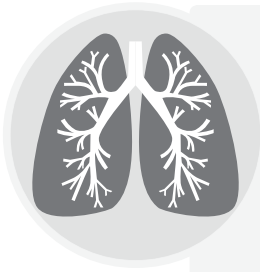




## Lung Cancer Screening



### Recommendations

1. For adults aged 55–74 years with at least a 30 pack-year smoking history who currently smoke or quit less than 15 years ago, we recommend annual screening with low-dose computed tomography (LDCT) up to three consecutive times. *Weak recommendation*
2. For adults aged 18–54 and 75+, regardless of smoking history or other risk factors, we recommend not screening for lung cancer with LDCT. *Strong recommendation*
3. For adults aged 18 years and older, we recommend not screening for lung cancer with chest x-ray with or without sputum cytology. *Strong recommendation*

These recommendations apply to asymptomatic persons who meet the screening criteria; they **do not apply** to persons who have a history of lung cancer or are suspected of having lung cancer.

#### 1. How should I implement a weak recommendation to screen with LDCT?

- A weak recommendation implies that you should have a discussion with your patients about the benefits and harms of screening for lung cancer with LDCT (including false positives, side effects of invasive follow-up testing, and overdiagnosis).
- Help them make a screening decision that is consistent with their values and preferences.

#### 2. Why should I not screen with LDCT in patients who do not meet the age or smoking history criteria specified above?

- There is no evidence showing that there are benefits of screening those who do not meet the recommended age range and smoking history criteria.

#### 3. Why should I not screen using chest x-ray?

- There is no evidence showing that screening for lung cancer with chest x-ray (with or without sputum cytology) improves patient-important outcomes, but there are known harms, including false positives, side effects of invasive follow-up testing (e.g., bronchoscopy, needle biopsy, thoracotomy, and thoracoscopy) and overdiagnosis.

Because of the potential for screening-related harms, LDCT and subsequent management **should ONLY be carried out in health care settings with expertise** in early diagnosis and treatment of lung cancer.

#### 4. Why screen annually for three years in a row?

- It is possible that longer or more intensive screening might yield additional benefits, but there is not strong evidence (from an RCT) to support such a recommendation.

#### 5. What should I do if LDCT is not available in my area?

- Refer to a centre where LDCT scans and expertise in early diagnosis and treatment are available.
- In all cases and at any age, smoking cessation is a recommended course of action.

#### Screening 1000 eligible people with LDCT vs. chest x-ray

- 231 more people receive a positive test result
- 4–5 fewer late-stage lung cancers are found
- 8–9 more early-stage lung cancers are found
- 3 more people are diagnosed with lung cancer
- 3 fewer people die from lung cancer