td>
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<td>○ Not concerned</td>
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What is the bottom line on screening?
Overall, lung cancer screening with LDCT has both benefits and harms.

**Benefit:** Lung cancer screening reduces the risk of dying from lung cancer. In 1000 people who have annual screening, 3 lives are saved by screening.

**Harms:** Like all screenings, the benefit comes at some cost in terms of false positive results, extra tests, increased radiation exposure, and possible complications of these tests.

It’s important that you weigh the benefits and harms before you decide on screening. Every person is different. Many people will choose to be screened with this information, but some will not. Think about how you feel and talk to your doctor before making a decision.

What is your decision about lung cancer screening?

○ Screening is right for me.
○ Screening is not right for me.
○ I am unsure about screening

Please tell your doctor your decision about lung cancer screening. **Regardless of your decision about screening, avoiding cigarettes is the most important thing you can do to lower your chance of dying from many diseases, not just lung cancer.** Quitting smoking helps with emphysema and asthma, as well as heart and vascular diseases.

If you are still smoking and need help to quit, talk with your health care team and call our Quit for Life® Program at 1-800-462-5327.

Adapted with permission from the U.S. Department of Veteran Affairs and the Agency for Healthcare Research and Quality, 2016.