

# Marijuana smoking increases risk of COPD for tobacco smokers

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Smoking both tobacco and marijuana increases the risk of respiratory symptoms and chronic obstructive pulmonary disease (COPD), found a study in CMAJ <http://www.cmaj.ca/press/pg814.pdf>. Smoking only marijuana, however, was not associated with increased risks.

The study, which surveyed 878 people aged 40 years or more in Vancouver, Canada, was part of the Burden of Obstructive Lung Disease (BOLD) Initiative that sought to determine the prevalence of COPD in adults over 40 years in the general population. It differed from other studies in that the study population was older and the prevalence of tobacco smoking was lower in participants.

COPD is characterized by diseased lungs and narrowed airways and is associated with high mortality.

The researchers defined smokers as people who reported smoking at least 365 cigarettes in their lifetime, and a history of [marijuana](#) smoking as self-reporting of any previous smoking.

While tobacco smoking was associated with increased risk, smokers who reported using both tobacco and marijuana were 2.5 times more likely than nonsmokers to have respiratory symptoms and almost 3 times more likely to have COPD as defined by spirometric testing.

"We were able to detect a significant synergistic effect between marijuana smoking and tobacco smoking," write Dr. Wan Tan of the

University of British Columbia and St. Paul's Hospital and coauthors. "This effect suggests that smoking marijuana (at least in relatively low doses) may act as a primer, or sensitizer, in the airways to amplify the adverse effects of tobacco on respiratory health."

The researchers were limited by lack of data on the potential variations in marijuana potency, on differences in inhalation and the number of smokers who combine both substances in the same cigarette.

In a related commentary <http://www.cmaj.ca/press/pg797.pdf>, Dr. Donald Tashkin of the University of California Los Angeles (UCLA) writes that "the findings of Tan and colleagues add to the limited evidence of an association between marijuana use and COPD because their study focuses on an older population (aged 40 or older) that is at greater risk of COPD." Previous studies have failed to find an additive effect of marijuana and tobacco on either chronic respiratory symptoms or abnormal lung function in younger smokers. Dr. Tashkin states that "we can be close to concluding that marijuana [smoking](#) by itself does not lead to COPD."

However, Dr Wan Tan and coauthors conclude that "Although our study had insufficient power to show an association between marijuana alone and increased risk for COPD, it remains uncertain whether marijuana by itself is harmful for the lungs. Larger studies are needed to address this critically important issue in the future."

Source: Canadian Medical Association Journal ([news](#) : [web](#))

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