American Cancer Society Expands Lung Cancer Screening Recommendation

Annual screening is now recommended for current and former smokers ages 50 to 80, regardless of when they quit.

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As Lung Cancer Awareness Month begins, the American Society (ACS) recommends that more people should be screened for the leading cause of cancer-related death in the United States and worldwide. The updated recommendation, which calls for annual CT screening starting at age 50 for people who have a smoking history of 20 pack-years or more, regardless of when they quit, is expected to make 5 million more people eligible. The biggest change is that screening is now recommended even for people who quit smoking many years ago.

“This updated guideline continues a trend of expanding eligibility for lung cancer screening in a way that will result in many more deaths prevented by expanding the eligibility criteria for screening to detect lung cancer early,” ACS senior vice president Robert Smith, PhD, said in a news release. “Recent studies have shown extending the screening age for persons who smoke and formerly smoked, eliminating the ‘years since quitting’ requirement and lowering the pack per year recommendation could make a real difference in saving lives.”

Lung cancer incidence has declined in recent years, largely due to a reduction in smoking, and mortality has dropped thanks to advances in early detection and treatment. But still, nearly 240,000 people will be diagnosed with lung cancer this year, and about 127,000 people will die from it, according to ACS. While lung cancer is most often diagnosed among people over 65, and historically men have had higher rates than women, it increasingly affects younger people and women. In fact, women under 55 have a higher lung cancer incidence than men of the same age. Smoking remains the main risk factor, but a growing proportion of cases are being diagnosed among people who never smoked.

Non-small-cell lung cancer, the most common type, has a five-year overall survival rate of 28%, but this rises to 65% if it is detected while the cancer is still localized in the lungs. Once cancer has metastasized, or spread elsewhere in the body, five-year survival falls to 9%. Survival rates are even lower for small-cell lung cancer. Unfortunately, only a small proportion of cases are diagnosed early, when the cancer is easier to treat.

The new ACS guideline, published in the ACS journal, CA: A Cancer Journal for Clinicians, recommends yearly lung cancer screening for people ages 50 to 80 who currently smoke or smoked in the past and have a 20 pack-year or greater smoking history. Screening is not recommended for people with health conditions that substantially limit their life expectancy or would affect their ability or willingness to undergo lung cancer treatment if diagnosed.

A pack-year is equivalent to smoking one pack, containing 20 cigarettes, every day for a year. So, for example, a person who smokes a pack a day would accrue a 20 pack-year history in 20 years, while a someone who smokes two packs a day would do so in 10 years. Even lighter smokers can reach this threshold if they have smoked for decades.

The recommended annual screening test is low-dose computed tomography (CT), which uses X-rays to produce images of the lungs and chest. If the scan detects lung tumors or other abnormalities, follow-up testing—including other types of imaging and biopsies—may be done to determine whether they are malignant. Studies indicate that the benefits of screening outweigh the risks of the low-dose radiation used for the scans.

Before deciding to be screened, people should have a discussion with their health care provider about the purpose of screening, how it is done and the benefits, limits and possible harms of screening, according to ACS. Those who currently smoke should receive counseling and resources to help them quit.

The previous ACS guidelines recommended screening for people ages 55 to 74 with at least a 30 pack-year smoking history who currently still smoke or who stopped smoking less than 15 years ago. The new guidelines lower the starting age, decrease the smoking history threshold and no longer recommend that people discontinue screening if they quit smoking 15 or more years ago.

Recent evidence shows that the risk for lung cancer remains elevated even among people who stopped smoking long ago, in part because genomic damage is not always reversible. This “serves as a cautionary tale to current episodic smokers regarding the common assumption that quitting smoking removes the risk of lung cancer, particularly with the passage of time,” Don Dizon, MD, of the Lifespan Cancer Institute at Brown University, and Arif Kamal, MD, of ACS, wrote in an accompanying editorial.

They give an example of a woman in her 50s who previously smoked two packs a day during high school and into young adulthood but quit when she became a mother at age 30. Because of her previous 20 pack-year history, she is now—for the first time—considered a prime candidate for lung cancer screening.

The new ACS screening guidelines are similar to the current recommendation from the U.S. Preventive Services Task Force (USPSTF), which was updated in 2021. USPSTF also puts the age range for screening at 50 to 80 years and the smoking history threshold at 20 pack-years. But it still advises discontinuation of screening for people who quit 15 or more years ago. This recommendation was assigned a B grade, meaning the net benefit is likely to be moderate to

substantial. USPSTF guidelines are important because the Affordable Care Act requires health insurers to cover preventive health services with an A or B grade.

Experts and advocates hope that expanding eligibility to an additional 5 million people (from about 14 million to about 19 million) will encourage greater uptake of lung cancer screening. In particular, the updated ACS and USPSTF guidelines make more Black people eligible for screening, a population that appears to develop lung cancer at a younger age and with less smoking.

But unlike mammograms, colonoscopies and Pap tests, many people are not aware that lung cancer screening exists. Even among people who were eligible under the previous guidelines, screening rates remain low. Only about 6% of eligible people have ever been screened, according to the American Lung Association, and most of those do not receive follow-up screening in subsequent years.

“This updated guideline is critical to identify all individuals who can benefit from the early detection of lung cancer,” said ACS Cancer Action Network president Lisa Lacasse. “ACS CAN will continue to work to improve access to care and lung cancer screening at no cost for any person at risk of the disease to decrease lung cancer deaths and help end cancer as we know it, for everyone.”

Click here to read the full ACS recommendation, a systematic review of evidence supporting the new guidelines and an easy to read summary for patients.

Click here for more news about lung cancer.
