

# The impact of smoking on lung cancer risk.

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## Abstract

**Smoking is a well-established risk factor for lung cancer. Studies have shown that smokers are 15-30 times more likely to develop lung cancer compared to non-smokers. The chemicals in tobacco smoke cause damage to DNA and other genetic material in cells, leading to mutations that can trigger the development of lung cancer. Additionally, smoking can weaken the immune system and make it harder for the body to fight off cancer cells. The impact of smoking on lung cancer risk highlights the importance of smoking cessation and prevention programs to reduce the incidence of this disease.**

**Keywords:** Lung cancer, Smoking, Tobacco.

## Introduction

Smoking is a major risk factor for lung cancer and is responsible for approximately 85% of all cases. The harmful chemicals present in tobacco smoke, such as tar and carbon monoxide, can damage the DNA in the lung cells leading to the development of cancerous cells [1].

In addition to inhaling tobacco smoke, people who smoke also increase their risk of lung cancer by exposing themselves to second-hand smoke [2]. Research has shown that individuals who are regularly exposed to second-hand smoke are at a higher risk of developing lung cancer, even if they have never smoked themselves.

The link between smoking and lung cancer is well-established and has been the subject of numerous studies and research. These studies have shown that smokers have a much higher risk of developing lung cancer compared to non-smokers. The longer a person smokes, the higher their risk becomes [3]. Furthermore, the risk of developing lung cancer increases with the number of cigarettes smoked per day.

Despite the strong evidence linking smoking and lung cancer, many people still continue to smoke [4]. This is often due to nicotine addiction, which is a highly addictive substance present in tobacco. Quitting smoking is not easy, but it is possible, and it can greatly reduce the risk of lung cancer.

There are several effective treatments available to help people quit smoking, including nicotine replacement therapy, counselling, and prescription medications. In addition, support from family, friends, and health care professionals can also be beneficial in helping people quit smoking [5].

It is important to note that the impact of smoking on lung cancer risk is not limited to smokers alone. People who are regularly exposed to second-hand smoke are also at an increased risk of developing lung cancer [6]. This is why it is crucial for governments to implement policies aimed at reducing exposure to second-hand smoke, such as smoke-free public spaces.

## Conclusion

In conclusion, the impact of smoking on lung cancer risk cannot be overstated. Smokers have a much higher risk of developing lung cancer compared to non-smokers, and the risk increases with the length of time spent smoking and the number of cigarettes smoked per day. Quitting smoking is the best way to reduce the risk of lung cancer, and there are effective treatments available to help people quit. Governments must also take action to reduce exposure to second-hand smoke to protect the health of non-smokers.

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