Lung Cancer Screening

Facts & Stats - November 2022

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Lung Cancer in Canada¹

- Most diagnosed cancer and leading cause of cancer death
- More Canadians die from lung cancer than from colorectal, pancreatic, and breast cancer combined
- In 2021, approximately 21 000 Canadians died from lung cancer
- Incidence and mortality increase by age
 - Incidence highest among individuals aged 75-84 years, at 396 cases per 100 000 people
 - Mortality highest among individuals 85 or older, at 366 cases per 100 000 people



Lung Cancer Screening⁴⁻⁷

What is the recommended screening test?

 A scan of the lungs using a low-dose CT (computed tomography) machine, which uses a small amount of radiation

Who should be screened?

- Screening works best for individuals who are at high-risk for lung cancer and are not experiencing any symptoms
- Usually recommended for those:
 - Between 55 and 74 years of age
 - Currently smoking or have smoked in the past
 - Have a smoking history of 20 years or more

How will it help?

 In Canada, approximately half of lung cancers are diagnosed at stage IV, where the fiveyear survival rate is 4%, whereas approximately 20% are diagnosed at stage I, where the five-year survival rate is higher at 63%¹

- The idea is that if lung cancer can be detected earlier, it can be treated before the tumour has metastasized and spread or before the tumour grows too big, and as a result will respond better to treatment which can reduce the mortality rate
- Studies conducted in the US, Netherlands, Belgium, and Italy have shown a reduction in lung cancer related deaths following the implementation of screening using low-dose CT scans^{2, 3}
 - Screening has been shown to increase the likelihood of detecting stage I cancer and reduce the risk of mortality by 16%³

What are the risks?

- Potential for over-diagnosing and over-treating cancers¹
- Potential for false positive results³
- Potential for invasive procedures³

Current Screening Programs in Canada



- Province wide screening programs launched in Ontario in 2021⁷ and in British Columbia in 2022⁴
- A 2-year pilot program launched in Quebec in 2021⁵ and in Alberta in 2022⁶
- Results from these pilot programs will inform a provincial wide implementation

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