

HEALTH

Heavy smokers should get annual CT screening, thoracic surgeons say

The scans have been shown to reduce lung cancer deaths by 20%. Concern about false positives, cost and insurance coverage hinder implementation of the recommendations.

By KEVIN B. O'REILLY, *amednews* staff. Posted July 11, 2012.

Physicians should send patients with long histories of heavy smoking to lung cancer screenings using low-dose computed tomography every year, say guidelines issued by the American Assn. for Thoracic Surgery.

A multidisciplinary, 14-member task force established by the society recommends annual CT scans for patients 55 to 79 years old who have smoked the equivalent of a pack of cigarettes daily for 30 years — that is, the number of packs smoked every day multiplied by the number of years patients kept the habit. For example, smoking two packs a day for 15 years would be equivalent to smoking a pack a day for 30 years and make screening a good idea.

Patients 50 to 79 who have smoked the equivalent of a pack a day for 20 years and have another comorbidity that raises their overall lung cancer risk by 5% over the following five years also should be screened annually, the guidelines say. They were published in the July issue of *The Journal of Thoracic and Cardiovascular Surgery* (ncbi.nlm.nih.gov/pubmed/22710038/).

The recommendations come on the heels of similar guidelines adopted by the American College of Chest Physicians, the American Society of Clinical Oncology, the American Thoracic Society and the National Comprehensive Cancer Network. These guidelines were published as part of a systematic review of the benefits and harms of low-dose CT screening for lung cancer in the June 13 issue of the *The Journal of the American Medical Association* (jama.jamanetwork.com/article.aspx?doi=10.1001/jama.2012.5521).

The *JAMA* review examined randomized controlled trials involving more than 80,000 patients, the largest of which found that screening done once annually for three years cut the risk of lung cancer death by 20%.

The thoracic surgeons' guidelines depart from the others in extending the screening population to 79, instead of 74, arguing that there is little evidence to show that lung cancer risk drops after that age. They also differ in recommending the screening to patients who have survived a bout with lung cancer.

"This service really should be given to long-term lung cancer survivors — there are more than 4,000 right now," said Francine L. Jacobson, MD, MPH, co-chair of the thoracic surgeons' task force and lead author of the guidelines. "These people have proven they can get the disease, and they have a high risk that hasn't gone down."

The guidelines recommend screening and treatment by a multidisciplinary team composed of thoracic surgeons, thoracic radiologists, pulmonologists, oncologists and pathologists. They also call for a Web-based application to help patients identify their lung cancer risk.

About 160,000 Americans are expected to die of lung cancer this year, according to the American Cancer Society. The National Cancer Institute says 70% of lung cancer patients are diagnosed when the disease has advanced to stage III or IV and is less treatable, with a five-year survival rate of 16%.

Barriers to wide screening

Despite the flurry of guidelines urging CT screening for lung cancer, it may be a while before most physicians put them into regular practice. One obstacle is lingering concern about the risk of false positives. About one in four patients were wrongly suspected of having cancer in the largest randomized controlled trial and may have undergone unnecessary biopsies, repeated radiation exposure and more invasive surgery.

Another stumbling block is expense. The National Cancer Institute says the screening can cost \$300 or more and is not covered by Medicare or any private health plan. About 300 people would have to be screened to prevent one death, the institute says. The thoracic surgeons' task force estimated that if the screening were offered as a commercial insurance benefit for high-risk patients 50 to 64 years old, it would cost \$12 per plan member per year, with a cost of \$19,000 for every life saved.

"This is probably fairly comparable to what happened with mammography early on," said Dr. Jacobson, a thoracic radiologist at Brigham and Women's Hospital in Boston. "There are people who are willing to pay for it, and practices that are more committed to offering it. We have primary care physicians in our community who, in one way or another, have been providing this type of screening for years. The issue of providing it for people with insurance reimbursement will be one of the next horizons."

Guidance on using CTs to spot lung cancer

A 14-member task force established by the American Assn. for Thoracic Surgery has published guidelines urging annual lung

cancer screening with low-dose computed tomography for:

- Patients 55 to 79 years old who smoked the equivalent of a pack of cigarettes a day for 30 years.
- Long-term lung cancer survivors, to detect second primary lung cancer until age 79.
- Patients 55 to 79 who smoked the equivalent of a pack of cigarettes a day for 20 years and who have additional comorbidity that produces a cumulative risk of developing lung cancer of more than 5% over the next five years.

Source: "Development of the American Association for Thoracic Surgery Guidelines for Low-Dose Computed Tomography Scans to Screen for Lung Cancer in North America: Recommendations of the American Association for Thoracic Surgery Task Force for Lung Cancer Screening and Surveillance," *The Journal of Thoracic and Cardiovascular Surgery*, July (ncbi.nlm.nih.gov/pubmed/22710038/)

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