

Lung Cancer Screening Guidelines and Recommendations

Organization	Groups eligible for screening	Year
American Academy of Family Practice ¹	Evidence is insufficient to recommend for or against screening.	2013
American Association for Thoracic Surgery ²	<ol style="list-style-type: none"> Age 55 to 79 years with ≥ 30 pack year^a smoking history. Long-term lung cancer survivors who have completed 4 years of surveillance without recurrence and who can tolerate lung cancer treatment following screening to detect second primary lung cancer until the age of 79. Age 50 to 79 years with a 20 pack year smoking history and additional comorbidity that produces a cumulative risk of developing lung cancer $\geq 5\%$ in 5 years. 	2012
American Cancer Society ³	Age 55 to 74 years in relatively good health with ≥ 30 pack year smoking history, who either currently smoke or have quit within the past 15 years; receive evidence-based smoking cessation counseling if they are current smokers; have undergone a process of informed/shared decision making that included information about the potential benefits, limitations, and harms of screening with low-dose CT; and have access to a high-volume, high-quality lung cancer screening and treatment center.	2019
American College of Chest Physicians ⁴	Age 55 to 77 years, asymptomatic smokers and former smokers who have smoked 30 pack years or more and either continue to smoke or have quit within the past 15 years. <i>Asymptomatic</i> is defined as the absence of symptoms suggesting the presence of lung cancer.	2018
American Lung Association ⁵	Age 55 to 77 years with ≥ 30 pack year smoking history and no history of lung cancer. Encourage CMS to extend age for screening coverage to match USPSTF age 55 to 80 years. Do not force patients to exit screening once they reach the 15-year mark of cessation. Do not exclude patients with chronic cough from screening. Provide screening for groups that were not included in the National Lung Screening Trial where biological plausibility exists for increase risk of lung cancer (e.g., from environmental exposure). Consider the use of risk prediction models.	2015
Centers for Medicare & Medicaid Services ⁶	Age 55 to 77 years with ≥ 30 pack year smoking history and smoking cessation < 15 years.	2015
National Comprehensive Cancer Network ⁷	<p>Group 1: Age 55 to 77 years with ≥ 30 pack year smoking history and smoking cessation < 15 years.</p> <p>Group 2: Age ≥ 50 years and ≥ 20 pack year smoking history and additional risk factors (other than secondhand smoke exposure) that increase the risk of lung cancer to $> 1.3\%$ using Tammemagi lung cancer risk calculator.^b</p>	2019
U.S. Preventive Services Task Force ⁸	Age 55 to 80 years with ≥ 30 pack year smoking history and smoking cessation < 15 years (This recommendation is being updated).	2013

^aA pack year is smoking an average of one pack of cigarettes per day for one year. For example, a person could have a 30 pack year history by smoking one pack a day for 30 years or two packs a day for 15 years.

^bAdditional risk factors include cancer history, lung disease history, family history of lung cancer, radon exposure, occupational exposure, and history of chronic obstructive pulmonary disease or pulmonary fibrosis. Cancers with increased risk of developing new primary lung cancer include survivors of lung cancer, lymphomas, cancer of the head and neck, and smoking-related cancers. Occupational exposures identified as carcinogens targeting the lungs include silica, cadmium, asbestos, arsenic, beryllium, chromium (VI), diesel fumes, and nickel.

References

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- ⁵American Lung Association. Providing guidance on lung cancer screening to patients and physicians. April 30, 2015. Available at: <http://www.lung.org/lung-disease/lung-cancer/lung-cancer-screening-guidelines/>.
- ⁶Centers for Medicare & Medicaid Services. Decision Memo for Screening for Lung Cancer with Low Dose Computed Tomography (LDCT) (CAG-00439N). February 5, 2015. Available at: <http://www.cms.gov/medicare-coverage-database/details/nca-decision-memo.aspx?NCAId=274>.
- ⁷National Comprehensive Cancer Network Clinical Practice Guidelines in Oncology. Lung cancer screening. Version 1.2020. Available at: <http://www.nccn.org>.
- ⁸U.S. Preventive Services Task Force. Lung cancer: screening. Recommendation summary. 2013. Available at: <https://www.uspreventiveservicestaskforce.org/Page/Document/UpdateSummaryFinal/lung-cancer-screening>. (In process of being updated).

Reviewed: September 22, 2019