





## Impact of marijuana smoking on lung function in older persons

Wan C. Tan<sup>1</sup>, Jean Bourbeau <sup>©</sup><sup>2</sup>, Shawn D. Aaron<sup>3</sup> and Don D. Sin<sup>1</sup>, on behalf of the CanCOLD Collaborative Research Group

**Affiliations**: <sup>1</sup>The University of British Columbia, Center for Heart Lung Innovation, St Paul's Hospital, Vancouver, BC, Canada. <sup>2</sup>Research Institute McGill University Health Center, McGill University, Montreal, QC, Canada. <sup>3</sup>The Ottawa Hospital Research Institute, University of Ottawa, Ottawa, ON, Canada.

Correspondence: Wan C. Tan, University of British Columbia, Centre for Heart Lung Innovation, St Paul's Hospital, Rm166, 1081 Burrard Street, Vancouver, BC V6Z 1Y6, Canada. E-mail: wan.tan@hli.ubc.ca

## @ERSpublications

Marijuana smoke exposure amplifies the harmful effects of cigarette smoke http://bit.ly/2rS6mtt

Cite this article as: Tan WC, Bourbeau J, Aaron SD, et al. Impact of marijuana smoking on lung function in older persons. Eur Respir J 2020; 55: 1902390 [https://doi.org/10.1183/13993003.02390-2019].

This single-page version can be shared freely online.

## From the authors:

Most previous epidemiological studies support a significant association between marijuana smoking and chronic respiratory symptoms [1], but the effects on lung function remain unclear. Previous longitudinal cohort studies have focused largely on young adults [1]. The results from these studies have shown that marijuana smoking produced marginal or no effects on lung function, which is expected given that with even heavy cigarette exposure, meaningful changes in forced expiratory volume in 1 s (FEV<sub>1</sub>) or forced vital capacity (FVC) are hard to discern in young adults. Lung function changes, however, accelerate in older age groups and the impact of respiratory irritants and toxins on lung function becomes much more evident [2]. To our knowledge, our study is the first longitudinal study of marijuana smoking in older individuals in a general population whose median age was 65 years [3]. The results of the present study addressed a major gap in marijuana research by demonstrating that marijuana smoking amplifies the harmful effects of tobacco smoking on the risk of COPD and FEV<sub>1</sub> decline over time.