

Applicant

Dr. Robert Dales, Health Canada

E-mail Address

r.dales@canada.ca

Project Title

Long-term Exposure to Ambient Air Pollution and Effects on Cognitive Decline in an Older Population: The Canadian Longitudinal Study on Aging (CLSA)

Project Summary

The primary objective of the current proposal is to study the change in cognitive ability (over a three year follow-up period between the first and second health assessments), associated with neighbourhood concentrations of ozone, nitrogen dioxide, and fine particulates, estimated by satellite monitoring and NAPS ground monitors. Traffic-related air pollution will be estimated by the proximity of residence to roadways. A secondary objective is to assess the effect of air pollution on changes in other age-related disorders, cardiac and respiratory, over the same time period. This proposed study will help clarify the health effects of air quality in the elderly, with special focus on cognitive change, and will lay the ground work for further longer term observations over a twenty year period.

Keywords

Healthy aging, Cognitive function, Neurological disease, Air pollution