



Lung Cancer Fact Sheet

for Health Care Professionals

Lung Cancer in the US¹

Lung cancer is the second most common cancer and the leading cause of cancer death for both men and women. Lung cancer is most often caused by exposure to tobacco smoke and other airborne chemicals.

Types of Lung Cancer^{1, 2}

The 2 main types of lung cancer are non-small cell lung cancer (NSCLC) and small cell lung cancer (SCLC).

- NSCLC accounts for about 80% of lung cancers and includes adenocarcinoma, squamous cell carcinoma, and large cell carcinoma. These subtypes have similar treatments and prognoses.
- SCLC accounts for about 14% of all lung cancers and tends to metastasize faster than NSCLC. Two out of 3 people with SCLC already have extensive-stage cancer when diagnosed.

Risk Factors^{1, 2}

Tobacco use: Smoking is the leading cause of lung cancer. About 80% of lung cancer deaths are caused by smoking. Cigarette smoking increases the risk of lung cancer 25-fold compared to people who never smoked. Other forms of tobacco products linked with an increased risk of lung cancer include cigars, pipes, and waterpipes.

Secondhand smoke: Exposure to secondhand smoke (SHS) is the third most common cause of lung cancer in the US.

Radon: Exposure to radon is the second-leading cause of lung cancer. Radon is found at high levels in some homes.

Asbestos: Exposure to asbestos is another risk factor for lung cancer. Exposure may occur in mines, mills, textile plants, places where insulation is used, and shipyards. People exposed to large amounts of asbestos also have a greater risk of developing mesothelioma.



Other carcinogens: Exposure to air pollutants and other chemicals and substances, such as arsenic, vinyl chloride, coal products, diesel exhaust, and radioactive ores like uranium, has been shown to increase lung cancer risk.

Personal or family history: People with a history of lung cancer and other types of lung disease, including asthma, chronic bronchitis, COPD, emphysema, pneumonia, and tuberculosis, have an increased risk of lung cancer. First-degree relatives of people who have had lung cancer may also have a slightly higher risk of lung cancer.

Screening^{2, 3}

Lung cancer screening may be beneficial for certain people at higher risk who are not exhibiting signs and symptoms. The American Cancer Society recommends yearly screening for lung cancer with a low-dose CT (LDCT) scan for people ages 50 to 80 years who:

- Smoke or used to smoke

AND

- Have at least a 20 pack-year history of smoking

A pack-year is equal to smoking 1 pack (or about 20 cigarettes) per day for a year.

Before deciding to be screened, people should have a discussion with a health care professional about the purpose of screening and how it is done, as well as the benefits, limits, and possible harms of screening.

People who still smoke should be counseled about quitting and offered interventions and resources to help them.

People should not be screened if they have serious health problems that will likely limit how long they will live, or if they won't be able to or won't want to get treatment if lung cancer is found.

Signs and Symptoms ²

Signs and symptoms of lung cancer, which usually do not appear until the cancer is advanced, include persistent cough, bloody or rust-colored sputum, chest pain, hoarse voice, shortness of breath, new wheezing, unexplained weight loss, loss of appetite, fatigue, and recurrent pneumonia or bronchitis. Some people present with Horner syndrome, superior vena cava (SVC) syndrome, or a paraneoplastic syndrome.

Prevention ²

Not all lung cancers can be prevented. However, patient education and guidance related to risk factors can help some people reduce their risk.

- Avoiding or quitting tobacco can significantly reduce a person's risk of developing lung cancer. Exposure to secondhand smoke should also be avoided.
- Identifying people at risk for exposure to carcinogens, such as radon, asbestos, and other harmful chemicals at home or work, can lead to interventions that help prevent or minimize exposure. Monitoring indoor radon levels at home and getting homes treated, if needed, are additional strategies.
- Completing a periodic assessment for risk factors, following recommended screening guidelines, and providing health education, such as encouraging a healthy diet, to people who may be at higher risk for lung cancer, should be a regular part of care.

Treatment ^{2, 4, 5}

NSCLC and SCLC have different treatment recommendations. Treatment options are based on the tumor subtype, stage, and molecular characteristics, along with patient comorbidities. Surgery, radiation therapy, chemotherapy, targeted therapy, and immunotherapy drugs, either in combination or alone, are common treatments that might be used. Visit [cancer.org/cancer/lung-cancer](https://www.cancer.org/cancer/lung-cancer) to learn more about treatment options for different types of lung cancer.

References

1. American Cancer Society. *Cancer Facts & Figures 2024*. Atlanta: American Cancer Society; 2023. Accessed at <https://www.cancer.org/content/dam/cancer-org/research/cancer-facts-and-statistics/annual-cancer-facts-and-figures/2024/2024-cancer-facts-and-figures-acs.pdf> on January 17, 2024.
2. American Cancer Society. *Lung Cancer*. Cancer.org. Accessed at <https://www.cancer.org/research/cancer-facts-statistics.html> on January 17, 2024.
3. Wolf, AMD, Oeffinger, KC, Shih, YCT, et al. Screening for lung cancer: 2023 guideline update from the American Cancer Society. *CA Cancer J Clin*. 2023. doi:10.3322/caac.21811.
4. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Non-Small Cell Lung Cancer. Version 1.2024. Accessed at https://www.nccn.org/professionals/physician_gls/pdf/nscl.pdf on January 17, 2024.
5. National Comprehensive Cancer Network. NCCN Clinical Practice Guidelines in Oncology: Small Cell Lung Cancer. Version 3.2023. Accessed at https://www.nccn.org/professionals/physician_gls/pdf/scl.pdf on January 17, 2023.
6. Web LA, McDonnell KK, Adams SA, et al. Exploring Stigma among lung cancer survivors: a scoping literature review. *Oncology Nurse Forum*. 2019; 46(4): 402-418.
7. Haylock PJ, Curtiss CP. *Cancer Survivorship: Interprofessional, Patient-Centered Approaches to the Seasons of Survival*. Pittsburgh, PA: Oncology Nursing Society; 2019.

Lung cancer in the US:

2024 estimates ^{1,2}

New cases: 234,580

- 116,310 in men; 118,270 in women

Deaths: 125,070

- 65,790 in men; 59,280 in women

5-year relative survival rate for localized stage: 63%

5-year relative survival rate for distant stage: 8%

5-year relative survival rate for all stages combined: 25%

Quality of Life ^{2, 6, 7}

Common issues affecting quality of life for people with lung cancer include the effects of cancer and its treatment, fear of recurrence, activity intolerance, chronic and/or acute pain, weakness, anorexia, cachexia, dyspnea, anemia, and fatigue.

Social stigma and guilt associated with a lung cancer diagnosis and its low survival rate can cause stress, worry, or guilt that affects quality of life. People may feel (or be made to feel) they did things to cause the cancer or make it worse, such as delaying screening or treatment or ignoring symptoms.

A cancer diagnosis can profoundly impact quality of life. **Clinicians should assess for any physical, social, psychological, spiritual, and financial issues.** Integrating palliative care can help manage symptoms, address issues, and improve quality of life. It can be offered at any time, from diagnosis until the end of life. Throughout a person's cancer journey, it's very important for clinicians to share information and coordinate care to ensure ongoing surveillance.

