# COVID-19 and Lung Cancer Q&A about Lung Cancer Screening
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**Dr. Tanner let's pivot to lung cancer screening. This is something very near and dear to our hearts at LUNGevity. One of the things that we are very concerned about is that the COVID-19 pandemic is going to set back screening. Our patient community is equally concerned, and we've had patients ask us, "I was supposed to get screened next week. Is it safe for me to go and get screened?" What is your advice in this situation?**

**Dr. Tanner:** I echo your love for lung cancer screening. I think that this really depends on what part of the country you're in and what type of resources are available. If you're in a region that's been heavily struck, like New York or New Orleans, I don't think that coming in for a routine test right now is the right thing to do. You put yourself at risk. I think each medical community, each state, will probably decide for themselves when it's time to bring back lung cancer screening. What we have to know about screening in general is that it is an elective test. While I would love for everybody eligible to be screened who would like to be screened, we have to be smart about it. Screening patients who may have underlying lung disease puts them at risk for contracting COVID-19.

We actually just participated, myself included, in an expert consensus statement from the American College of Chest Physicians in association with The American College of Radiology. The document is now endorsed by a number of professional societies as to when we should do lung cancer screening. For the most part, we are suggesting that someone who has never been screened before who is getting ready to initiate lung cancer screening should delay that until it's safe in the community. For someone who's already undergone screening and is due for their annual lung cancer screening follow-up, that also can be delayed. Patients who have undergone screening with screen-detected Lung-RADs that are stage III or IV, it's probably okay to delay a follow-up or subsequent imaging up to three months, depending on the situation.

While it is really dependent on what resources are available and what the prevalence of COVID-19 is in your community, I would say that at this time it's probably not safe. If you've never been screened before, it is okay to delay. It really is probably safer in some instances to delay. If it's an annual screen, I'm all for repeat screening and adherence. That's a super, super important subject. I know that LUNGevity is actually sponsoring a trial right now, looking at ways to improve adherence, and this kind of throws a wrench in things if you tell people don't come back. At the same time, you've got to weigh the risk and benefit of subjecting a population that's older with underlying smoking history at the very least and a possible underlying lung disease to coming into a facility.

We all know that lung cancer screening is super simple. You lay down, you hold your breath, they shoot you through a tube, and it's done, but that still is a health exposure. If you're in an area where the prevalence of COVID-19 is high, you might want to think twice about initiating and wait until other safety measures are in play. For instance, if you have a screen-detected nodule and you're due to come in for your six-month mark, it's probably okay to delay for up to three months, depending on what is available, what the resources are like, and what the prevalence of the disease is. The consensus statement outlines this. To answer the patient question, it's okay to wait if you're not in a good place.

**Dr. Tanner, you used two concepts that I would like you to define before we move onto the next question. First, you used the word elective to describe lung cancer screening. What's the meaning of elective?**

**Dr. Tanner:** There are procedures that we can't delay: if you come in and you have chest pain and you need an emergent catheter to open up your blood vessels, say, or you have a large lung tumor that is blocking your airway and you need to start treatment because you have lung cancer. Those are urgent and semi-urgent. Electives are procedures like cosmetic procedures, things that don't need to happen right away. With any kind of screening—mammography or colonoscopy, for example—we are screening people who are supposedly asymptomatic and not showing active symptoms of disease. In a pandemic, when we are worried about exposing people unnecessarily to an infection that could potentially make them very ill or end their life, we probably want to delay elective procedures. Elective surgeries in many places have been stopped. If you have to have that bunion removed, it could probably wait, and elective screening tests and exams have also been pushed back.

We're not doing pulmonary function tests, which are breathing tests to measure lung volumes and degree of obstruction in our emphysema patients right now because that can wait. We're able to manage chronic diseases without testing in some cases. In lung cancer screening, presumably the patient is asymptomatic, not having any symptoms, and this is something that patients are deciding they want to do. It's their choice to be screened. It was recommended by their physician, and they are eligible and would like to be screened, but in the case of a global pandemic, it's something that can wait.

**Dr. Tanner, you also used a concept called Lung-RADS. Can you tell us a little bit about Lung-RADS?**

**Dr. Tanner:** When we do lung cancer screening, we're essentially looking for small spots in the lung that could be cancer. Many patients, because they've been smoking and exposed to the environment, will have spots. Not all spots turn out to be cancer. Lung-RADS is a structured reporting system that The American College of Radiology developed for its radiologists. The radiologists are the doctors who sit in a dark room and read your scan. Based on what they see, they will assign a Lung-RADS code to your scan. It's a way to know what was found.

A Lung-RADS 1, for instance, means that all of your lungs look normal. There are no spots. There's nothing suspicious that might indicate cancer. Lung-RADS 2 might mean you have a very teeny-tiny spot that's most likely benign, and nothing that could be reached surgically at this point, nothing anyone would want to attempt to biopsy because of risks. Lung-RADS 3 might mean that there is a nodule that's slightly bigger but still too small to do much with. Lung-RADS 4 is when we find lung masses and things that are highly suspicious for lung cancer. The radiologist will look at your your scans after your CT is done and assign a code, so we know how soon we have to follow up with either additional testing or the next scan to follow these findings.

In the case of Lung-RADS 1, it means that nothing was found so you can come back in a year and get your next scan if you're still eligible. If it's Lung-RADS 2, it's something small., but we'll have you come back in a year anyway. For Lung-RADS 3 perhaps we'll have you come back in six months. When Lung-RADS is for something more suspicious, it's left to the ordering physician's discretion as to whether get to get an additional scan in three months or do something a little bit more invasive, like a biopsy.

**Dr. Tanner, if a patient has undergone lung cancer screening and a nodule is found, what happens in this era of COVID-19?**

**Dr. Tanner:** A lot of it depends on the size of the nodule and whether or not it was there before. If you've had a nodule and it was there before and it hasn't changed in size, we're not going to be too excited. We're probably going to delay, in this time of COVID-19, subsequent CT scans. As I mentioned before, this consensus statement has been put out by the various groups that talk about lung cancer screening and pulmonary nodule management to talk about what would be an acceptable delay. And of course, it all boils back to the prevalence of COVID-19 in your community. If you're in the middle of a mountain community and there's not a lot of COVID-19 going on and the hospital system has decided to open up radiology services for non-urgent things, it might be that you get your scan on time. However, if you're in a place that's a hotbed of COVID-19, it is probably okay to delay nonsuspicious nodule management by up to three months.

What do I mean by nonsuspicious? There are things radiographically that we see on the pictures that suggest whether something is cancer or not cancer. One is the contour of the nodule—is it smooth, is it bumpy, is it spiky? Another is the size of the nodule—nodules that are larger are more suspicious for cancer, and has the nodule grown? If we have the benefit of having a scan before and there's now a change in the size, it's enlarged or gotten bigger, we might want to do something additional from a testing perspective. However, all of these things outside of the large lung masses that are concerning for straight-up cancer can be delayed. For small nodule management, the consensus was that it's probably okay to wait three months to do additional scans even if you're due then. This is to keep you safe, but of course, as I said at the beginning, it depends on where you are and what's open in the area, but I don't want anybody to be worried about it.

Certainly, the chance of malignancy in a Lung-RADS 2 nodule, which is super small, is very low. Less than 10%, way less than that. If it's a Lung-RADS 3 nodule, the probability might go up a little bit. In the end, even if this is a cancer, these are stage I cancers, very tiny, tiny cancers and outside of small cell lung cancer, which is not as prevalent as non-small cell lung cancer, the chance of the nodule exploding and traveling all over the body in three months is pretty minimal, almost not likely to happen. Certainly, tumor biology is different in every patient, but if you have a nodule and your doctor is saying, "I think it's okay to wait because of COVID-19, which could do more harm to you than getting this scan," then you should trust your physician.

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