Health Reports: Does geography matter in mortality? An analysis of potentially avoidable mortality by remoteness index in Canada

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Canadians who live in remote areas are more likely than those in easily accessible areas to die prematurely of preventable and treatable causes. This is one of the findings of a new study released today in the publication *Health Reports*.

Avoidable mortality rates, which have been used as an indicator in health policy, health care delivery and health care use, vary significantly by province and territory, and by neighbourhood income level and sex. About 72% of premature deaths in Canada are considered avoidable.

This is the first study to use a new remoteness index that was developed by researchers at Statistics Canada to look at avoidable mortality, which is defined as premature death that should not occur in the presence of timely and effective health care and prevention.

The new remoteness index is used alongside the Canadian Vital Statistics—Death Database (data for 2011 to 2015), and the 2016 Census of Population to provide researchers with a new dimension to measure the geographic variability of avoidable mortality in Canada, including the effects of income, education and Aboriginal population.

The study found that the remoteness index is a good predictor of both preventable and treatable causes of mortality for census subdivisions with relatively small populations of Aboriginal people.

Note to readers

This research used three data sources produced by Statistics Canada. The first data source, the Canadian Vital Statistics – Death Database, is an administrative database containing a collection of annual demographics and cause-of-death information in Canada. Only data for the period from 2011 to 2015 were used.

The second data source used in this research was the census subdivision (CSD) remoteness index (RI), which was developed by a team of researchers at Statistics Canada in 2017. The index value for each CSD ranges from 0 to 1, where "0" represents the most accessible areas and "1" represents the most remote areas. The CSD-level RI scores were classified into five mutually exclusive categories: "easily accessible areas," "accessible areas," "less accessible areas," "remote areas" and "very remote areas."

The third data source, data tables from the 2016 Census of Population, was used to derive the proportion of the population with a postsecondary certificate, diploma or degree, the proportion of Aboriginal population and the average annual household income after-tax for each CSD.

Available tables: table 13-10-0390-01.

Definitions, data sources and methods: survey numbers 3233 and 3901.

"Does geography matter in mortality? An analysis of potentially avoidable mortality by remoteness index in Canada" is now available in the May 2019 online issue of *Health Reports*, Vol. 30, no. 5 (**82-003-X**).

The table "Preventable and treatable mortality by remoteness" is also available.

This issue of *Health Reports* also contains the articles "A pan-Canadian measure of active living environments using open data," and "Factor structure of a coping measure in the 2013 Canadian Forces Mental Health Survey."

To enquire about "Does geography matter in mortality? An analysis of potentially avoidable mortality by remoteness index in Canada," contact Rajendra Subedi (**rajendra.subedi@canada.ca**), Health Statistics Division.

To enquire about "A pan-Canadian measure of active living environments using open data," contact Thomas Herrmann (**thomas.herrmann@mcgill.ca**), Department of Geography, McGill University.

To enquire about "Factor structure of a coping measure in the 2013 Canadian Forces Mental Health Survey," contact Stacey Silins (**stacey.silins@forces.gc.ca**), Department of National Defence.

For more information, or to enquire about the concepts, methods or data quality of this release, contact us (toll-free 1-800-263-1136; 514-283-8300; **STATCAN.infostats-infostats.STATCAN@canada.ca**).

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