

Applicant

Dr. Isabel Fortier, Research Institute of the McGill University Health Center

E-mail Address

Isabel.fortier@mail.mcgill.ca

Project Title

Association between air pollution and chronic bronchitis in two elderly populations

Project Summary

Chronic Obstructive Pulmonary Disease (COPD) is the third leading cause of death, claiming the lives of 2.9 million people globally in 2010. With population aging, the burden of COPD is expected to increase. COPD is characterised by persistent airflow limitation and encompasses a spectrum of diseases including chronic bronchitis. Ambient air pollution exposure has been shown to have adverse consequences on lung function and aggravate chronic bronchitis. Nevertheless, the chronic effects of air pollution on COPD and chronic bronchitis prevalence is still unclear. The objective of this study is to explore and compare associations between residential air pollution exposure and chronic bronchitis prevalence in Canadian and European elderly populations. We also aim to assess whether air pollution exposure has an effect on airflow limitation amongst individuals with chronic bronchitis. Lastly, we want to determine whether subpopulations of individuals are particularly vulnerable to air pollution effects on both airflow limitation and chronic bronchitis.

Keywords

Chronic bronchitis, air pollution, aging, COPD, lung function, airway obstruction