

NEW Lung Cancer Screening Recommendations: What does that mean?

- Terri Conneran:** If they don't give you the right answer, ask again, and then push. There's a reason you need to advocate for yourself. You have your body, you're responsible for it. If there's a problem, find out and get it treated.
- Diane Mulligan:** Advances in lung cancer treatments over the last few years have made it possible to live with lung cancer for years after diagnosis. Now, the hope is that a diagnosis might be made earlier when lung cancer is more treatable, thanks to newly updated screening guidelines. Find out why one person living with lung cancer says new guidelines are great, but the most effective diagnostic tool is your own voice. I'm Diane Mulligan.
- Sarah Beatty:** And I'm Sarah Beatty. We'll also get more detail on the two groups that may benefit the most from the screening guideline changes, and find out why screening more people for lung cancer is such a challenge. That's today on the Living With Lung Cancer: Hope With Answers podcast.
- Diane Mulligan:** Lung cancer is a tough topic. It's a disease that affects patients, families, friends, co-workers, but first, it's a disease that affects people. The Hope With Answers: Living With Lung Cancer podcast brings you stories about people living, truly living with lung cancer. The researchers dedicated to finding you breakthrough treatments and others who are working to bring hope into the lung cancer experience.
- Diane Mulligan:** The U.S. Preventive Services Task Force recently changed the lung cancer screening guidelines, lowering the age for screening by five years from 55 to 50 years old, and decreasing the pack-years, which is the amount they smoked. Will this change in screening guidelines lead to many more people being diagnosed early when lung cancer is more treatable? If you've qualified for a lung cancer screening at any point over the last decade, it's due partly to the work of LCFA co-founder and lung cancer survivor, David Sturges and Dr. Denise Aberle, diagnostic radiologists at UCLA Medical Center and LCFA Scientific Advisory Board member.
- Sarah Beatty:** They worked to make lung cancer screening available and covered by insurance to those who qualify. Despite the availability of lung cancer screening, rates are still very low. Dr. Aberle explains why.

Dr. Denise Aber...: Until this last decade. Until about 2011, we didn't have a screening test for lung cancer. Clinical trials had been conducted and there was no test that was found to actually reduce death rates with any form of screening, whether that's by image or looking at sputum. So, the trial that was able to provide the evidence-base for screening, was the National Lung Screening Trial. And it randomized about 53,000 older, current, and former smokers, to receive either a chest x-ray or low dose CT annually for three years, looking for differences in cancer mortality. And it was based on that trial, which did show a mortality benefit that private insurers and also the Centers for Medicare & Medicaid Services based their decisions to make a recommendation for screening. It's interesting, Sarah, because lung cancer screening has a very high bar for being a covered benefit, unlike any other screening tests that is offered.

Sarah Beatty: So let's talk about the criteria for getting lung cancer screening. It's a little complicated and it can take a while, right?

Dr. Denise Aber...: Individuals have to satisfy specific criteria. Currently they have to be a current or former smokers between the age of 55 to 77, to have screening as a fully covered Medicare benefit, or a now 50 to 80 years of age, if they are privately insured. They have to have smoked at least 30 pack-years, which is a way that we quantify the intensity of smoking based on the number of years that you smoked and the number of packs per day that you smoked. And they have to have quit within the preceding 15 years. The clinician who recommends the screening exam has to provide a written order in the medical record, the Electronic Medical Record, and the patient must undergo a shared decision-making visit with a healthcare provider for at least the baseline screen. Therein lies part of the problem, shared decision-making has multiple components. The provider and the patient have to review their age and smoking criteria.

Dr. Denise Aber...: The fact that the patient has no symptoms, the benefits and the harms of screening have to be reviewed, including the use of a visual aid in order to understand what the true mortality benefits are. The patients have to agree that they will undergo treatments for lung cancer if it were detected, and any comorbidities, like patients with severe lung disease or cardiac disease that might offset the benefits of screening and early detection have to be discussed. And then finally, smoking cessation counseling has to be performed, whether that is adherence to smoking cessation or that is offering to help the patient quit smoking. If you do shared decision-making correctly, that takes about 15 to 20 minutes. And that is typically prohibited for busy clinicians who are already responsible for addressing the reason for a patient visit and reviewing all the other preventive screening measures and vaccinations.

Sarah Beatty: Oh, that is a lot of detail and information for primary care physicians to be responsible for. I'm thinking at my doctor's office, I may get only 20 minutes or

so to cover everything. Do you think this contributes to fewer people getting lung cancer screening?

Dr. Denise Aber...: Placing this on the primary care physicians, this obligation is probably one of the reasons that screening uptake in the United States has been so low, which is probably 6% or less. If you undergo a screening exam, then the exam has to be performed at a screening center that is certified by the American College of Radiology on a CT scanner, that has to also be certified by the American College of Radiology. It turns out virtually all helical CT scanners can perform these exams. However, you still have to submit images and have sign up by the ACR in order for the exam to be covered. The exam might take 10 minutes from the time you walk into the room to the time that you walk out, and it involves a low radiation dose.

Dr. Denise Aber...: Helical or spiral CT scan, that probably takes anywhere from 10 to 30 seconds, depending on which generation of scanner you're using. The study has to be interpreted by a qualified radiologist. And the interpretations have to use guidelines called Lung-RADS that were also developed by the American College of Radiology. All screening centers have to submit their screening results to a federal Lung Cancer Screening Registry that was developed by the American College of Radiology. Everything I just told you is a requirement for the patient to be covered without a copay for their screening exam.

Sarah Beatty: My goodness. Thank you so much for that description because I think it's important that people understand everything that goes into it. What is going on in my head is how many people are excluded from screening, kind of given all of those requirements or not excluded from screening but who may not have access to it because they can't afford it, because they don't meet those guidelines. So, I mean, here's an example. I'm 46 years old, I grew up in a house with a fairly heavy smoker, I grew up in an area with radon. So, those are risk factors. But if I went to my doctor and said, "Boy, I have this sort of nagging cough. I can't quite get rid of it." Nothing in your description would mean that I would be qualified to get a CT scan for lung cancer. Is that right?

Dr. Denise Aber...: You are exactly right. I'm going to break your question down into two components because the requirement, the bar for screening for lung cancer is so high, most screening centers see a moderate proportion of patients who either don't exactly satisfy criteria or who have not had a shared decision-making visit. And either one of those can make the patient responsible for that bill. So, many screening centers including mine, now have healthcare providers within the screening program. We see those patients and ensure that shared decision-making visits are documented in the Electronic Medical Record, and for patients who may not satisfy criteria, we advise them that we can't really comment on the evidence-based for risks and benefits because we

haven't studied people outside these eligibility criteria. And if they want to be screened, we can provide that service and send the report to them and their provider, but they may be financially responsible.

Dr. Denise Aber...: That's how we handle patients who should or could be eligible. What you're asking I believe are individuals who may have risks for lung cancer, but don't exactly satisfy the age criteria or the smoking criteria. And that's a larger problem. You mentioned some risk factors that puts you at higher risk for lung cancer. You mentioned a radon exposure, and I think you may have mentioned secondhand smoke. All of these are potential risk factors for lung cancer. And in fact, there is a body of scientists, who believe we should not be using these rules of age and smoking, in order to identify people who should be screened. It would require the use of what we call mathematical models that incorporate 9 to 11 different kinds of risk factors, including race, including radon exposure, occupational exposures, prior radiation, all kinds of additional variables.

Sarah Beatty: That's the reason that people like me, younger non-smoking women in particular, aren't being screened for lung cancer at all.

Dr. Denise Aber...: The reason why that doesn't have traction right now, is that it requires more detail, more information, more variables to be collected. And we're already struggling with the ones that we have in order to identify people to screen. So, the simple answer is Sarah, you don't have a way to actually get in for lung cancer screening. Having said that, if you discuss with your primary care provider, or if you call a screening clinic to talk to one of the healthcare providers managing the program, they can go through this information with you, along with the risks and benefits. And if your provider writes the script for a screening CT, we can provide it. You will simply be responsible for paying for it.

Sarah Beatty: Goodness. That is a lot of information, but I appreciate the thought process of how people can sort of proactively handle their screening. So, David and Dr. Aberle, you were both part of a team in different capacities that helped establish the first set of guidelines for who should be screened for lung cancer. Can you both talk about the importance of that work because Dr. Aberle you just mentioned that until I believe 2011, there weren't guidelines. So, maybe David, you can start us out and explain how you got involved in that work and from your perspective as a lung cancer survivor, what is so important about that work?

David Sturges: Thank you. Some of this I'm going to toss back on Denise because, I mean, it's extremely important for everybody to understand Dr. Aberle's involvement and responsibilities as part of this trial. And I became a member of the data and monitor safety board for this study thanks to Dr. Aberle, who felt that there needed to be a lay member of this panel i.e. a patient advocate. And so I came

on board partway through the trial. I can't tell you exactly when, but I was not there from its inception,. But I was at the time and have continued to be very proud of the involvement and the opportunity to be a member of that panel. And I have to say I was incredibly impressed at every step of the way with the collection of data, with the explanations provided with respect to the concerns that were raised.

David Sturges: I don't think that there was ever a time where I sat there and thought, my goodness, we are running off the track here. Are we carefully focused it? These are incredibly focused group with people from a variety of medical backgrounds, be they researchers, active clinicians, what have you.

Dr. Denise Aber...: The trial lasted from 2002 when we launched to about 2010, and was able over time to identify that low dose CT screening did in fact reduce deaths from lung cancer because of early detection. The name of the game is early detection because that's when the cancer can be treated and is most likely to be curable, meaning to result in long-term survival. And that's exactly what we saw.

Sarah Beatty: And David, this was the beginning of your lung cancer advocacy work, right?

David Sturges: I must admit I walked in and felt very intimidated and as any good participant I thought, "Well, I have to sit here and hear everybody out and learn the rules of the road." And there was a doctor whose name I won't mention, halfway through turned to me and he said, "Well, are you going to talk or aren't you?" And I said, "Okay." At which point I started to talk and as Denise said, it was an important experience for me, but also I believe in terms of everybody involved. And I think too, it's important for you to know Denise, the breath of participation not only just the numbers of participants, but the institutions that participated across the country who performed the scans, the screening, and that type of thing.

Sarah Beatty: I particularly enjoy the relationship that you two have built working on this and other work together through LCFA and outside of it as well. So, here's my question and this one I hope isn't a curve ball question. The change in the screening guidelines that were announced quite recently, are those a great thing and, great thing but. Where does the change in the screening guidelines leave us as we are trying to get toward that place, as you just said, Dr. Aberle, where we're approaching in more common ability to diagnose lung cancer early, when it's most treatable.

Dr. Denise Aber...: So, Sarah I've been taught never to say these are good guidelines but, I can't say that. So, my definite answer would be, these are good revisions to the current guidelines, and we have additional opportunities to make them now. Probably, the recent guidelines that were just published, lower the threshold for screening

to 50 years rather than 55. And they require a lower smoking intensity, which we measure as pack-years. From 30 pack years to 20 pack years. The single most important consequences of these revisions is that it reduces the disparities in screening benefits, because it will include more women and blacks.

Dr. Denise Aber...: One of the most important notions to come out of the NLST was that black men accounted for less than 5% of all the participants in the NLST. Interestingly, these black men had worse prognostic indicators, meaning, factors that tend to make them more prone to poor lung cancer outcomes. More of them were current smokers, even though they had a lesser smoking intensity, they had more competing comorbidities and there were other such young demographic variables that would have projected that they would not do as well as whites and other groups.

Dr. Denise Aber...: And yet in the NLST, the decrease in lung cancer deaths was higher in blacks than in any other racial or ethnic group. The reduction in mortality was about 39% as opposed to about 28%. So, significant mortality reduction despite greater adverse variables. The point I'm making is that blacks have a higher risk of lung cancer and lung cancer death at earlier ages, and with less smoking intensity than others. So, these revisions will reduce both racial and sex disparities to enable screening in a higher risk groups and additional percentage of the population who we know are going to get lung cancer. Some of whom we know. And we'll provide greater benefits in reducing lung cancer mortality across the United States, big improvement. We have other opportunities to further improve this, but I think this was a substantial first step.

Sarah Beatty: And David, from the perspective of someone who has been diagnosed with lung cancer, from someone who has to consider that and have that conversation with your doctor. What do you think about this change in these screening guidelines, or what would be your best advice to someone concerned on how they would go in and manage a conversation with their doctor?

David Sturges: I would echo exactly what Dr. Aberle has said in terms of the fact that they have extended or expanded, I should say the eligibility. But for me I think equally as important, not only with the existing guidelines, but then the new guidelines. We have to develop outreach programs, we have to do full out and on programs that educate not only the patient, but also the physicians to ensure that both know that this is out there. Explain to them, this is what a scan does. This is who is eligible and with a brief explanation of this is why you might be eligible for screening. What the screen might discover, what it might reveal, what happens in the event that you have a positive screening. And I think as you and I briefly spoke before this, Sarah, there seems to be at least in my mind eye, certain issue of, "Well, smoking's on the down swing."

David Sturges: Is this an issue? But I think we have too many people that do not have an association with smoking. And we tend to forget that there are huge numbers of people out there that still smoke. But also we have to remember all of those people that have quit smoking and are still very much at risk for lung cancer and for whom screening can be beneficial. And for that, I would point to myself as a former smoker, somebody who would not smoke for 20 years was asymptomatic and went in for what's called a calcium CAT scan as part of a process to develop cardiac treatment. I have a family that has a history of heart disease. So, it was suggested kind of as a one off, "Hey, do this." And it might be, I think even the physician said, it might even be fun.

David Sturges: Well, the results came back and then from the point of view of the, "You've got a calcium score." And as the score was okay, and I tossed the report aside and later that evening, I went back and literally there was a footnote that said, "We have also identified a nodule in the lower lobe of the patient's right lung. This may be something that is being watched that the patient is aware of, but if not, the patient needs to check this out." Well, it hadn't been anything of which I had been aware of. I spoke with my physician, they performed a biopsy which confirmed that it was a malignancy, and I underwent surgery, and had the lower lobe of my right lung removed.

David Sturges: Now, all the other criteria that we now have for these guidelines as well as what the basis of the NLST was, would not have applied to me other than for the simple fact, I should say that I quit smoking 20 years prior. But when you start looking at the numbers of people who are out 15, 20 years, it still makes up a significant number of people who are at risk.

Sarah Beatty: Well, I am so grateful for you both to have this kind of conversation and I think it will be really useful for people to hear that this changing guidelines is a yes and situation. We're able to identify more people and it sounds like, Dr. Aberle, really do a lot of good for certain groups, certain populations, and to summarize your story, David, every patient, every person needs to kind of follow that little intuition, that instinct to say, "Let me check this out. Let me make sure that I have that conversation with my doctor."

David Sturges: People who listening to this are going to have the basis and have an understanding of what screening does or hopes to do, coupled with the need for not only patients and hopefully physicians that might listen to this. That are attuned to screening and it is in the back of their mind as part of their examination of patients.

Sarah Beatty: Hopefully the newly updated guidelines will lead to many more people getting screened and diagnosed earlier, helping them live longer healthier lives with the right treatment.

- Diane Mulligan: Up next, a conversation with patient advocate, Terri Conneran, who says that while the new guidelines are a step in the right direction, the best tool for managing your health is your own voice.
- Diane Mulligan: Are you enjoying the Hope With Answers: Living With Lung Cancer podcast, consider making a donation to help LCFA produce this resource for patients or anyone seeking answers, hope, and access to updated treatment information, scientific investigation, and clinical trials. Just text L-C-F America to 41444 to join in this important fight.
- Diane Mulligan: Welcome back. Newly updated screening guidelines will hopefully play a significant role in diagnosing lung cancer at earlier stages.
- Diane Mulligan: But Terri Conneran, a patient advocate who's been living with lung cancer since 2017, says that the most important tool to get a correct diagnosis is your own voice. We're going to talk about these new lung cancer screening guidelines that were recently released, and they lower the age for screening to 50 and decrease what is called the pack-years from 30 to 20 years. I'm interested in what you think about the change in these screenings.
- Terri Conneran: Any time we changed the screening to include more people for more screenings of their lungs, I think it's probably for the best. I don't think it captures everybody unfortunately. I used to smoke. I didn't smoke... I don't know how much I smoked to be honest with you. Initially that it was 30 pack-years, I didn't take 30 pack-years. I wasn't 55. Now it's been reduced to 20 pack-years and I don't know what I smoked. I think that we're kind of including more people as we move forward with it, but gosh, it's not going to include everybody.
- Terri Conneran: And if you think about it just for a second, what is a pack-year? Let's say I'm 15 years old when I started smoking. Okay. Because I'm a dumb teenager. I started smoking at 15, I smoked 20 pack-year. That puts me at 35 years old. You're still nowhere near that 50 year, and this is only including tobacco smoking, it's not including other risk factors, or other smoke. It's not quite wide enough.
- Diane Mulligan: And as we know, it's still even difficult to really... If you go to your doctor and you say, "I did smoke, I think maybe I should get screened." I know that... I've been told, "Maybe you don't really need that." So, I think that your perspective on that is really interesting and I have to... It is interesting that it does broaden the net, but we still know so many people find out that they're diagnosed through because they're in for some other reason. I mean, we know people who've been in car crashes and they were diagnosed, right? I mean, you can get diagnosed, but it's so many times shock because it's not what you were in for.

Terri Conneran: We're missing the bulk of the people. It's a start, it's a move in the right direction. So, I applaud them, we have to take a second to acknowledged such a good thing. But at the same time, we still need to kind of go a little further and then maybe still a little further too. It's not a perfect science. You don't know exactly how much you smoked, you don't know how much. I mean, if somebody said to me, how many cookies have I eaten on average in the course of a day? And I figured it out, how many packs I ate over the course of my lifetime on average, I would have no idea. I might be able to guess, but it's not accurate. And so if we're going to go with something that's inaccurate like that, then we need to be a lot more inclusive of more people because it does take anybody who has lungs, right?

Terri Conneran: Anybody who has lungs can get through this crazy disease and we want to be able to live longer and we want to catch it sooner, because catching it sooner gives us a better chance of having a long quality of life with the potential for cure. So, we still need to widen it. We're getting there. So, I hope that this gives the impetus to people that were casual smokers or didn't really meet the previous criteria. Maybe it'll tickle up something in their brain. Maybe it'll be just enough.

Terri Conneran: I don't think I have 20 pack-year history, not if it's high, but maybe if I saw something at my doctor's office. Maybe it would have been enough for me to ask the question. Maybe if my kids saw it at the doctors they may say, "Hey mom, you should get treated." Because this might've been just enough to kind of push me over the edge. And in order to find out that... To know that you find something sooner, it gives you a better chance of having a full life, and having a full care, and having a potential for full treatment. You do better life choices, better diagnostics, better testing, and better testing is longer life.

Diane Mulligan: Tenacity plays a role in all this and certainly you were very tenacious. Talk to me a little bit about that.

Terri Conneran: To put it in the easiest terms to understand. I mean, we all heard the squeaky wheels is the one that gets the oil. And so how am I going to find out or how am I going to know unless I really push. The doctor doesn't know what my normal is, and how I should feel, and what's changed in my body. So, I need to kind of be honest with myself and I need to be able to express it to the doctor. And if the doctor I have isn't quite listening as well as they think they need to, I need to look for other options and explore other role than other things. Because if there's something going on, I only really have one shot at it. I've got one body and I need to make it work best I can.

Diane Mulligan: Absolutely. And I think the other thing is that, while we were talking about smoking and pack-years and all of that, it's true that if you have lungs, you can

get lung cancer, right? I mean, you just have to be on top of your health as much as you possibly can.

Terri Conneran: Every breath counts for sure. Diane.

Diane Mulligan: That's great advice and echoes what we know to be true. All you need to get lung cancer is lungs. Thanks to lung cancer patient advocate, Terri Conneran, for joining us to talk about her best advice for someone who might not fit the lung cancer screening criteria.

Sarah Beatty: And thank you to LCFA Scientific Advisory Board member, Dr. Denise Aberle, and co-founder David Sturges for taking the time to chat with us today. Join us again next time on the Hope With Answers: Living With Lung Cancer podcast.

Diane Mulligan: Make sure to subscribe to the Hope With Answers: Living With Lung Cancer podcast, you'll be notified every time a new episode is available. So, visit us online at lcfamerica.org, where you can find more information about the latest in lung cancer research, new treatments, and more. You can also join the conversation with LCFA on Facebook, Twitter, and Instagram.