

August 3, 2020

Alex H. Krist, M.D., M.P.H. Chairperson U.S. Preventive Services Task Force 5600 Fishers Lane Rockville, MD 20857

Re: Draft Recommendation Statement - Lung Cancer Screening

Dear Dr. Krist:

The American Lung Association is pleased to have the opportunity to provide feedback to the United States Preventive Services Task Force (USPSTF) on its draft recommendation for lung cancer screening.

The American Lung Association is the oldest voluntary public health association in the United States, representing the millions of Americans living with lung diseases, including lung cancer. The Lung Association is the leading organization working to save lives by improving lung health and preventing lung disease through research, education and advocacy.

During 2020, an estimated 228,820 new cases of lung cancer are expected to be diagnosed.¹ Lung cancer remains the leading cause of cancer death, with 135,720 deaths due to lung cancer expected in 2020.² The Lung Association strongly supports lung cancer screening for high-risk populations as we know that early detection improves the chances of survival. Screening is essential to saving lives, particularly since lung cancer is typically found in the later stages and has an overall 5-year survival rate of 21.8%.³

The Lung Association enthusiastically supports USPSTF's draft recommendation on lung cancer screening and offers the following comments on the proposal.

Expanded Eligibility Criteria

USPSTF's draft recommendation expands the current recommendation for screening to include individual ages 50 to 80 years who have a 20 pack-year smoking history and currently smoke or have quit within the past 15 years. This recommendation will nearly double the number of individuals eligible for screening and has the potential to save significantly more lives than the current guidelines.

The Lung Association is pleased that screening continues to receive at least a 'B' grade. Because of the Affordable Care Act's coverage requirements, this recommendation would significantly expand not just eligibility for screening but also coverage of screening at no cost to patients in many private health insurance plans and Medicaid expansion plans. This removes an important financial barrier that could prevent many individuals at high risk, especially those with lower incomes, from receiving lifesaving screenings.

The draft recommendation is also an important step forward in addressing racial disparities associated with lung cancer. The expanded criteria will more than double the number of African Americans and Hispanics eligible for screening and increase the number of American Indians and Alaskan Natives eligible by 2.7-fold.⁴ Additionally, African Americans have a younger average age of onset of lung cancer and are more likely to be diagnosed at advanced stages compared to white individuals.⁵ Both the decrease in the eligibility age from 55 years to 50 years and the decrease in the pack year history from 30 to 20 years are especially important to improve early detection and survival rates among this population.⁶ Improved outreach to communities of color will be essential to ensure that the expanded eligibility criteria results in improved utilization rates and better health outcomes for patients with lung cancer.

Suggested Changes to Draft Recommendation

The Lung Association believes that including patients who have quit smoking for more than 15 years within the high-risk criteria would strengthen the final recommendation. Multiple studies have found benefits of screening beyond the 15-year cut-off. We encourage USPSTF to review this research before finalizing the recommendation. ^{7,8,9,10,11} For example, one recent meta-analysis concluded that "at the critical screening threshold of 15 years since quitting, the percentage of excess risk for lung cancer remains high and only marginally declines at time points afterward, excluding millions of former smokers who remain at elevated risk of malignancy." Simplifying the eligibility criteria in this way could also make it easier for primary care providers to refer patients for screening, which has been a barrier to improving utilization rates under the current recommendation.

While the Lung Association supports the ultimate conclusion released by USPSTF about the benefits of screening for those at high risk, we are concerned that the evidence review is overly focused on the harms of the screening process. While it is important to consider the risks and harms of screening, it is misleading to do so in a way that is disproportionate to, and at the cost of, the benefits. For example, in discussing the potential false positives, the evidence review references the Veterans Health Administration's Lung Cancer Screening Demonstration Project, yet this project used criteria for a positive scan that is significantly less conservative than the Lung Imaging Reporting and Data System (Lung-RADS) criteria used today, increasing the rate of false positives. The Lung Association urges USPSTF to put the harms and benefits of screening in more appropriate context in the final recommendation and supporting documents.

Areas for Future Research

The draft recommendation includes a list of research needs and gaps. The Lung Association is pleased that the draft recommendation recognizes the need for research focused on racial minorities, women and vulnerable populations. Additionally, the Lung Association recommends adding the potential expansion of eligibility criteria to include environmental exposures as an area for future research as well. For example, the eligibility criteria does not currently include radon exposure, the second leading cause of lung cancer in the United States, responsible for thousands of deaths each year. Individuals in certain occupations, such as veterans and fire fighters, may also have an increased risk of lung cancer due to environmental exposures. We encourage USPSTF to add this to the list of research needs and gaps included in the final recommendation to help encourage additional study of these important issues.

The number one strategic imperative of the American Lung Association is to defeat lung cancer, and expanding screening for those at high risk is critical to improving survival rates. Once USPSTF's recommendation is finalized, the Lung Association is committed to continuing to improve lung cancer screening rates for the high-risk population by educating patients, providers and policymakers about this expansion of eligibility for screening and addressing other challenges and barriers to improving utilization. For example, our Saved by the Scan campaign aims to raise awareness of the benefits of early detection through lung cancer screening and drive individuals to take a lung cancer screening eligibility quiz at SavedByTheScan.org so that individuals at high risk will talk to their doctor about getting screened for lung cancer. Since the launch of Saved By The Scan in August of 2017, more than 450,000 individuals have taken the lung cancer screening eligibility quiz. Of those, approximately 32% of quiz respondents were found to be at high risk and encouraged to have a discussion with their doctor about whether they should be screened.

Once again, the Lung Association strongly supports USPSTF's draft recommendation statement and is pleased to have the opportunity to provide feedback on this critical issue. Thank you for considering our comments.

Sincerely,

Harold P. Wimmer

National President and CEO

Harold Wimmer

¹ Siegel RL, Miller KD, Jemal A. Cancer Statistics, 2020. CA: A Cancer Journal for Clinicians. 2020.

² Siegel RL, Miller KD, Jemal A. Cancer Statistics, 2020. CA: A Cancer Journal for Clinicians. 2020.

³ US National Institutes of Health, National Cancer Institute, SEER Cancer Statistics Review 1975-2017. Available at: https://seer.cancer.gov/csr/1975 2017/.

⁴ Centers for Disease Control and Prevention. National Center for Health Statistics. National Health Interview Survey, 2018. Analysis performed by the American Lung Association Epidemiology and Statistics Unit using SPSS software.

⁵ Annangi, S., Nutalapati, S., Foreman, M.G. *et al.* Potential Racial Disparities Using Current Lung Cancer Screening Guidelines. *J. Racial and Ethnic Health Disparities* 6, 22–26 (2019).

⁶ Aldrich MC, Mercaldo SF, Sandler KL, Blot WJ, Grogan EL, Blume JD. Evaluation of USPSTF Lung Cancer Screening Guidelines Among African American Adult Smokers [published online ahead of print, 2019 Jun 27] [published correction appears in JAMA Oncol. 2019 Aug 1;:]. *JAMA Oncol*. 2019;5(9):1318-1324.

⁷ Luo YH, Luo L, Wampfler JA, et al. 5-year overall survival in patients with lung cancer eligible or ineligible for screening according to US Preventive Services Task Force criteria: a prospective, observational cohort study. *Lancet Oncol*. 2019;20(8):1098-1108. doi:10.1016/S1470-2045(19)30329-8 ⁸ Wang Y, Midthun DE, Wampfler JA, et al. Trends in the Proportion of Patients With Lung Cancer Meeting Screening Criteria. JAMA. 2015;313(8):853–855. doi:10.1001/jama.2015.413;

⁹ McKee BJ, Regis S, Borondy-Kitts AK, Hashim JA, French Jr RJ, Wald C, McKee AB. NCCN Guidelines as a model of extended criteria for lung cancer screening. J Natl Compr Canc Netw. 2018;16:444-449. doi: 10.6004/jnccn.2018.7021;

- ¹⁰ Tammemägi MC, Church TR, Hocking WG, et al. Evaluation of the lung cancer risks at which to screen ever- and never-smokers: screening rules applied to the PLCO and NLST cohorts [published correction appears in PLoS Med. 2015 Jan;12(1):e1001787]. PLoS Med. 2014;11(12):e1001764. Published 2014 ¹¹ Tindle HA, Stevenson Duncan M, Greevy RA, et al. Lifetime Smoking History and Risk of Lung Cancer: Results From the Framingham Heart Study [published correction appears in J Natl Cancer Inst. 2018 Oct 1;110(10):1153]. *J Natl Cancer Inst.* 2018;110(11):1201-1207. doi:10.1093/jnci/djy041
- ¹² Reitsma M, Kendrick P, Anderson J, et al. Reexamining Rates of Decline in Lung Cancer Risk after Smoking Cessation: A meta-analysis [published online ahead of print, 2020 Jun 30]. *Ann Am Thorac Soc.* 2020;10.1513/AnnalsATS.201909-659OC. doi:10.1513/AnnalsATS.201909-659OC
- ¹³ American Lung Association, Radon, March 31 2020. Available at: https://www.lung.org/clean-air/at-home/indoor-air-pollutants/radon.
- ¹⁴ NCCN Guidelines as a Model of Extended Criteria for Lung Cancer Screening Brady J. McKee, MD; Shawn Regis, PhD; Andrea K. Borondy-Kitts, MS, MPH; Jeffrey A. Hashim, MD; Robert J. French Jr, MD; Christoph Wald, MD, MBA, PhD; and Andrea B. McKee, MD *J Natl Compr Canc Netw 2018;16(4):444–449 doi: 10.6004/jnccn.2018.7021*