Helping you decide about Lung Cancer Screening

This fact sheet explains the benefits and risks of lung cancer screening with low-dose CT scans so you and your health care provider can decide whether it is right for you.

Why should I be screened?
Lung cancer is most treatable when it is identified in the earliest stages.

What is lung cancer screening?
Lung cancer screening looks for signs of the disease before there are any symptoms in patients who are at high risk. Using advanced medical imaging equipment known as a CT scanner, a hospital radiology department can take very detailed “pictures” of your lungs. A doctor will then examine these pictures to look for changes that could be signs of lung cancer. Cancer can look like a spot on your lung. A low-dose CT scan is the only proven effective way to screen for lung cancer.

Who should consider being screened for lung cancer?
Medical experts agree that lung cancer screening should be offered annually to adults who meet all of the following criteria:

- Between the ages of 55 - 77.
- No signs or symptoms of lung cancer.
- Current or former heavy smokers with at least a 30 pack-years history of smoking.
- If a former smoker, have quit within the last 15 years.
- Without any major health problems or conditions that would prevent a person from receiving cancer treatments like surgery.

What should I do before being screened?
To be eligible for screening, you must have a medical appointment where you and your doctor discuss the risks and benefits of screening to make sure that lung cancer screening is the right option for you. Some of the important elements to consider are

- The importance of completing an annual lung cancer screening if you are determined to be at high risk
- Your ability and willingness to undergo further testing and treatment if applicable – for example, if you are unable to safely receive surgery, the screening may not be appropriate for you
- Understanding the impact of other conditions, such as COPD and cardiac disease

HOW TO FIND YOUR PACK YEARS OF SMOKING

<table>
<thead>
<tr>
<th>number of years you have smoked</th>
<th>average number of packs per day</th>
<th>pack years</th>
</tr>
</thead>
</table>

Lung cancer screening with low-dose CT is fast and takes only a few minutes to complete.
Potential benefits and risks of lung cancer screening

It is important to consider both the benefits and risks before deciding whether to have lung cancer screening. Use the table below to consider your options.

<table>
<thead>
<tr>
<th>+</th>
<th>The benefits of being screened for lung cancer</th>
<th>The facts*</th>
</tr>
</thead>
</table>
| Reduced risk | ■ Reduced chance of dying from lung cancer.  
■ If caught early, treatment may be more successful.  
■ It may detect cancer before you have any symptoms. | ■ 3 fewer lung cancer deaths when 1,000 people are screened.  
■ Studies show that early treatment of lung cancer allows some patients to live a longer life.  
■ 9 out of 10 lung cancers will be detected by screening. |
| More treatment options | If caught early you may have more treatment options. | Early lung cancer may be removable with surgery.  
Advanced lung cancers are often inoperable. |

<table>
<thead>
<tr>
<th>-</th>
<th>The risks of being screened for lung cancer</th>
<th>The facts*</th>
</tr>
</thead>
</table>
| False alarms | ■ There is the chance of a false alarm. A false alarm is a result that looks like cancer but is not.  
■ A false alarm could lead to an invasive procedure like surgery or a biopsy.  
■ Invasive procedures sometimes cause serious complications. | ■ 100 in 1,000 will have a false alarm.**  
■ 25 in 100 of those with a false alarm will have an invasive procedure.  
■ 3 in 25 invasive procedures from false alarms will have a major complication. |
| Over diagnosis | Sometimes screening identifies slow growing cancers that would not lead to illness or death.* | 4 in 1,000 people will be diagnosed with a slow growing cancer that would not lead to illness or death. |

*Benefits and risks based on results of the National Lung Screening Trial, which included three annual screens and five years of additional follow up.  
For more information cancer.gov/clinicaltrials/noteworthy-trials/nlst

**After adjustment for new LungRADS reporting system

Are there radiation risks from the CT scan?

Low-dose CT scans expose people to radiation. Over time, exposure to repeated or high doses of radiation may cause cancer and other health problems. For heavy former or current smokers, the benefit of screening is probably much greater than the risk from radiation.

The most important thing you can do

Stop smoking. Regardless of your screening decision, avoiding cigarettes is the most powerful way to lower your chance of dying or suffering from lung cancer, emphysema, and heart attacks. For help quitting, call 1-800-QUIT-NOW.

Benefits of Quitting Smoking

Within minutes of quitting smoking you will experience benefits.

Taking the next step

Talk to your health care provider about lung cancer screening. For more information, you can also visit:  
www.exeterhospital.com

A patient decision aid by Dartmouth-Hitchcock’s Norris Cotton Cancer Center and Geisel School of Medicine at Dartmouth. cancer.dartmouth.edu