From Eligibility to Results: Navigating Lung Cancer Screening with Confidence

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Abstract

Lung cancer remains the leading cause of cancer-related death in the United States, yet lung cancer screening (LCS) with low-dose CT scans continues to be underutilized, with national rates remaining below 20%. While awareness is slowly growing, many individuals still have questions or concerns that prevent them from pursuing screening. Barriers include lack of familiarity with the exam, fear of abnormal results, and confusion about who qualifies.

This article offers a clear, step-by-step overview of what to expect from a lung cancer screening at Indiana University Health—from determining eligibility and having a shared decision-making conversation, to completing the scan and reviewing any findings with a dedicated team of professionals. Our goal is to improve community understanding of the screening process, reduce fear or uncertainty, and highlight the compassionate care available throughout. By sharing this information, we hope to support community members in taking the first step toward early detection and peace of mind.

Introduction

Each year in the United States, more than 200,000 people are diagnosed with lung cancer, and over half those people will die from the disease. Lung cancer remains the leading cause of cancer-related death, claiming more lives annually than breast, prostate, and colon cancers combined. Yet, when detected early, lung cancer can often be treated successfully. Screening with a low-dose CT (LDCT) scan can reduce the chance of dying from lung cancer by 20–24%, making it one of the most effective cancer prevention tools available today.

While anyone can develop lung cancer, tobacco use is the single greatest risk factor, responsible for 80–90% of cases. Because of this, current and former smokers are the main focus of lung cancer screening programs. However, smoking is not the only risk factor: radon exposure, asbestos and diesel exhaust in the workplace, family history, and environmental pollutants also play a role. In Indiana, where smoking rates remain higher than the national average, the need for effective lung cancer screening is especially urgent.

While recent data has shown an overall increase in screening rates, lung cancer screening remains underutilized with fewer than one in five eligible individuals undergoing screening each year. Understanding why this gap persists—and what we can do about it—requires looking closely at both the science and the lived experiences of patients in our communities.

Who Should Be Screened?

To qualify for a lung cancer screening CT scan, individuals must meet three criteria:

- Age: Between 50 and 77 years old
- Smoking history: Current smoker or quit within the last 15 years
- Pack-years: At least 20 pack-years of smoking (packs per day × years smoked)

For example: one pack a day for 20 years, two packs a day for 10 years, or half a pack a day for 40 years all equal 20 pack-years. These criteria are based on national guidelines and are covered by Medicare, Medicaid, and most private insurance plans.

Who Should Be Screened?

Lung cancer is often silent until advanced stages, when treatment options are limited. By the time symptoms, such as persistent cough or weight loss, appear, the disease may already have spread. Screening allows doctors to find lung cancer earlier, when it is smaller, more treatable, and potentially curable.

Studies show that LDCT screening can detect up to 70% of lung cancers at stage I, compared with only about 15% without screening. This difference saves lives—not just in numbers, but in the very real stories of patients who can undergo curative surgery or targeted therapy instead of facing late-stage disease.

The Numbers Behind Screening Rates

For years, the American Lung Association reported that only about 5% of eligible people were receiving screening. In 2024, the rate appeared to jump to 16%. At first glance, this looked like extraordinary progress.

In reality, the change came not from thousands more patients getting screened, but from a change in how the numbers were measured. Earlier reports used data from the American College of Radiology's registry of screening facilities, while the 2024 report used a nationwide CDC survey. Each method has strengths and weaknesses, but the bottom line remains the same: most eligible people still are not getting screened.

For patients and communities, this means the challenge is unchanged. We cannot be satisfied with a statistical improvement when the real need—more people participating in screening—remains unmet.

Barriers and Misconceptions

Why do so few people get screened, even when eligible? Research and patient feedback point to several barriers:

- Lack of awareness: Many do not know lung cancer screening exists or that insurance covers it.
- Fear and stigma: Fear of abnormal results or judgment about smoking history prevents some from seeking care.
- Access issues: Rural residents may lack nearby facilities, and those without primary care doctors may not get referred.
- Language and cultural barriers: Emerging multilingual communities face challenges navigating complex medical systems.
- Coverage is not enough: Even when insurance pays for screening, extra steps like scheduling, transportation, lack of support, and costs associated with follow up care can keep patients from following through.

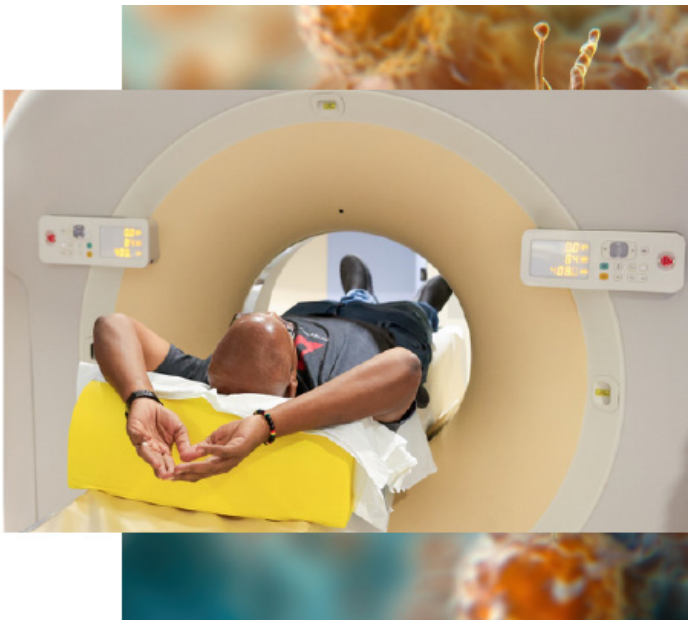
At IU Health, nurse navigators play a crucial role in overcoming these barriers by providing education, reassurance, and practical support.

What to Expect During the Exam

For those who move forward, the exam is simple:

- No special preparation is required.
- Patients remain in their clothes, no IV or contrast is needed.
- The scan uses about 20% of the radiation dose of a regular chest CT.
- The scan itself takes less than one minute.

Afterward, a radiologist reviews the images, and within one week, a nurse navigator calls with results. If normal, the patients return annually. If abnormal, a team of specialists reviews the case and coordinates next steps.



Patient recieving a CT scan.

This streamlined, supportive process is designed to reduce anxiety and ensure patients never feel alone in their journey.

Patient and Community Resources

Patients interested in screening can begin by speaking to their doctor or self-referring through IU Health's online portal at iuhealth.org/lung-scan.

Support for quitting smoking is also available through:

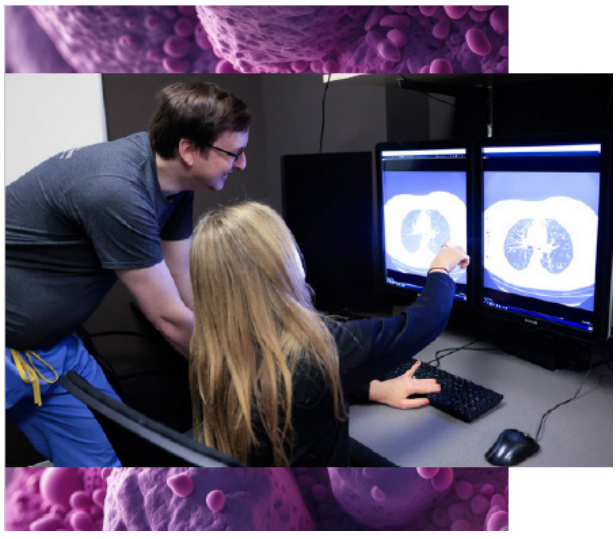
- Indiana Tobacco Quitline (1-800-QUIT-NOW)
- CDC's quit resources at smokefree.gov
- Local IU Health cessation programs

Advocacy groups such as the American Lung Association's "Saved by the Scan" campaign offer educational tools and survivor stories that help reduce stigma and empower individuals to take action.

Looking Forward: Future Directions

The future of lung cancer screening depends on three things:

- Better measurement: Multiple data sources (registries, surveys, claims) should be used together to give a more complete picture.
- Equitable access: Mobile CT units, evening and weekend appointments, and multilingual outreach are critical to reaching underserved populations.
- Policy support: Legislators and healthcare leaders must recognize that screening saves lives and invest in infrastructure that supports long-term implementation.



Radiologists reviewing a lung cancer screening exam

IU Health mobile CT unit

Thanks to a donation from the Tom and Julie Wood Family Foundation, IU health launched Indiana's first mobile lung screening program in 2025. This 40-foot truck with a CT scanner offers convenient and accessible scans across the state. Programs like mobile CT scanners and nurse navigation demonstrate how community-engaged strategies can bridge the gap between guidelines and real-world practice. By involving patients, families, and communities in design and outreach, we can create more inclusive approaches that address fear, stigma, and access head-on.

Conclusion

Lung cancer screening is a powerful tool—but only if people use it. The jump in reported screening rates from 2023 to 2024 reflects a change in counting, not in reality. The real story is that most eligible individuals are still not being screened.

As clinicians, researchers, and community members, we have a shared responsibility: to cut through confusion, provide accurate information, and build systems that make screening accessible and reassuring for all. By combining clear education, supportive navigation, policy advocacy, and community engagement, we can take meaningful steps toward reducing the burden of lung cancer in Indiana and beyond.

Community Takeaway: What You Need to Know About Lung Cancer Screening

- Lung cancer is the leading cause of cancer death in the U.S., but screening with a low-dose CT scan can reduce the risk of dying death by 20–24%.
- Who should be screened?
- Age 50–77
- Current smoker or quit within the last 15 years
- At least 20 pack-years of smoking (e.g., 1 pack/day × 20 years)
- What is the scan like?
- Quick and painless — less than one minute
- No needles, no contrast, and you stay in your clothes
- Uses about 20% of the radiation of a regular chest CT
- Getting started: Talk to your doctor or self-refer at iuhealth.org/lung-scan.
- After the exam: A nurse navigator will call you within a week with results and next steps.

I• f normal: You repeat the scan each year.

- If abnormal: A team of lung specialists will review your case and guide follow-up care.

Screening saves lives, — but only if eligible people take part. Don't let fear, uncertainty, or lack of information hold you back.

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