
RSNA Press Release

RSNA/ACR Joint Statement on Lung Cancer Screening (Updated: 10/9/2013)

Released: October 10, 2013

Lung cancer remains the leading cause of cancer deaths in both men and women, killing more people than cancers of the breast, prostate and colon combined, with approximately 230,000 new cases of lung cancer diagnosed and 160,000 deaths from lung cancer every year in the United States. Tobacco smoke causes most cases of lung cancer. The Radiological Society of North America (RSNA) and the American College of Radiology (ACR) advise smokers to quit and recommend that people who are at high risk for lung cancer, such as older heavy smokers, consult their physicians to determine if lung cancer screening with computed tomography (CT) is appropriate for them.

The goal of lung cancer screening is to find cancer at a small size before it has spread outside the lung. Currently, most lung cancers are detected only after they are already causing symptoms, by which time the disease has spread outside the lung in up to 30% of cases. The landmark National Lung Screening Trial (NLST) of 53,454 current and former smokers has shown that early detection with CT reduces deaths from lung cancer by 20%.

The ACR and the RSNA support the United States Preventive Services Task Force (USPSTF) draft recommendation ("Grade B") for CT lung cancer screening of high-risk individuals (those 55 through 79 years old who have a 30-pack-year or greater history of smoking). Since the publication of the initial NLST results, lung cancer advocacy groups, particularly the Lung Cancer Alliance, have actively campaigned for recognition of the efficacy of lung cancer screening with CT. These efforts have contributed to the recognition of this life-saving tool by the USPSTF.

Currently, there is not enough evidence to support lung cancer screening for people who are at low or moderate risk for lung cancer including younger individuals, those with less smoking history or other risk factors such as a significant exposure to secondhand smoke or other cancer causing substances. These individuals should consult with their physician and engage in shared-decision making to evaluate their individual risk and determine if there may be a role for CT screening.

Before undergoing CT screening, individuals should be made aware of the relative benefits and risks of lung cancer screening with CT, including what the likelihood is of an abnormal screening examination and how that is likely to be managed. The relative benefit of lung cancer screening with CT outweighs the potential increase in lifetime risk of cancer related to the radiation exposure from annual screening CT in older high risk smokers for whom screening is recommended. However, appropriate precautions should always be taken to

minimize radiation exposure through the use of the "As Low As Reasonably Achievable (ALARA)" principle.

High-quality, cost-effective screening on a national basis requires standardized processes based on the data and outcomes from the NLST and other clinical trials. This includes appropriate identification of individuals for screening, the CT screening technique itself, reporting of the CT results and the management of positive results, including incidental significant findings, and the inclusion of smoking cessation as part of any lung cancer screening program. Screening programs should also promote awareness of the benefits of lung cancer screening for the recommended population.

The RSNA and the ACR look forward to working with the U.S. Department of Health and Human Services, the National Cancer Institute, Congress and other key stakeholders in taking the necessary steps to create a sustainable and effective CT lung cancer screening process. The ACR will work to provide as much guidance as possible to providers and individuals as it works to finalize official practice guidelines and standards. Both organizations will continue to develop educational materials on the elements for a high-quality screening program that can be implemented in all practice settings. The ACR and the RSNA also suggest that patients and healthcare providers refer to the National Comprehensive Cancer Network (NCCN) guideline for lung cancer screening.

For patients: http://www.nccn.org/patients/guidelines/lung_screening/index.html

The PDF for physicians requires free log in to the NCCN site. To access, click on "Lung Cancer Screening" on this page:

http://www.nccn.org/professionals/physician_gls/f_guidelines.asp#detection

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RSNA is an association of more than 52,000 radiologists, radiation oncologists, medical physicists and related scientists, promoting excellence in patient care and health care delivery through education, research and technologic innovation. The Society is based in Oak Brook, Ill. ([RSNA.org](http://www.rsna.org))