Executive Summary

How Healthy Are Rural Canadians? An Assessment of Their Health Status and Health Determinants is a pan-Canadian report that examines patterns of selected socio-demographic and economic characteristics, health status and health behaviours, focusing on the differences between rural and urban Canadians. The purpose of this report is to create a wider understanding of rural health needs and to inform and support programs and policies that will attend to these needs.

In the past few years, increasing attention has been given to the role of place in shaping people's health experiences. However, most of the theoretical work on place and health has been based on studies of urban environments. Less attention has been directed to characterizing the health of rural populations of Canada. This document is the first report ever produced at the pan-Canadian level that provides a broad picture of the health of rural populations. Its descriptive analysis provides a basis for considerations of rural health issues among health decision-makers and suggests future avenues of research in the area of rural health.

The report will be of interest to national, provincial, territorial and regional health authorities, practitioners, officials and decision-makers responsible for specific health promotion, as well as for disease prevention and clinical care programs. It will also be of interest to policy-makers in related non-health sectors, such as economic and social development in rural communities.

Findings in this report were obtained from several pan-Canadian data sources, including the Canadian Community Health Survey (CCHS), the Canadian annual mortality database and the Canadian Cancer Registry. The Metropolitan Influenced Zone (MIZ) classification developed by Statistics Canada was used to distinguish between urban and different types of rural communities. The MIZ definition is based on population density and distance, but also considers the commuting flow between rural and small towns and larger centres. Urban areas are defined as census metropolitan areas (CMAs) and census agglomerations (CAs). Metropolitan Influenced Zones (MIZ) are assigned on the basis of the share of the workforce that commutes to any CMA or CA (Strong MIZ: between 30% and <50%; Moderate MIZ: between 5% and <30%; Weak MIZ >0% and <5%; No MIZ: no commuters). This report explores such issues as socio-demographic characteristics, health behaviours, life expectancy and quality of life indicators, chronic conditions and injuries in Canadian rural and urban communities.

While some health measures did not show any pronounced rural–urban differences, and some adverse health measures were found to be higher in urban areas, rural areas generally showed a health disadvantage for many health-related measures examined in this study. Health disadvantages were reflected in measures that included higher mortality rates and standardized mortality ratios or relative risks greater than 1.0.

- Rural areas reported higher proportions of people with low income and less than secondary education level. On the other hand, a strong sense of community belonging was reported by rural residents in greater proportions than by their urban counterparts.
- Health-related factors, such as the prevalence of smoking and obesity, were elevated in rural Canada, while analyses of other health influences, such as dietary practices and leisure time physical activity, indicated lower practice levels in rural areas.
- For men, life expectancy at birth was significantly higher in urban areas compared to rural areas. Life expectancy in men ranged from 74.0 years in No MIZ areas to 76.8 in CMAs/CAs, but was higher in Strong MIZ areas (77.4 years) compared to CMAs/CAs. Among women, life expectancy was at its lowest in Weak MIZ areas, with 81.3 years, and at its highest in Strong MIZ areas, at 81.5 years.
- Higher overall mortality risks among rural communities seem to be driven by higher death rates from causes such as circulatory diseases, injuries and suicide. Residents of the most rural areas are often at highest risk. In contrast, residents of rural communities that have the most commuting flow between large centres were at lower risk of dying from certain conditions than those in urban areas or other rural areas.
- Circulatory disease mortality risk is significantly higher in all MIZ categories (with the exception of Strong MIZ areas) among men and women both aged 0 to 65 years and older than 65 (figures are for both sexes combined):
  - Strong MIZ areas: standardized mortality ratio = 1.00
  - Moderate MIZ: standardized mortality ratio = 1.07
  - Weak MIZ: standardized mortality ratio = 1.06
  - No MIZ: standardized mortality ratio = 1.10
- The incidence rates of most cause-specific cancers were lower in rural areas than in urban areas. Overall, cancer mortality rates were slightly lower in rural than urban areas (men—CMA/CA: 247.0 per 100,000; Weak MIZ: 238.7 per 100,000; women—CMA/CA: 155.1 per 100,000; Weak MIZ: 149.9 per 100,000).
- Respiratory disease mortality risks were, for the most part, significantly higher among rural residents (both sexes combined—Moderate MIZ: standardized mortality ratio = 1.08; Weak MIZ: standardized mortality ratio = 1.10; No MIZ: standardized mortality ratio = 1.10). Residents of Strong MIZ areas, however, had a reduced risk of dying from respiratory conditions, compared with those living in metropolitan cities (both sexes combined—standardized mortality ratio = 0.94). Women living in Weak MIZ areas reported a prevalence of asthma significantly lower than their urban counterparts.

- Only women living in Weak and No MIZ areas reported a higher prevalence of diabetes. When examining mortality risks, a reduced risk of dying from diabetes was observed for men living in Strong MIZ areas compared to their urban counterparts (Strong MIZ: standardized mortality ratio = 0.81). In contrast, women living in the most rural areas had higher risks of dying from diabetes compared to those living in urban areas (Moderate MIZ: standardized mortality ratio = 1.17; Weak MIZ: standardized mortality ratio = 1.16; No MIZ: standardized mortality ratio = 1.32).
- Canadians living in Strong, Weak and No MIZ areas reported a higher prevalence of arthritis/rheumatism than their urban counterparts (both sexes combined—CMA/CA: 15.4%; No MIZ: 17.5%).
- Multivariate analyses adjusting for various socio-economic and demographic factors showed that higher mortality risks in rural areas remained for all-cause mortality (relative risks, or RRs, ranging from 1.11 to 1.37 for men aged 0 to 44 years and from 1.08 to 1.31 for women in the same age group), motor vehicle accident deaths (RRs ranging from 1.61 to 1.90 for men aged 45 to 64 years and from 1.69 to 2.98 for women in the same age group) and suicides (RRs ranging from 1.28 to 1.67 for men aged 65 years and older and from 0.66 to 0.81 for women in the same age group).

This report shows that, generally, rural residents of Canada are more likely to be in poorer socio-economic conditions, to have lower educational attainment, to exhibit less healthy behaviours and to have higher overall mortality rates than urban residents. While some determinants of health are more difficult to modify than others, the authors identified possible avenues for addressing urban–rural health disparities, including, for example, the following:*

- Although many regional economic development programs or projects have yielded mixed results, some success stories may serve as models for community interventions. Innovative and multi-sectoral approaches could play an important role in assisting communities to adjust to and address micro- and macro-level changes such as boom-and-bust economic cycles (which tend to hit rural communities particularly hard) or a community's dependence on one industry for economic sustainability.
- Overall mortality due to injury and poisoning is considerably higher in rural areas than in urban areas. Certain rural-based industries, such as farming, fishing and logging, tend to have high levels of occupational hazards. One area of attention could be occupational health and safety issues in the rural setting, as rural workers may have special needs for which different solutions may be effective.

* Please note that the recommendations presented in the report do not necessarily reflect those of the Canadian Institute for Health Information, the Public Health Agency of Canada, the Centre for Rural and Northern Health Research or Laurentian University.

- People living in rural communities generally need to travel longer distances, and often on more dangerous roads, for work, shopping and other reasons. Not surprisingly, injuries and death due to traffic accidents are much more common in rural areas. Improving rural road conditions and raising road safety awareness could be an avenue to explore.
- The importance of disease prevention and health promotion is well recognized in public health and clinical settings. What is less clear is whether conventional strategies, mostly developed by urban program planners for urban residents, are equally effective in rural settings. Findings reported in this study concerning health-related factors, such as higher proportions of smokers, lower consumption of fruit and vegetables and higher proportion of individuals who are overweight among rural residents, suggest that there may be potential in rural-friendly approaches in disease prevention and health promotion.