# American Cancer Society Recommends Informed Decision Making in Lung Cancer Screening

## Former or current smokers ages 55-74 with 30-pack-year smoking history may consider screening

ATLANTA –January 11, 2013—New guidelines from the American Cancer Society say evidence is sufficient to recommend screening  high risk patients for lung cancer with low-dose computed tomography (CT) provided that certain conditions exist.

- The patient is aged 55 to 74 years, has at least a 30–pack-year smoking history*, and currently smokes or has quit within the past 15 years
- The patient has undergone a thorough discussion of the benefits, limitations, and risks of screening.
- The patient can be screened in a setting with experience in lung cancer screening.

Following the announcement of results from the National Lung Cancer Screening Trial (NLST) in late 2010, the American Cancer Society joined with the American College of Chest Physicians, the American Society of Clinical Oncology, and the National Comprehensive Cancer Network (NCCN) to produce a systematic review of the evidence related to lung cancer screening with low dose CT. The systematic review focused on four key questions: What are the potential benefits of screening individuals at high risk of developing lung cancer using LDCT? What are the potential harms of screening individuals at high risk of developing lung cancer using LDCT? Which groups are likely to benefit or not benefit? And in what setting is screening likely to be effective?

The results of this systematic review were published in the *Journal of the American Medical Association* in June, 2012, and were used as the basis for these new recommendations, which are being published  early online in *CA: A Cancer Journal for Clinicians,* a peer-reviewed journal of the American Cancer Society. (In 2010, the American Cancer Society issued interim guidance to inform referring clinicians and adults at risk for lung cancer while a full guideline was developed.) The report will appear in print in the March/April 2012 issue of the journal.

In the report describing the new guidelines, the authors say: “Findings from the National Cancer Institute’s National Lung Screening Trial established that lung cancer mortality in specific high-risk groups can be reduced by annual screening with low-dose computed tomography. These findings indicate that the adoption of lung cancer screening could save many lives.”

They conclude: “At this time, there is sufficient evidence to support screening provided that the patient has undergone a thorough discussion of the benefits, limitations, and risks, and can be screened in a setting with experience in lung cancer screening.”

But they caution that more work is needed to fill in existing knowledge gaps related to broadening eligibility for lung cancer screening, to further define early lung cancer detection protocols, and to put in place an infrastructure to support population-based lung cancer screening. “As with other guidelines for cancer screening, we can expect that this initial guideline will be revised as new data become available,” write the authors.

As with other cancer screening recommendations, the new lung cancer screening guidance embraces the process of informed and shared decision-making; a thoughtful discussion with a clinician related to the potential benefits, limitations, and harms associated with screening. This discussion should occur before any decision is made to initiate lung cancer screening.

Among the limitations and harms posed by screening are missed cancers, anxiety associated with abnormal results, the need for additional imaging tests and biopsies, investigation of incidental findings not related to the lungs, and exposure to radiation from repeated tests.

The recommendations emphasize that smoking cessation counseling remains a high priority for clinical attention in discussions with current smokers, and that screening should not be viewed as an alternative to smoking cessation.

The hope is that the guideline will lead adults at high risk of lung cancer to become informed about the potential to detect lung cancer early, and to be referred to institutions that can deliver high quality services, and that screening will contribute to additional declines in lung cancer mortality. However, the authors caution that the implementation of high quality lung cancer screening in the U.S. poses many challenges. “Whether community based screening for lung cancer with LDCT will exceed or fail to achieve the benefit observed in the NLST could be influenced by many factors, and the answer awaits the results of further observation and research.”

**Pack-years are calculated by multiplying the number of packs of cigarettes smoked per day by the number of years the person has smoked.*

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See also: Lung Cancer Guideline: Frequently Asked Questions

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