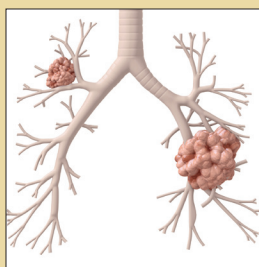


# Lung Cancer Screening Guidelines: The Nurse's Role in Patient Education and Advocacy

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Although the third leading cancer in incidence following breast and prostate, lung cancer is the principal cause of cancer death in the United States. The majority of lung cancer cases are detected at an advanced stage when surgical resection is no longer an option. Recent research has concluded that lung cancer screening with low-dose computed tomography for specific high-risk groups may reduce lung cancer mortality. Public awareness and the need for current information are growing regarding the state of the science relative to lung cancer screening for individuals at high risk for lung cancer. This article provides a historical perspective on the topic of lung cancer screening. The risks and benefits of screening are discussed, and current clinical practice guidelines are reviewed. Oncology nurses will need to be cognizant of the risks, benefits, and current guidelines related to lung cancer screening as they support patients and their families making informed decisions about personal health care.

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Lung cancer is the leading cause of cancer death for men and women in the United States (Siegel, Naishadham, & Jemal, 2013). Although lung cancer is curable in its earliest stages with surgical intervention, most lung cancers are diagnosed when the disease is advanced (30% stage III, 40% stage IV), a factor that contributes to the poor survival statistics (Bach et al., 2012; Wender et al., 2013). Early lung cancer diagnostic methods, most often conducted when patients presented with problematic symptoms, largely relied on chest radiology and sputum cytology, which were unable to detect minute malignant nodules that signal cancer at its earliest stages (Mulshine & Sullivan, 2005; Pastorino, 2010). Although lung cancer screening is not without controversy (Tehranzadeh, 2013), focus on disease screening has intensified with the advent of sophisticated technologies, such as low-dose spiral computed tomography (CT), that are capable of detecting lung cancer nodules during their early growth phases (Wender et al., 2013). Media attention to lung cancer screening has increased, and patient advocacy organizations, such as Lung Cancer Alliance, have taken active roles in promoting screening for individuals at high risk for lung cancer ([www.lungcanceralliance.org](http://www.lungcanceralliance.org)). The purpose of this article is to present the historical background relative to lung cancer screening, dis-

cuss risks and benefits, and review current practice guidelines. Such knowledge is essential for oncology nurses as they provide education and advocacy for patients and their families who will need access to current information to make informed personal healthcare choices.

## Background

The American Cancer Society (ACS) recommended lung cancer screening via chest radiography in the 1970s for current and former smokers, an endorsement that was withdrawn in 1980 (Wender et al., 2013). The purpose of screening, a form of secondary prevention, is to diagnose lung cancer at its earliest stages, a period when the illness is asymptomatic. The goal of screening is to provide treatment when the disease is still curable, resulting in fewer deaths, improved quality of life, and longer life expectancy (Smith, Brooks, Cokkinides, Saslow, & Brawley, 2013). Because screening is costly and not without risk, an important goal of population screening is to use selection criteria that accurately identifies who is at high risk to increase the odds that cancer will be detected with screening (Tammemägi et al., 2013).