

Population Health Snapshot 2012 -Technical Document-



www.nbhc.ca

New Brunswickers have a right to be aware of the decisions being made, to be part of the decision-making process, and to be aware of the outcomes delivered by the health system and its cost.

The New Brunswick Health Council will foster this transparency, engagement, and accountability by engaging citizens in a meaningful dialogue, measuring, monitoring, and evaluating population health and health service quality, informing citizens on health system's performance and recommending improvements to health system partners.

New Brunswick Health Council

Pavillon J.-Raymond-Frenette

100 des Aboiteaux Street, suite 2200

Moncton, NB

E1A 7R1

Phone: 1.877.225.2521

1.506.869.6870

Fax: 1.506.869.6282

www.nbhc.ca

How to cite this document:

New Brunswick Health Council, *Population Health Snapshot Technical Document 2012* (NBHC, 2012).

Cette publication est disponible en français sous le titre *Portrait de la santé de la population, document technique 2012*

Table of Contents

Executive summary

Highlights

Snapshot - Description -	A
What is the New Brunswick Population Health Snapshot?	B
Where does our model come from?	C
Population Health Snapshot – The model	D
Community Characteristics	E
1 Provincial view, 7 zones view	F
Zone Map	G
Limitations	H
Focus: Population Health: How can we gain more, healthier years of life in New Brunswick?	K

Section 1: Population Health Status

1. See their health as being very good or excellent	4
2. See their mental health as being very good or excellent	6
3. Pain or soreness that prevents activities (physical or emotional)	8
4. Life satisfaction, satisfied or very satisfied	10
5. Expected years of life	12
6. Infant with less than average birth weight	14
7. Infant deaths	16
8. Premature deaths from heart and stroke	18
9. Premature deaths from cancer	20
10. Premature deaths from breathing diseases	22
11. Premature deaths from injuries	24
12. Premature deaths from suicides / self-inflicted injuries	26

Section 2: Health Determinants—Health Care

13. Has a regular doctor	32
14. Medical doctor visit within the last year	34
15. Dental professional visit within the last year	36
16. People being hospitalized for unnecessary conditions	38
17. Adults 65 years and up who have received the flu shot in the last year	40
18. Females (18 to 69 years old) who had a pap test within the last 3 years	42
19. Females (50 to 69 years old) who had a mammogram in the last 2 years	44
20. Overall Hospital Rating	46
21. Overall Health care services	48

Section 3: Health Determinants—Health Behaviours

22. Physical activity during free-time, moderately active or active	54
23. Eat 5 or more fruits or vegetables a day	56
24. Adults with unhealthy weight (obese)	58
25. 5 or more drinks at one time, at least once a month, in the past year (heavy drinking)	60
26. Seeing your stress as being a lot	62
27. Current smoker, daily or occasional	64
28. Number of sexually transmitted illnesses	66
29. Teens who gave birth	68
30. Cyclist who always wore a bicycle helmet	70

Section 4: Health Determinants—Socioeconomic Factors

31. No high school diploma (25 years and older)	76
32. Unemployment	78
33. Divorced	80
34. Single parent family	82
35. Low Income	84
36. Violent crime	86
37. Property crime	88
38. Charged for driving under the influence (drugs or alcohol)	90

Section 5: Health Determinants—Physical Environment

39. Coming in contact with second-hand smoke at home	96
40. Coming in contact with second-hand smoke in the past month, in vehicles and/or public places	98
41. Dwellings rated as having excellent, very good or good indoor air quality	100
42. Sense of belonging to your community, somewhat strong or very strong	102

Appendix

New Brunswick Population Health Snapshot	
Zone 1: Moncton / South-East area - Population Health Snapshot	
Zone 2: Fundy Shore / Saint John area - Population Health Snapshot	
Zone 3: Fredericton / River Valley area - Population Health Snapshot	
Zone 4: Madawaska / North West area - Population Health Snapshot	
Zone 5: Restigouche are - Population Health Snapshot	
Zone 6: Bathurst / Acadian Peninsula area - Population Health Snapshot	
Zone 7: Miramichi area - Population Health Snapshot	
Description of zones	

Executive Summary

The Population Health Snapshot Winter 2012, is the 4th report of this type from the New Brunswick Health Council. Similar to our past reports, it seeks to inform individuals, communities and organizations about the health status (outcomes) of the population based on the area or zone in which they live. The snapshots also help to highlight some areas of health determinants which can be influenced or improved upon to have a positive effect on health status (outcomes).

Each indicator in our Snapshot falls within one of two categories:

- Health Status
- Health Determinants (which are grouped into Health Care, Health Behaviours, Socioeconomic Factors and Physical Environment)

The new Winter 2012 provincial and zone Snapshots are updated with the most recent information available to us. Some indicators could not be updated, either because the information comes from Statistics Canada Census data, which is only completed every 5 years; or because the information is obtained through surveys that follow a 3 year cycle; or due to unavailability of the data from the source. In addition to presenting the latest indicator data, the Snapshot includes a trending column that allows the reader to quickly assess any change from the previous Snapshot.

A green arrow pointing up (▲) signals an improvement in the indicator value.

A red arrow pointing down (▼) signals a worsening in the indicator value.

An equal sign (=) shows no change in the indicator value.

This year's Snapshot also includes a section for every zone called "Community Characteristics" that builds on the demographic profile. We have included the prevalence rates of chronic diseases and the top 10 hospital admissions classified by Case Mix Group (grouping together acute care inpatients that are similar clinically and in terms of resource use) and by area of residence.

The report also includes a section called "Focus" that highlights the concept of avoidable mortality, with special focus on 'preventable avoidable mortality'.

Provincial Highlights:

- New Brunswickers continue to show a relatively similar rate of self-reporting or rating their general health as compared to last year (ranking worst of the 10 Canadian provinces). Self-rated health has been shown to be associated with how long we live and our health care use.
- After reviewing the 5-year moving averages for premature death rates (heart and stroke, breathing diseases, cancer and injuries), the trend is showing a slight positive direction



Highlights

across all of the selected causes of death, with less potential years of life being lost on average.

- The health care factors show improvements in access to regular doctor, preventable hospitalization and flu shots for elderly.
- Some health behaviours or risk factors -known to be factors contributing to chronic diseases- like healthy eating, physical activity, and alcohol consumption continue to move in the wrong direction, whereas, others like obesity, smoking and stress are trending in a positive direction. Despite the positive trend, obesity rates continue to be among the worst in Canada.
- Unemployment rate showed an increase (in comparison to last year). Whereas other socioeconomic factors (updated based on the recent census 2011) showed a positive trend, including crime rates which is still showing a decline.
- Unlike previous snapshots, physical environment factors are starting to go in a negative direction. Second-hand smoke seems to be increasing both at home and in vehicles and public places which has been shown to increase the susceptibility to smoking and the increase in respiratory disease flare-ups. In addition, the sense of community belonging is still on a declining trend.
- Significant gender differences in premature death rates, with males exceeding females in death rates by cause particularly as it relates to heart and stroke and injuries.

The overall observation for this year's provincial Snapshot is that, in general, the health care factors are showing improvement with respect to better access and more intervention care but it is still too early to judge whether these factors are contributing to the observed slightly better population health outcomes from either life expectancy or from a quality of life perspective.

Females seem to be accessing health care more than males, yet they are less satisfied by the overall healthcare system and the hospital services.

Heart diseases related conditions continue to have a major impact on hospital admissions (4 of the top 10), most likely related to the high prevalence rates of high blood pressure (25.7%) and heart diseases (8.3%) in New Brunswick. Breathing diseases/COPD continue to raise a flag as it ranks third in the top 10 reasons for hospital admissions despite lower prevalence rates in the population (2.7%). Enteritis and viral Pneumonia (22.9 admissions per 10,000 from 20.8 last year, and 22.7 from 22.2 last year respectively) climbed the list, over taking angina and heart failure in ranks 4 and 5 last year.

Accordingly, New Brunswickers need to develop ways to address the determinants of health in our individual communities based on flagged areas for attention in order to shift the course towards better health and well-being of our population. Establishing policies and planning around the determinants of health will be vital; it will represent great opportunities for community level action and mobilization around key priorities for community planners, social inclusion networks and wellness networks. Joint efforts between communities and government department representatives will be the key for provincial policy and planning that lead to a better engaged and healthier New Brunswick population.



Snapshot
- Description-

Population Health
refers to the health of a population
as measured by health status
indicators and as influenced by the
health determinants.

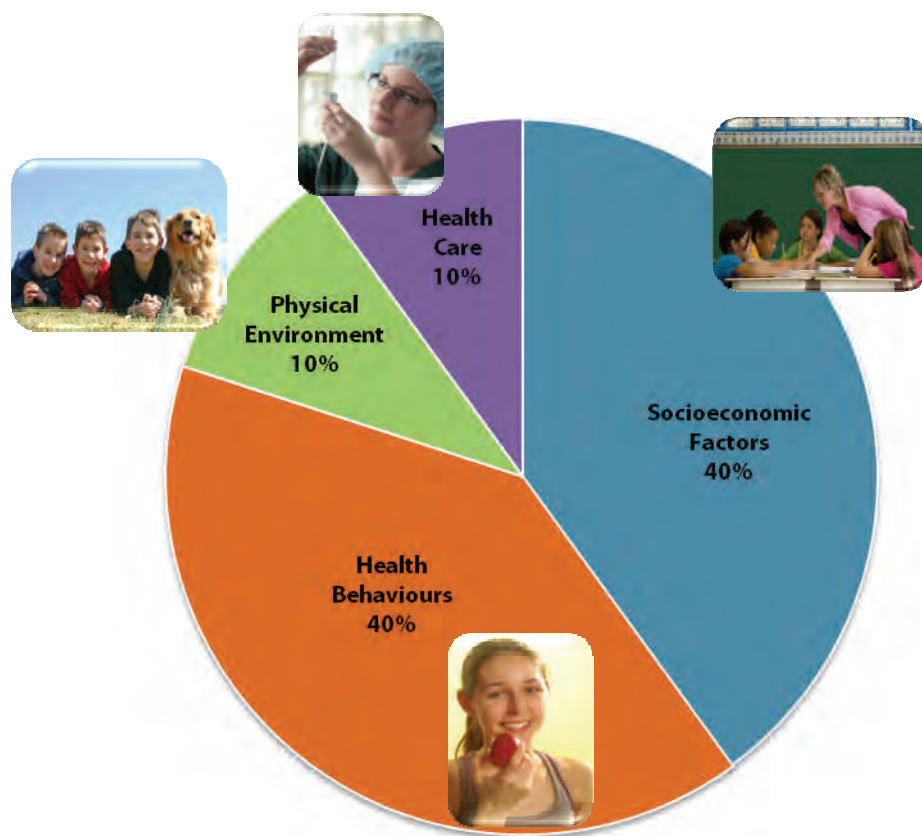
The snapshot is a representation of the health of the population, at a given point in time, depending on the availability of data. It is a one page document that focuses on both the **Health Status** and the **Health Determinants** of a population.

- 1 - The **Health Status** equally weights length and quality of life as its two main sources of outcome related indicators.
- 2 - The **Health Determinants**, as per The *Public Health Agency of Canada*, are the following:
 - Social, economic and physical environments,
 - Personal health practices and behaviours,
 - Individual capacity and coping skills,
 - Human biology,
 - Early childhood development,
 - And health services.

The goal of the **Population Health Snapshot** is to inform individuals, communities, and organizations about their health status with respect to the population in which they live, and highlight some areas of health determinants which can be influenced or improved to have a positive effect on health status.

The model we have chosen to represent Population Health in New Brunswick has been adapted from various population health models such as the University of Wisconsin Population Health Institute – Wisconsin County Health Rankings and modified to fit our needs. We have also kept a Canadian perspective by taking into account the determinants of health as indicated by the *Public Health Agency of Canada*.

Based upon review of the literature and expert opinions on how these determinants contribute to health and by how much, we are using the following model as a guide as to what influences our health:



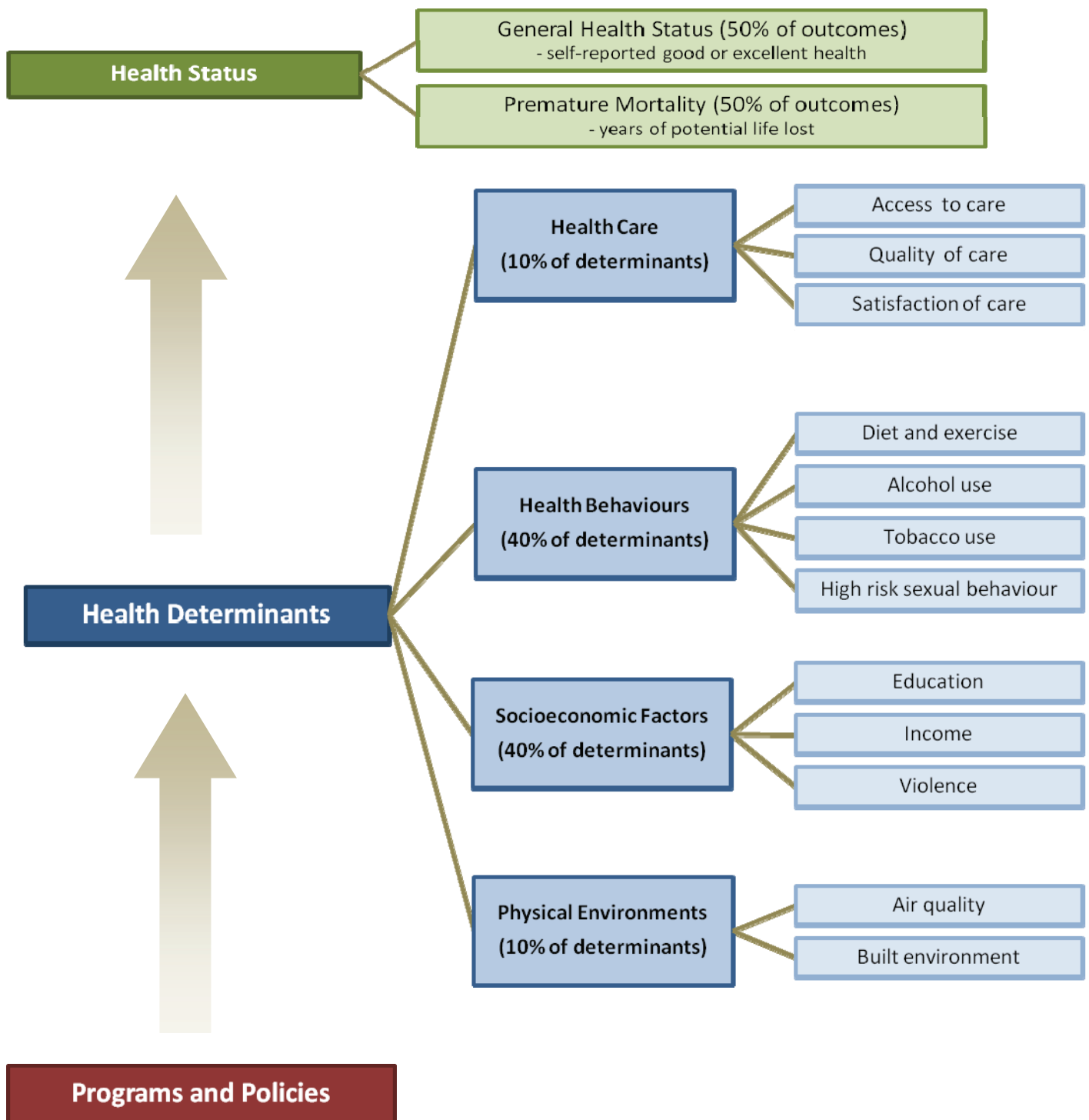
This model regroups determinants of health that can be influenced by programs and policies. It also takes into account citizen involvement in their own health and well-being as well as external factors which can influence the health of the population.

Everyone wants to be as healthy as possible.

The purpose of this tool is to showcase information on a single page in order to focus on areas which require improvements.

Specifically, the following demonstrates what we have chosen as indicators under the

Health Status and the **Health Determinants** of a population.



Community Characteristics

Understanding the demographic make-up and the health conditions in a community provides the context/window that enables visualizing where determinants of health are leading, thus allows projecting the potential impacts on the demand and utilization of health services.

Putting the different pieces of the puzzle together provides a comprehensive/clearer picture that can be leveraged in developing, prioritizing and assessing impacts of policies, programs and services, or community initiatives over time.

This section of the report, consisting of: “The top 10 hospital admissions”, “The top 10 chronic health conditions” and “The demographic characteristics”, helps answer: “What makes the community less/more well?” thus addresses the areas in need for improvement.

The section on “The determinants of health” helps answer “Are the factors determining good health and well being changing for the better or worse?”, “Which factors and for whom are they changing the most?”, and “Which factors require more attention and intervention?”

Our **New Brunswick population Health Snapshot** is depicted in two ways:

Provincial Snapshot

In this snapshot we look at the New Brunswick population as a whole, comparing male and female averages with the overall provincial average. One of the objectives of the provincial snapshot is to see where New Brunswick stands with respect to the various indicators, in relation to the other Canadian provinces and territories. A second objective is to demonstrate whether there has been a change in ranking for New Brunswick compared to the previous snapshot.

Zone Snapshot

We have created 7 snapshots, one for each health zone. Each of these zones is compared, whenever possible, with each other zone for every indicator. The goal of the health zone snapshot is to provide information on specific health determinants which are highlighted as doing well (ranked 1, 2), Caution (ranked 3, 4, 5), or lagging (ranked 6, 7). The rating is done by best (1) to worst (7). By comparing zones, some zones will always do better than others; ultimately, this can lead to encourage continuous improvement within the zone and affect the health of all New Brunswickers. Included also are arrows indicating if the rank, compared to the last snapshot, within each zones has improved, worsened or stayed the same within New Brunswick.

The zones are defined as the following (*see appendix section for exact description of each health zone*):

Zone 1: Moncton / South-East Area

Zone 2: Fundy Shore / Saint John Area

Zone 3: Fredericton / River Valley Area

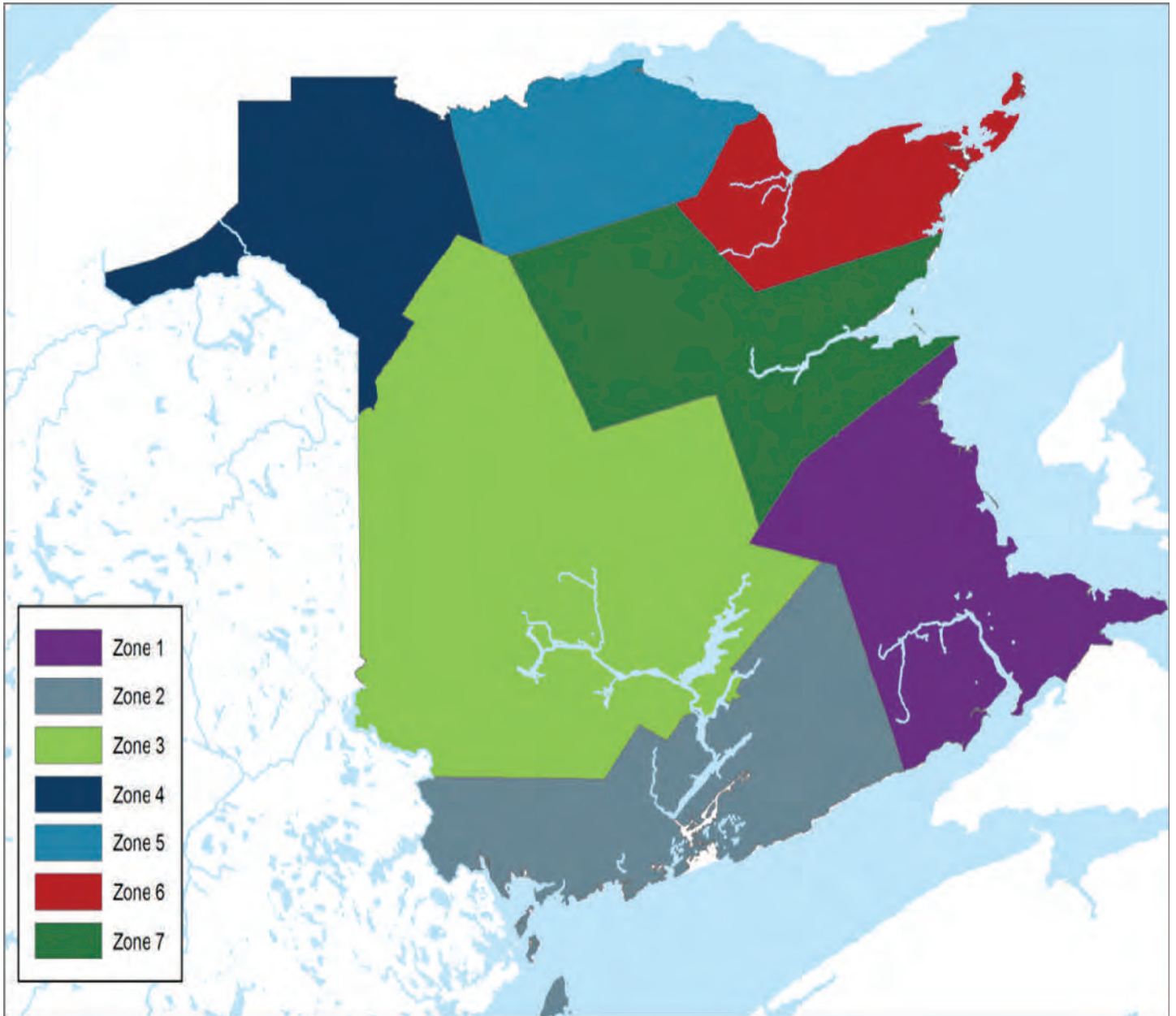
Zone 4: Madawaska / North West Area

Zone 5: Restigouche Area

Zone 6: Bathurst / Acadian Peninsula Area

Zone 7: Miramichi Area

New Brunswick Health Zones



The indicators provided in this report are intended to contribute to our understanding of population health at the provincial and zone levels. They are individual measures that capture a key dimension of health, of the health system or of some of the factors affecting health. Individually they are not as strong of an indicator, but when looking at them together, they paint a very distinct picture of population health.

We have chosen 42 indicators to reflect the current health of New Brunswickers. Each indicator narrative will provide the definition, source and contextual information on the importance of that indicator in our population health model.

Data limitations

We have used information from statistical surveys, such as the Canadian Community Health Survey (CCHS), to display quantitative information. The target population of this survey are individuals living in private dwellings aged 12 years and over with the exclusion of those living on Indian Reserves and Crown Lands, residents of institutions (such as long term care homes), full-time members of the Canadian Forces and residents of some remote areas. The number of people interviewed in each province and territory is such that the information, for the most part, is representative of the provinces, territories, and zones at a given point in time. Occasionally you will see results where the number may be of more variability due to the small number of respondents. We have indicated these with a caution symbol to ensure they are interpreted with caution. Since 2007, data for the Canadian Community Health Survey (CCHS) are collected yearly instead of every two years. For New Brunswick, this means reporting data with smaller sample sizes when reporting annual snapshots.

We acknowledge that responding to any survey is voluntary, and can be subject to the perspective of the respondent.

The information reflected in our snapshot, in some instances comes from as early as 2006. We have used the most up-to-date information available to us at this time in all cases. For some indicators, this meant using New Brunswick only data (such as information from the New Brunswick Vital Statistics database), which limits our capacity to compare our information on a national front, but gives us more up-to-date information.

Model limitations

The model is limited by the data we have been able to acquire for the different indicators. To improve the quality of the model, we need to continue working with partners and stakeholders to acquire a wider variety of quality data and the newest available data. This would create a more comprehensive picture to better understand the health of the New Brunswick population.

The model is a representation of information and does not represent the detailed story associated with the health status from the interaction of the determinants in each health zone. This information will help with the recommendations around specific areas.

The Population Health Snapshot is a work in progress that will evolve to better represent the health of the population as we find new and better quality data sources and indicators and work at investigating the story behind the numbers with various stakeholders.





Focus:

**POPULATION HEALTH: HOW CAN WE
GAIN MORE, HEALTHIER YEARS OF LIFE
IN NEW BRUNSWICK?**

A population is healthy when the individuals enjoy more years of life with good health and well-being (i.e. quality of life). Shorter life expectancy, more disability, and lack of life satisfaction, are all signs of deteriorating population health.

Assessing population health is fundamental for health planning. The highest level of population health outcomes are generally complex to capture and measure. Some composite indices have been developed (e.g. Quality Adjusted Life Expectancy/QALEs and Disability Adjusted Life Expectancy/DALEs^{1,2} Quality Adjusted Life Years/QALYs, and Disability Adjusted Life Years/ DALYs) to provide single measures of health outcomes. Morbidity (illness) and mortality (fatality/death) represent the major 2 components of population health outcomes, and a proxy was developed to measure the latter, that is “the potential years of life lost due to premature mortality” (i.e. the mortality in ages below 75 years old). Potential Years of Life Lost (PYLL) is a unit of measurement that describes the outcome of premature mortality, and transforms it into the years of life a population loses on average as a result of more people dying at a younger age. Therefore, the **more** people below 75 years of age, and/or the **younger** people in a population die, the more the years of life that population loses, and the opposite is true. *In other words, when we reduce/minimize our losses in population health, we maximize our gains.*

1- How much is New Brunswick losing?

New Brunswickers potentially lose 4,876.8 Years of Life/100,000³ of the population due to premature mortality, which is above the Canadian average (ranking 7 out of 10). Around 72% of that premature mortality is avoidable (i.e. “Avoidable mortality refers to untimely deaths that should not occur in the presence of timely and effective health care or other public health practices, programs and policy interventions”⁴). This includes both treatable and preventable mortality (Refer to appendix for the classification of causes of death by preventable and treatable causes). Out of the potentially avoidable mortality, 33% (1,171.2 PYLL/100,000) could have been avoided by proper treatment of the illness to reduce the fatality of the condition, leaving 67% of the Years of life lost (2,348.9 PYLL/100,000), that could have been avoided by prevention (i.e. reduction of the incidence of the illness) (Figure 1).

¹Murray, C.J.L. (1994) Global burden of disease. WHO Bulletin OMS. Online: http://apps.who.int/iris/bitstream/10665/52181/1/bulletin_1994_72%283%29_429-445.pdf

²Law, C.K. & P.S.F. Yip. (2003). Healthy life expectancy in Hong Kong Special Administrative Region of China. Bulletin of World Health. (81): 43-47. Online: <http://apps.who.int/iris/bitstream/10665/71687/1/81%281%2943-47.pdf>

³Statistics Canada. Table 102-4311 - Premature and potentially avoidable mortality, three-year average, Canada, provinces, territories, health regions and peer groups, occasional (number unless otherwise noted). 2007-09 age adjusted rate

⁴Canadian Institute for Health Information (2012). Health Indicators 2012 report

Avoidable mortality across Canada (Preventable vs. treatable)

(Statistics Canada, Age standardized PYLL rate/100,000 population, 2007-2009)

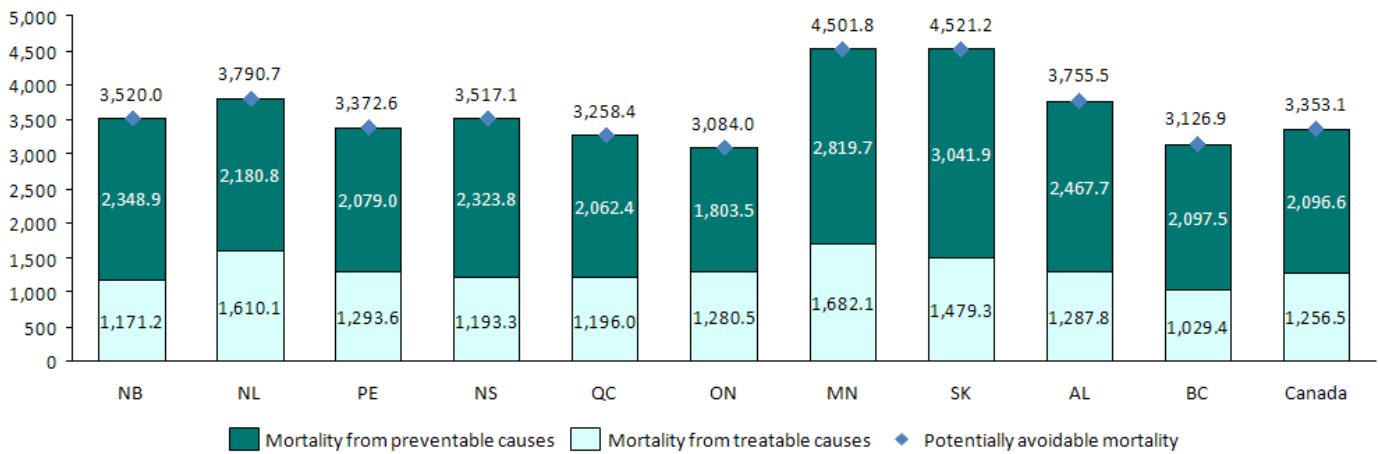


Figure 1. Avoidable mortality across Canada (Preventable vs. treatable), 2007-09

Source: Statistics Canada 2007/09. CANSIM table 102-4311

When compared to the rest of Canada, New Brunswick fares poorly in provincial ranking for the rate of preventable mortality (ranking 7th out of 10), while being above the Canadian average in treatable mortality (ranking 2nd out of 10). This highlights effective efforts within the health care setup in response to health conditions requiring treatment, yet it indicates a weakness at the level of prevention (i.e. people avoiding getting sick in the first place), and here is an area where every New Brunswick citizen can help.

The increasing prevalence of chronic health conditions presents a challenge to health systems, from a treatment, and more so from a prevention perspective. “For many chronic conditions, prevalence increases with age, causing a disproportionate health burden on seniors. Patients with chronic conditions—in particular multiple chronic conditions, also called comorbidities—typically have poorer quality of life and require considerable health care resources”⁵. Effective prevention and management of chronic conditions is required, as New Brunswick’s large boomer generation enters the senior age group.

Despite the perception that aging is a cause or a major determinant of chronic health conditions, seniors can still be healthy, and free of chronic conditions, thus requiring less health care. Accordingly seniors’ need for health care services is largely driven by the number of chronic conditions they have, not their age. In New Brunswick, more seniors (81%) report at least one chronic condition as compared to other provinces (after age-sex standardization) (Figure 2).

⁵ Canadian Institute for Health Information. (January 2011). Seniors and the Health Care System: What Is the Impact of Multiple Chronic Conditions? Online: https://secure.cihi.ca/free_products/air-chronic_disease_aib_en.pdf



Percentage of Seniors Who Reported Having 1 or More of 11 Chronic Conditions, for Canada and by Province (Age–Sex Standardized)

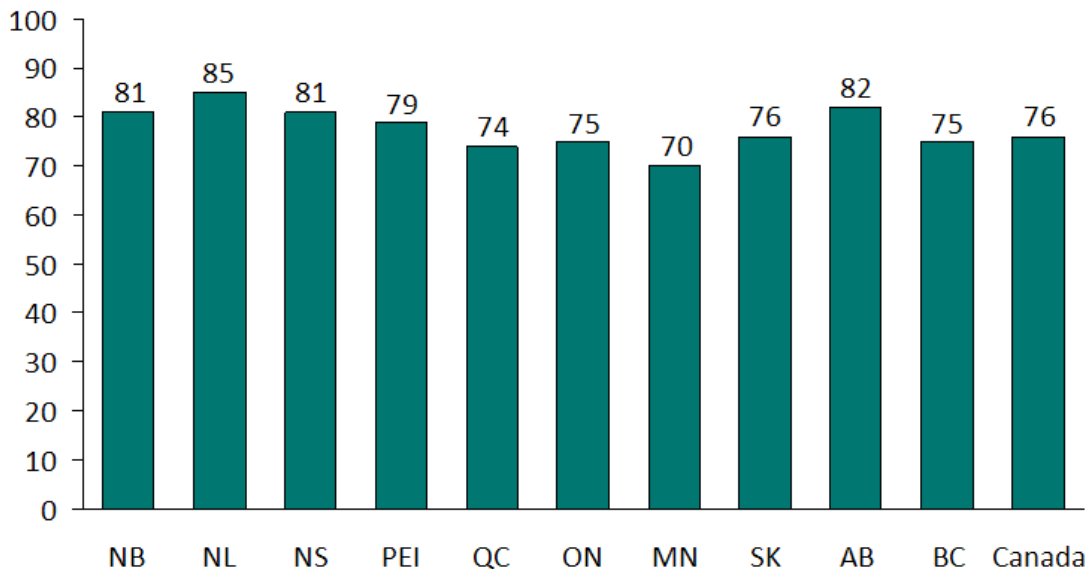


Figure 2. Percentage of Seniors Who Reported Having 1 or More of 11 Chronic Conditions, for Canada and by Province (Age–Sex Standardized) Source: Canadian Institute for Health Information. January 2011. Seniors and the Health Care System: What Is the Impact of Multiple Chronic Conditions?

Experiencing chronic health conditions is believed to influence the overall health status (i.e. quality of life) of an individual, as figure 3 demonstrates. Therefore, the more people reach older age free of chronic health conditions, the better the overall health status in those age groups, thus the better their quality of life. In order to attain that goal, ‘prevention’ is the key, and that is through adopting healthy lifestyles and behaviours to eliminate the risk of chronic health conditions at younger age groups, thus achieve healthy aging.

% of seniors who reported their health status as "Excellent", "Very good", or "Good"

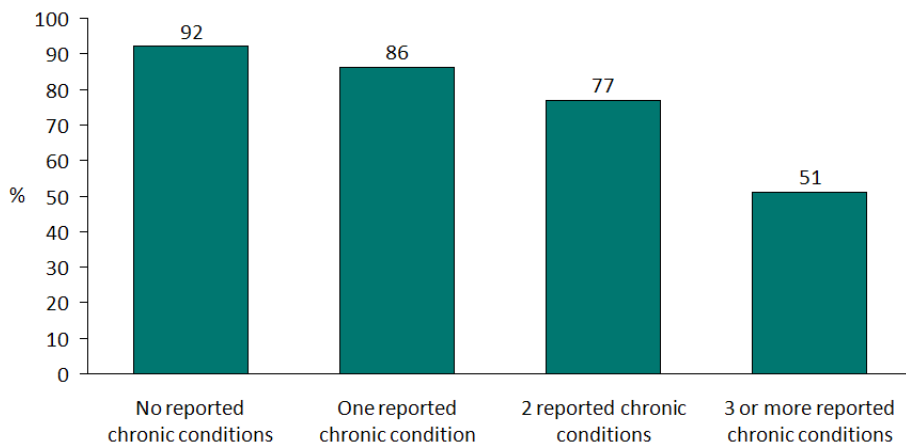


Figure 3. Percentage of Seniors Who Reported Their Health Status as “Excellent”, “Very Good”, or “Good”, by Number of Chronic Conditions in Canada. Source: Canadian Institute for Health Information. January 2011. Seniors and the Health Care System: What Is the Impact of Multiple Chronic Conditions?

In New Brunswick, the prevalence of chronic conditions starts to climb in the younger age groups. The primary care survey conducted by NBHC in 2011 showed that the prevalence of some conditions double, triple and sometimes quadruple between those aged 18-34 and those 35-54 (Figure 4). These conditions include (chronic pain, hypertension/high blood pressure, arthritis, heart disease and diabetes).

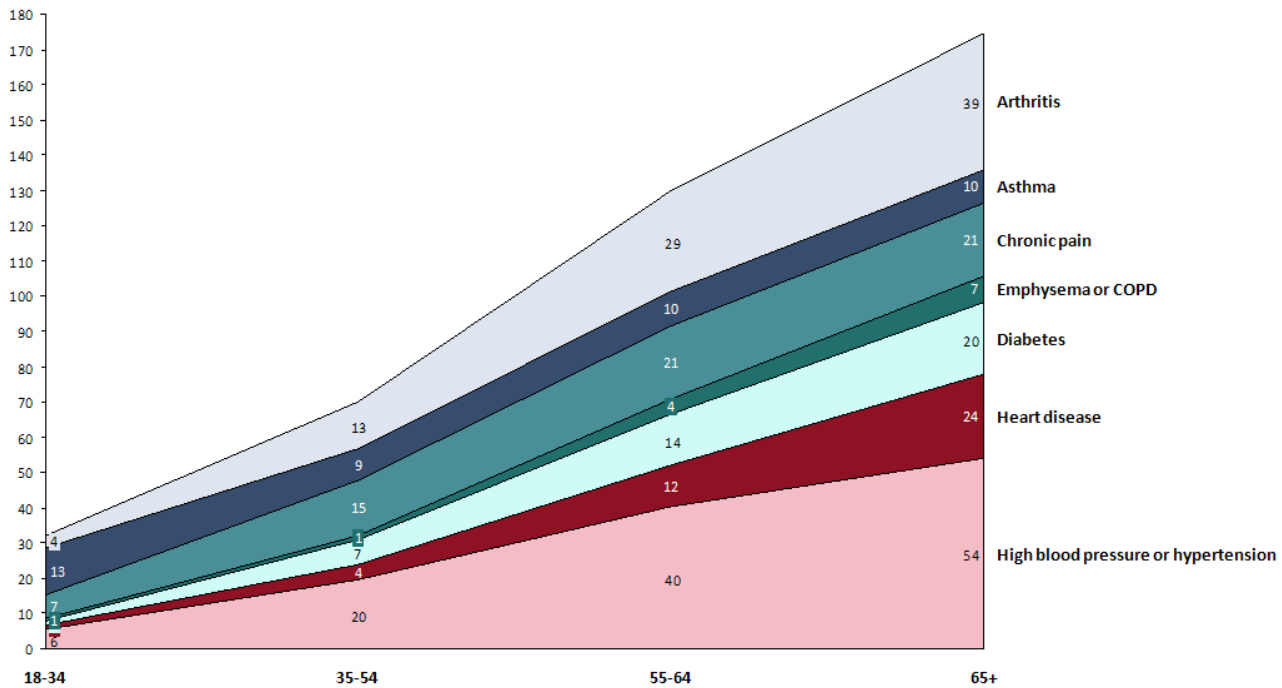


Figure 4. Self-reported prevalence rates in New Brunswick by age group (weighted).
 Source: Primary Care Survey, NBHC, 2011

Once chronic conditions start at a younger age, their control and management become critical for maintaining a good quality of life. The more young people start reporting chronic health conditions, the more years of good quality of life they are expected to lose, and the higher their risk of losing actual years of life due to preventable avoidable mortality, whose rate in New Brunswick is among the highest in Canada (rank 7 out of 10).



2- How much are New Brunswickers losing by zone?

A wide range of variability is observed upon taking a closer look at New Brunswick’s zones. Avoidable mortality age adjusted rate in PYLL (Both treatable and preventable) across all zones (except for zone 6) exceeded the national average, with zones 1 (Moncton/South East area), 2 (Saint John area) and 3 (Fredericton area) showing slightly lower avoidable mortality rates as compared to the North regions, namely zones 4 (Madawaska), 5 (Restigouche) and 7 (Miramichi). Zone 6 stands out with a lower than Canada average on adjusted rates of avoidable mortality in PYLL in both treatable and preventable categories. The population of Bathurst and the Acadian Peninsula region seems to be losing the fewest years of life in comparison to all Canadian provinces as a result of treatable causes of death. It fairs closely to Ontario (the best in Canada) in Potential Years of Life Lost from preventable causes (Figure 5).

Avoidable mortality across New Brunswick (Preventable vs. treatable)

(Statistics Canada, Age standardized PYLL rate/100,000 population, 2007-2009)

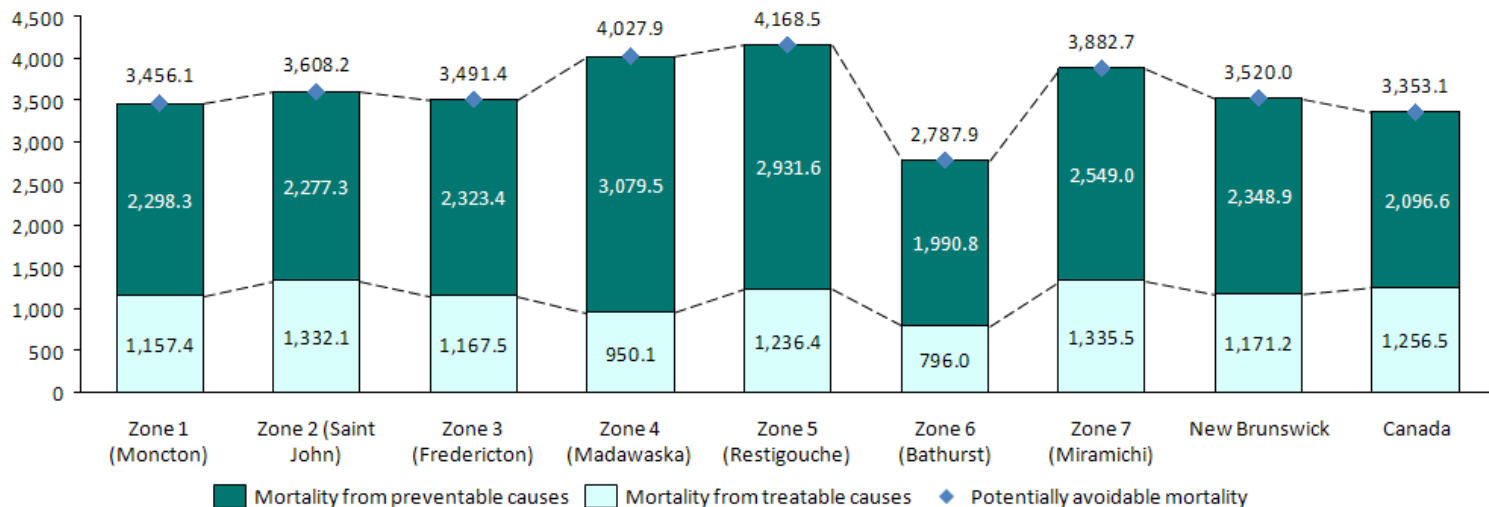


Figure 5. Avoidable mortality rates (Preventable vs. Treatable) across New Brunswick, 2007-09.
 Source: Statistics Canada 2007/09. CANSIM table 102-4311

The low rates of avoidable mortality (in both components: Preventable and treatable) in zone 6, raise many questions as to why the population in Bathurst and the Acadian Peninsula fair that well in terms of premature mortality, and certainly highlights the need for further analysis of the possible influencers, and consequently the lessons learned.

Is it driven by the health care determinants?

From the health care perspective, despite the overall low public rating of hospital experience in zone 6, the Bathurst and Acadian Peninsula region seems to have better accessibility to some surgeries specifically hip surgeries (repair and replacement), and lower surgical and pediatrics readmission rates. In addition, zone 6 has the highest rate of patients who reported staff talking about all the medications they were taking through home care or Extra Mural Program (EMP), all of which might reflect better treatment practices, thus less treatable mortality.

From a prevention point of view, zone 6 seems to be leading in flu shots rate among the elderly, which can contribute to a lower rates of breathing diseases leading to hospitalization or death (Figure 6). On the other hand, Zone 6 has one of the lower rates of population having a personal family doctor in New Brunswick, one of the lowest rates of people reporting getting an appointment within 5 days with a primary care provider, and a high proportion of non-urgent conditions being seen in the Emergency Department (Figure 6).

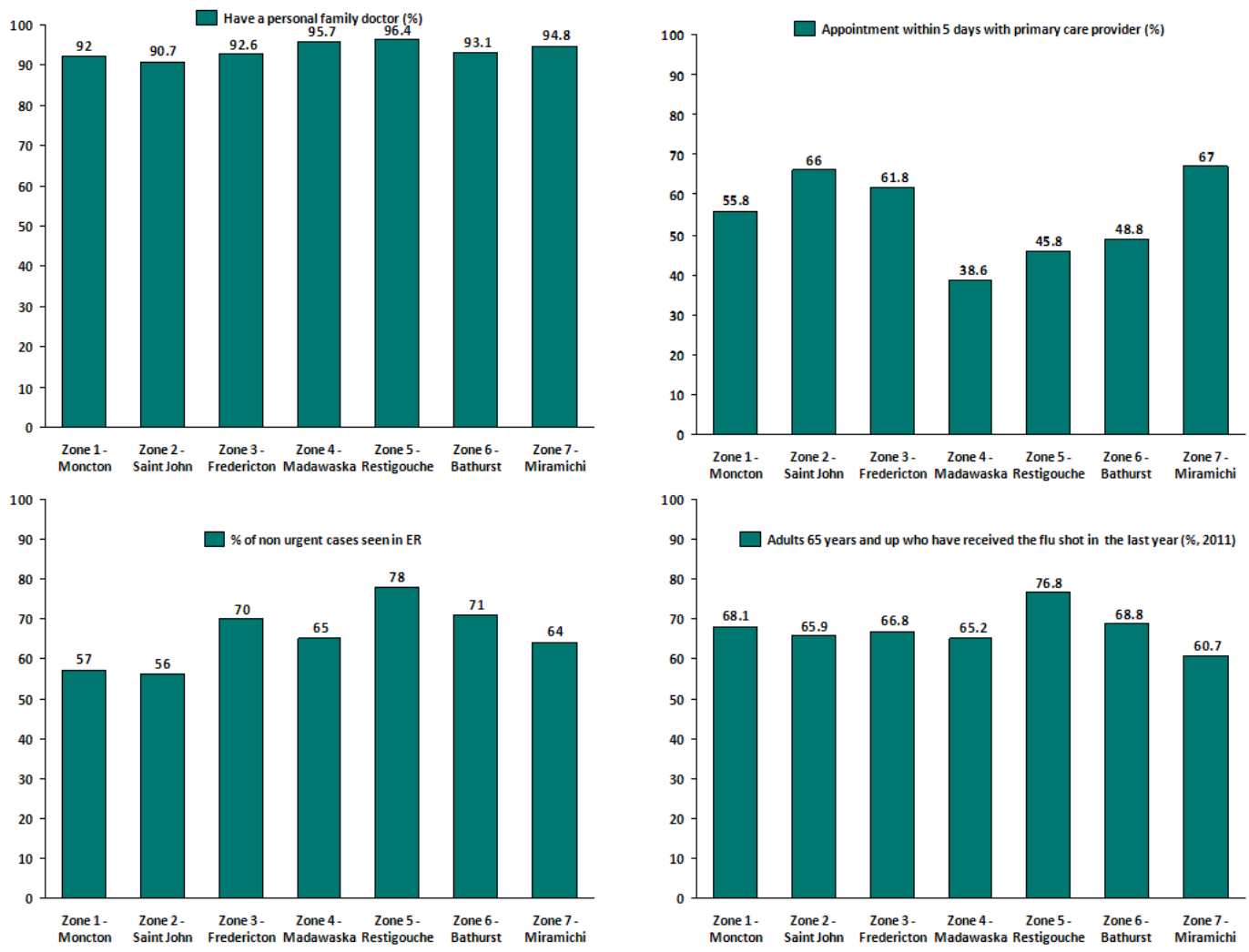


Figure 6. Primary care patterns across New Brunswick.
 Source: Primary care survey, NBHC, 2011 & Government of New Brunswick, Department of Health

It is worth noting that the Bathurst and Acadian Peninsula region has one of the lowest rates for the hospitalization of injuries, stroke events, and hip fractures, which can be influenced by better prevention practices that minimize the demand for acute care.

Is it driven by the Socio-economic or health behaviours determinants?

Among the remaining determinants, the population in zone 6 seems to be having the greatest challenge among other zones on some socioeconomic factors (education and unemployment). However, other than having one of the highest percentages of obesity, their lifestyle or risk factors are more favorable in terms of healthy eating (47% of population 12 years old and above eating fruits and vegetables at least 5 times/day, as compared to 35.9% on average in New Brunswick, and 40.4% in Canada), lowest prevalence of heavy alcohol drinking (18.2% of population drink 5 or more drinks at one time, at least once a month in the past year, vs. 21.7% New Brunswick average and 19% Canadian), lowest prevalence of smoking (15% daily or occasional smokers, vs. 22% for New Brunswick) and lowest prevalence of perceived stress (14% of population seeing their stress level being a lot, vs. 18.9% in New Brunswick overall and 23.6% in Canada) (Figure 7 a, b).

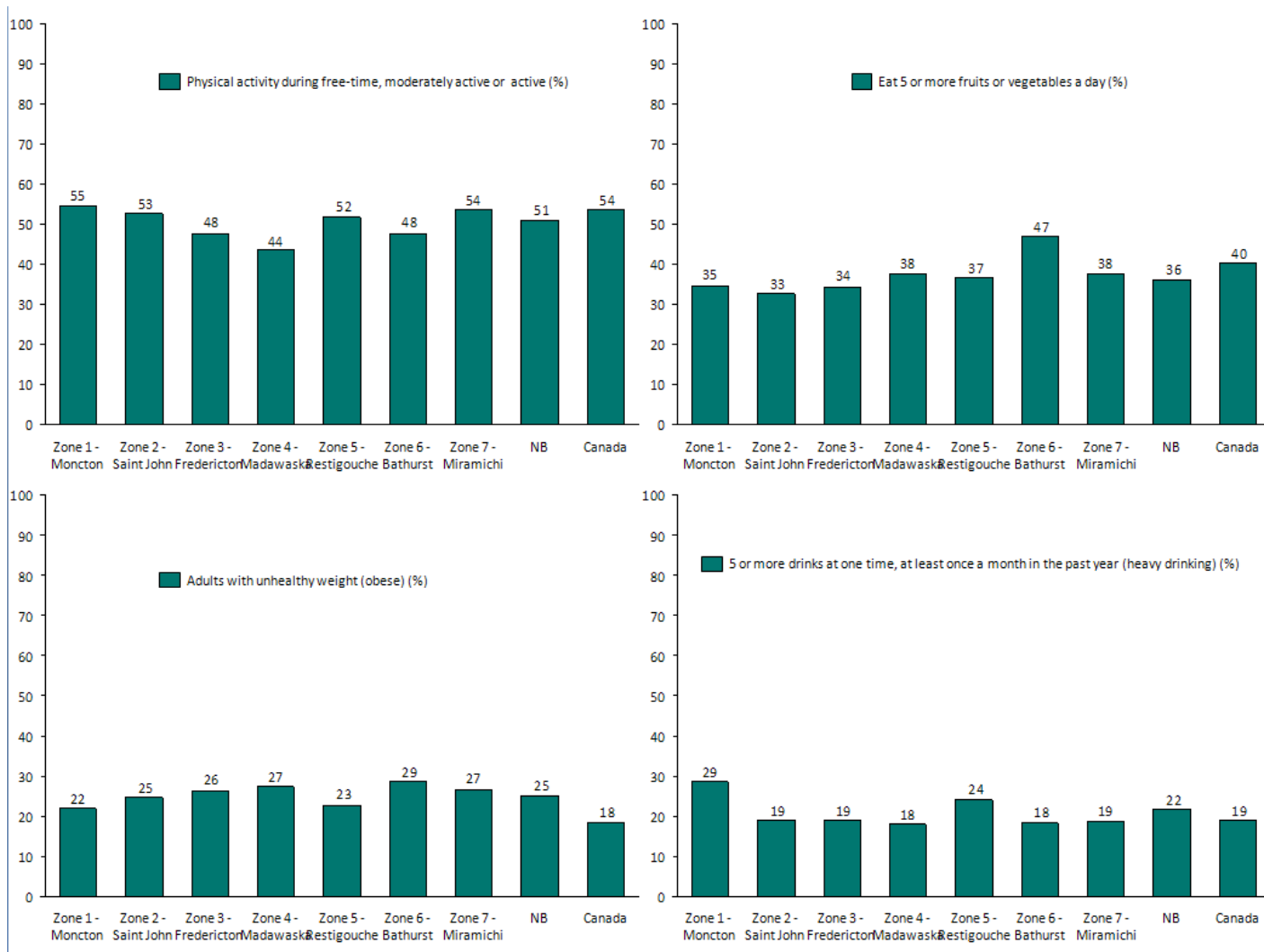


Figure 7.a. Selected health behavior determinants by zones, New Brunswick and Canada.
 Source: CCHS, 2011 & New Brunswick Government Department of Health

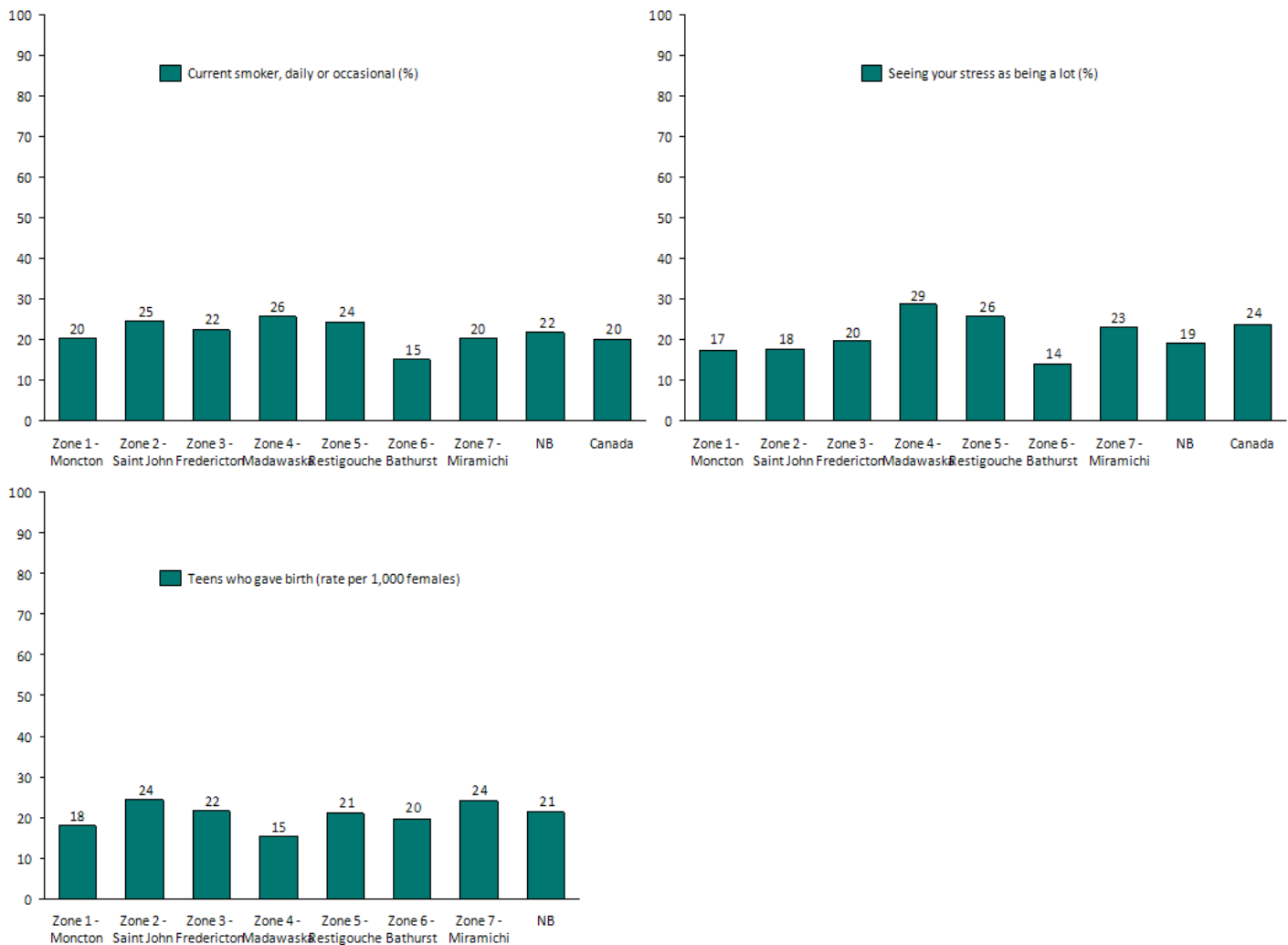


Figure 7.b. Selected health behavior determinants by zones, New Brunswick and Canada.
 Source: CCHS, 2011 & New Brunswick Government Department of Health

Personal accountability and confidence in one’s ability to take action and control is one of the concepts believed to influence personal behaviors and ultimately health status⁶. An example is diabetes control (as measured by the % of registered diabetes patients who are not in control, i.e. their HgA1C is more than 7%) where zone 6 seems to be among the strongest in the province having the second best results (i.e. the lowest % of diabetes patients not in control) (Figure 8).

⁶ Rosenstock, I.M., Strecher, V.J. and Becker, M.H. (1988) Social learning and the health belief model. Health Education Quarterly.15, (2), 175-183

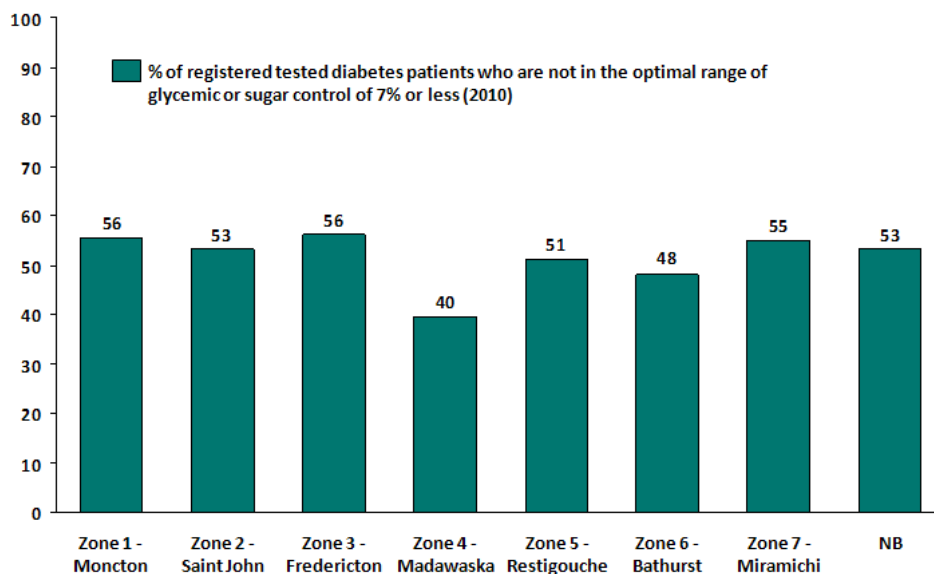


Figure 8. Percentage of registered tested diabetes patients who are not in the optimal range of glycemic or sugar control of 7% or less.

Source: Department of Health

Personal coping practices might be among the contributors to better prevention and preventable mortality in zone 6. Stronger personal accountability for one’s health in the Bathurst and Acadian peninsula region was noted by the provincial dialogue sessions that were held in winter 2012⁷ by the Department of Health and the New Brunswick Health Council across New Brunswick. Participants in Tracadie-Sheila and Bathurst recorded the highest proportion of responses for personal accountability for health, emphasizing the need for citizens taking ownership of one’s health and being able to do whatever it takes to prevent chronic diseases from developing.

In addition to personal accountability, could community initiatives and efforts be contributing to the well-being and resilience of the population in zone 6?

3- Aside from mortality, what do New Brunswickers get admitted to the hospital for?

Besides the trends in avoidable mortality rates, hospital admissions in New Brunswick highlight room for improvement in prevention due to the higher ranks of some important preventable causes of hospitalization like COPD and enteritis on the list of top 10 admissions (preceding other usually important causes of admissions like some heart disease related conditions) (Figure 9). One of the possible contributing factors to COPD’s higher rates can be the higher exposure to second hand smoke both domestically and in public places (Figure 10). Other possible contributors that can contribute to flare-ups and that still have not been assessed in-depth in New Brunswick are ambient air quality, and occupational exposures (exposures to dust, fumes, and other air pollutants in the workplace).

⁷ New Brunswick Health Council. (December 2012) Rebuilding Health Care Together. Dialogue Sessions: What Was Said. Available Online : http://www.nbhc.ca/docs/citizen_engagement/Rebuilding%20Health%20Care%20together-11272012-full.pdf

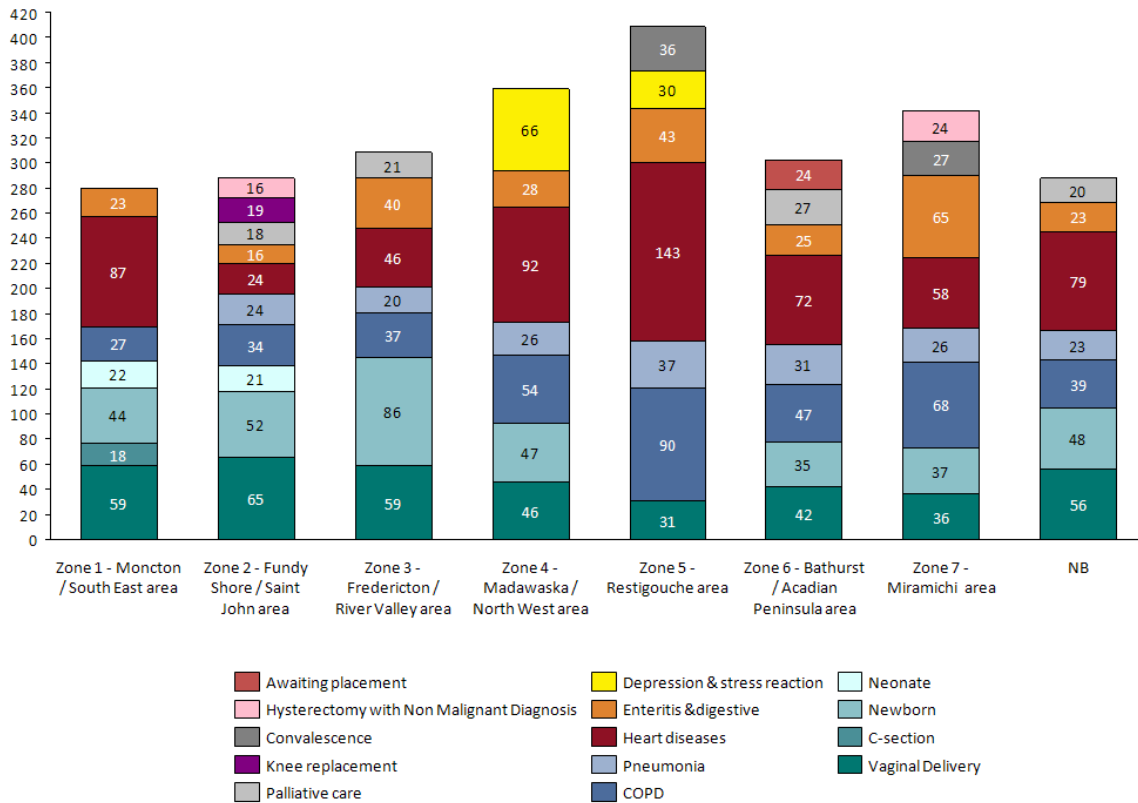


Figure 9. Top 10 causes of admission (CMGs) by patient's place of residence (Top 10 CMGs, rate per 10,000, 2011-12)
 Source: New Brunswick Department of Health

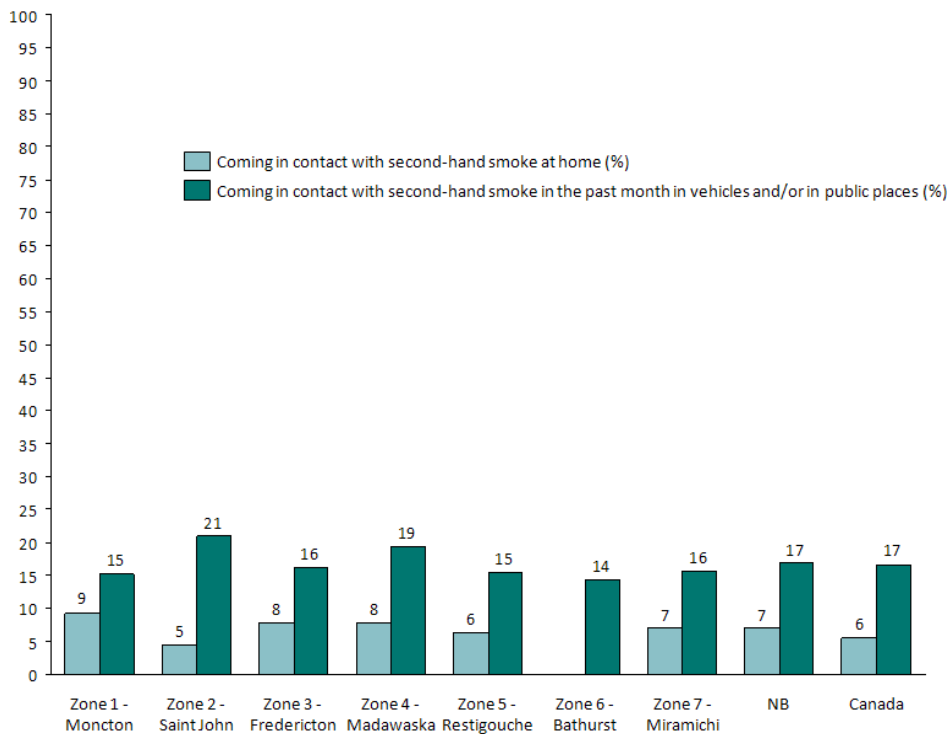


Figure 10. Exposure to second hand smoke at home and in vehicles &/or in public places (%).
 Source: CCHS 2011, Statistics Canada

4- So how can we minimize our losses?

The perceived relationships between health status and individual behaviours highlight the possibility of preventing adverse health outcomes, which contributes to better health status, measured on the intermediate term by the prevalence of chronic health conditions and self rated health, and measured on the long term by premature avoidable mortality, especially the preventable avoidable mortality.

It is worth noting that the avoidable mortality of today is an outcome of lifestyles and behaviours of the past decades, and accordingly, healthy lifestyles and behaviours of today shall translate into lower avoidable preventable mortality in the future, therefore making it an invaluable investment for a better quality and lengthy years of life.

Accordingly, effective alignment of prevention strategies from all government departments aimed at improving all determinants of health will translate into better health status and outcomes on the medium and long term, and that requires long term oriented plans and policies.

The Government of New Brunswick has established a Performance Excellence Process, guided by a strategy map (Figure 11) that puts Quality of Life at the heart of its vision for 2015, requiring all government departments to align their strategies and plans towards its achievement.

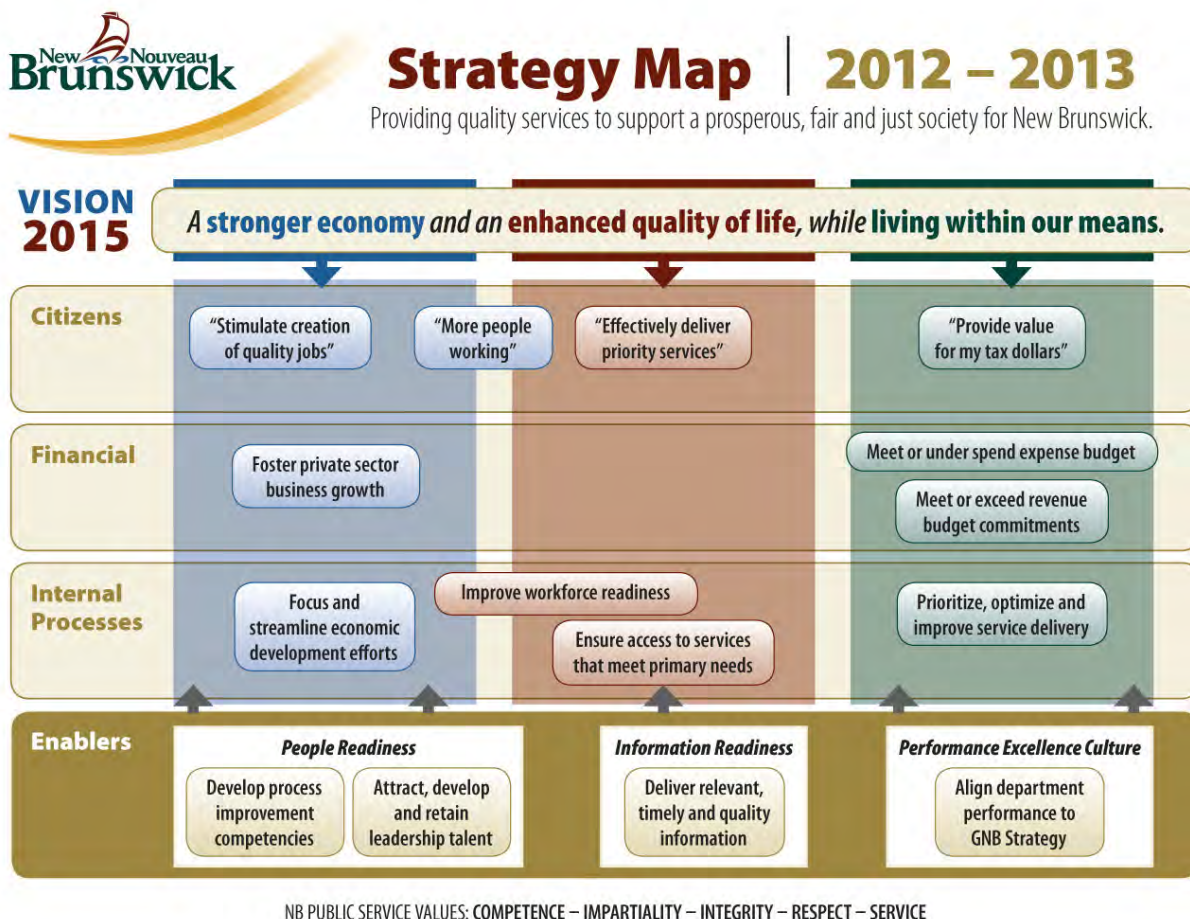


Figure 11. Government of New Brunswick strategy map 2012-2013

Start with the young ones

Targeting younger generations now through health prevention and promotion policies will lead to healthier adults, and will set the platform for healthy aging, all of which will reduce the demand for health care and ultimately lead to more years of quality life lived by the population.

Physical and Mental Fitness needs to be promoted among children and adults, and there seems to be positive signs as the data reported in the latest Children and Youth Provincial Snapshot 2012 shows encouraging findings of increasing levels of participation in certain types of sports activities. This positive trend in activities and school-related initiatives is also coupled with an increase in the students reporting having the opportunity to participate in exercise, and that their school environment helped them develop a more positive attitude towards physical activity.

Those gains towards more active living might be jeopardized by family and parents' behaviours, as they do not seem to be reinforcing positive active lifestyles, with more adults adopting sedentary unhealthy habits (watching TV for long hours).

Healthy eating need to be further emphasized, with the control on non nutritive foods and drinks especially within the school environment, and the promotion of breakfast eating and meeting the requirement of 5 fruits and vegetables per day.

Adverse factors and risky behaviours such as smoking, alcohol consumption and unsafe sex need attention as they are associated with the onset of non-communicable and communicable diseases at a young age.

Who is responsible?

Health and well-being is everyone's business, thus responsibility for population health includes the citizen. Personal beliefs, coping mechanisms and behaviours highly contribute to the population health status, and consequently to healthy life expectancy. Healthy lifestyles and behaviours are certainly supported and enforced by government policies and initiatives, and the challenge lying ahead is that the management of the determinants of health lies within a multi-stakeholders context, each with separate mandates and responsibilities, and in the absence of integrated planning.

In New Brunswick, the following departments are the main stakeholders for determinants:

- 1- Executive Council Office
- 2- Department of Health
- 3- Department of Healthy and Inclusive Communities
- 4- Department of Environment and Local Government
- 5- Department of Social Development
- 6- Department of Public Safety
- 7- Department of Education and Early Childhood Development
- 8- Department of Agriculture, Aquaculture and Fisheries
- 9- Department of Economic Development
- 10- Department of Energy and Mines
- 11- Department of Post-Secondary Education, Training and Labour
- 12- Department of Finance
- 13- Department of Justice
- 14- Department of Natural Resources
- 15- Department of Tourism, Heritage and Culture
- 16- Department of Transportation and Infrastructure

All those departments have embarked –directly or indirectly- on initiatives and programs within the domain of well-being, health prevention, and health promotion, especially as encouraged by the Government Strategy Map mentioned above. (Figure 11)

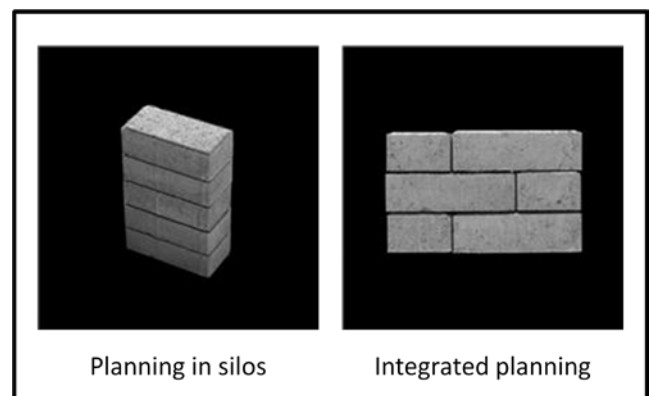
The Department of Healthy and Inclusive Communities continues to implement the Provincial Wellness Strategy with targets focusing on physical activity, healthy eating, exposure to tobacco, and mental fitness. Other well-being and health related strategies being developed include the New Brunswick Public Health Nutrition Framework for Action 2012-2016, the Comprehensive Diabetes Strategy for New Brunswickers 2011-2015, the Action Plan for Mental Health in New Brunswick 2011-18, and the Framework for the Prevention of Unintentional Injury in New Brunswick. A Poverty Reduction Strategy has also been in place since 2008 targeting some socio-economic determinants of children and youth well-being.

In addition to the above departments traditionally identified/observed as contributors to the health system and to health determinants, other departments do affect the health and well-being of New Brunswick population through their impact on non-health related determinants. The Department of Economic Development is aiming at the creation of quality jobs and boosting employment rates, thus contributing to the socioeconomic determinants⁸. The Department of Public Safety contributes to a safe community and environment through efforts to reduce crime. The departments of Education and Early Childhood Development and Post-Secondary Education, Training and Labour address education (as an important socio-economic determinant). They also contribute to the health and well-being of students by fostering a healthy school/college environment favoring physical and mental fitness. In addition, the efforts of the Departments of Environment and Local Governments; Transportation and Infrastructure; and Tourism, Heritage and Culture influence the determinants of physical and social environment.

Building on all of the above mentioned initiatives, New Brunswick is trying to foster a culture of well-being. However, as each organization strives to fulfill the responsibilities assigned to it, and most of the cases in isolation of the others' plans, initiatives and programs. It is the integrated planning and joint work that contribute to progress and improvement in population health and prevention especially within a multi-stakeholder context; just like building a brick wall: If everyone builds their bricks separately, they will just be columns of bricks that are prone to fall; however, if all build on the successes of each other, and interlink with the right cement (coordinated plans), the brick wall will rise up strong and enduring.



It is through integrated action that we improve the determinants of health for New Brunswickers to reduce the burden of disease and bring down the years New Brunswickers lose due to preventable avoidable mortality.



⁸ Department of Economic Development (2012). Rebuilding New Brunswick. Economic Development Action Plan 2012-2016. Online: <http://www.gnb.ca/legis/business/currentsession/57/57-2/LegDocs/2/en/RNB-ActionPlan2012-2016.pdf>

POPULATION HEALTH: HOW CAN WE GAIN MORE, HEALTHIER YEARS OF LIFE IN NEW BRUNSWICK?

Appendix: List of Causes of Death for Avoidable Mortality Indicator (CIHI, 2012)

Cause of Death	Preventable (Incidence Reduction)	Treatable (Case Fatality Reduction)
Infections		
Enteritis and other diarrhoeal disease	x	
Tuberculosis		x
Vaccine-preventable diseases	x	
Selected invasive bacterial infections		x
Sepsis		x
Malaria		x
Meningitis		x
Cellulitis		x
Pneumonia		x
Sexually transmitted infections, except HIV/AIDS	x	
Viral hepatitis	x	
HIV/AIDS	x	
Neoplasm		
Lip, oral cavity and pharynx cancer	x	
Esophageal cancer	x	
Stomach cancer	x	
Colorectal cancer		x
Liver cancer	x	
Lung cancer	x	
Melanoma skin cancer	x	
Non-melanoma skin cancer	x	
Malignant neoplasm of breast		x (Female only)
Cervical cancer		x
Uterus cancer		x
Testicular cancer		x
Bladder cancer		x
Thyroid cancer		x
Hodgkin's disease		x
Leukemia		x (Age<45)
Benign neoplasms		x

Cause of Death	Preventable (Incidence Reduction)	Treatable (Case Fatality Reduction)
Diseases of the Circulatory System		
Rheumatic heart disease	x	
Hypertensive diseases		x
Cerebrovascular diseases	x (50%)	x (50%)
Ischaemic heart disease	x (50%)	x (50%)
Other atherosclerosis	x (50%)	x (50%)
Aortic aneurysm	x	
Venous thromboembolism	x	
Diseases of the Respiratory System		
Chronic obstructive pulmonary disorders	x	
Asthma and bronchiectasis		x
Acute lower respiratory infections		x
Upper respiratory infections		x
Lung diseases due to external agents	x	
Adult respiratory distress syndrome		x
Pulmonary oedema		x
Abscess of lung and mediastinum; pyothorax		x
Other pleural disorders		x
Other respiratory disorders		x
Diseases of the Digestive System		
Peptic ulcer disease		x
Diseases of appendix; hernia; disorders of gallbladder, biliary tract and pancreas		x
Chronic liver disease (excluding alcohol-related disease)	x	
Diseases of the Genitourinary System		
Nephritis and nephrosis		x
Renal failure		x
Obstructive uropathy, urolithiasis and prostatic hyperplasia		x
Inflammatory diseases of genitourinary system		x
Disorders resulting from impaired renal tubular function		x

POPULATION HEALTH: HOW CAN WE GAIN MORE, HEALTHIER YEARS OF LIFE IN NEW BRUNSWICK?

Cause of Death	Preventable (Incidence Reduction)	Treatable (Case Fatality Reduction)
Infant and Maternal Causes		
Complications of the perinatal period	x	x
Congenital malformations, deformations and chromosomal anomalies		x
Pregnancy, childbirth and the puerperium		x
Unintentional Injuries		
Transport accidents	x	
Falls	x	
Other external causes of accidental injury	x	
Drowning	x	
Fires and flames	x	
Accidental Poisonings	x	
Injuries of Underdetermined Intent		
Injuries of undetermined intent	x	
Intentional Injuries		
Suicide and self-inflicted injuries	x	
Assault	x	
Alcohol and Drug Use Disorders		
Alcohol-related diseases, excluding external causes	x	
Drug use disorders	x	

Cause of Death	Preventable (Incidence Reduction)	Treatable (Case Fatality Reduction)
Nutritional, Endocrine and Metabolic Disorders		
Nutritional deficiency anemia	x	
Thyroid disorders		x
Diabetes mellitus	x (50%)	x (50%)
Adrenal disorders		x
Congenital metabolic disorders		x
Neurological Disorders		
Epilepsy		x
Disorders of Musculoskeletal System		
Osteomyelitis		x
Adverse Effects of Medical and Surgical Care		
Drugs, medicaments and biological substances causing adverse effects in therapeutic use	x	
Misadventures to patients during surgical and medical care	x	
Medical devices associated with adverse incidents in diagnostic and therapeutic use	x	
Surgical and other medical procedures as the cause of abnormal reaction	x	

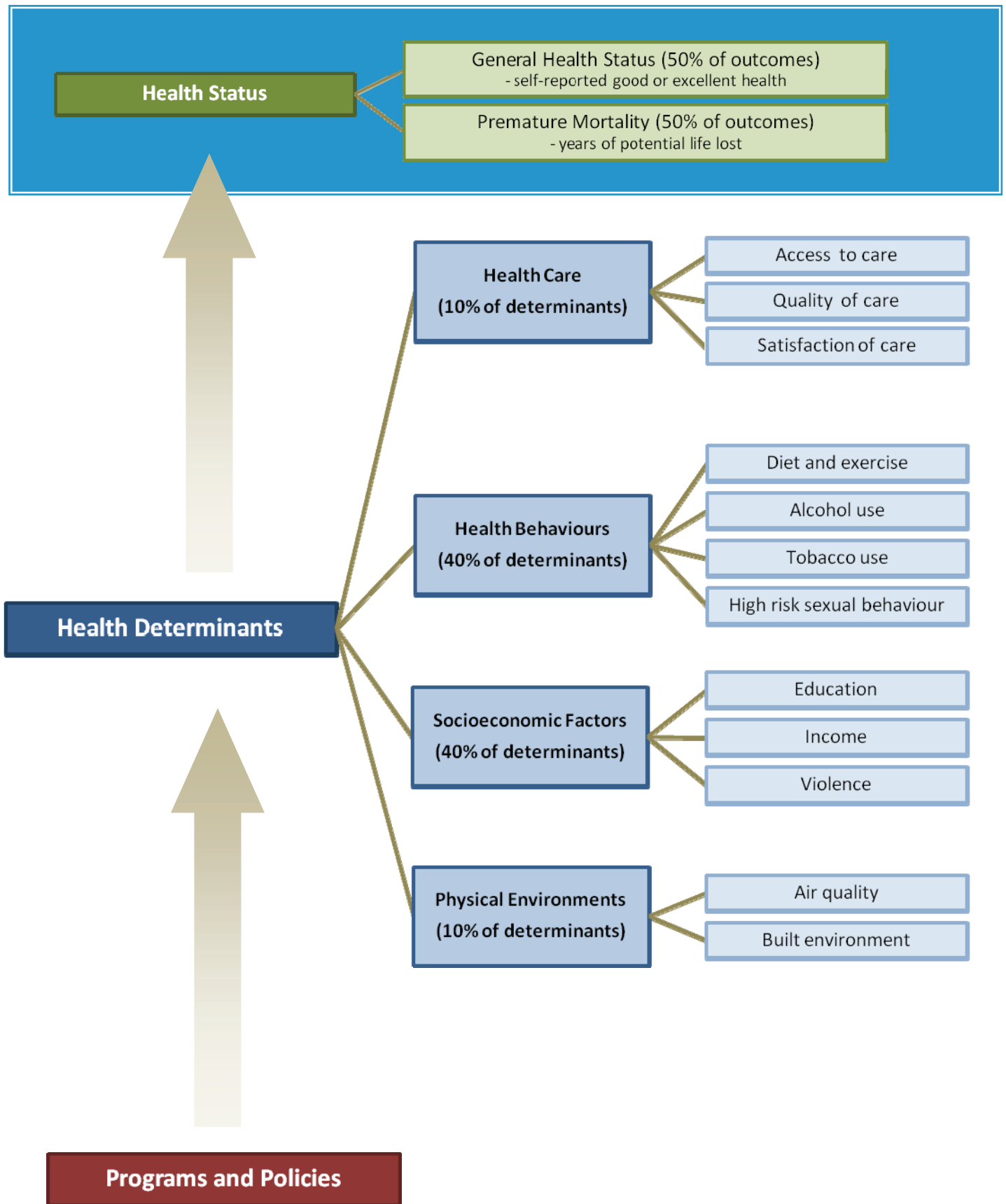


Section 1

Population Health Status

**The Population Health Status
equally weighs quality and length of life.**





Actual indicator: Perceived health, very good or excellent

Source: Statistics Canada, Canadian Community Health Survey
CANSIM table no.: 105-0501

Definition:

Population aged 12 and over who reported perceiving their own health status as being either excellent or very good. Perceived health is an indicator of overall health status. It can reflect aspects of health not captured in other measures, such as: incipient disease, disease severity, aspects of positive health status, physiological and psychological reserves and social and mental function. Perceived health refers to the perception of a person's health in general, either by the person himself or herself, or, in the case of proxy response, by the person responding.



Why is this indicator important?

Self-reported health is now among the most common measures used in public health surveys in Canada and its peer countries. It represents the physical, emotional, and social aspects of health and well-being.

Mortality – Past studies have demonstrated a reliable inverse association between self-rated health and mortality, meaning people who perceive their health as being very good or excellent tend to live longer.

Lower income and education – It was noticed that having poorer clinical and perceived health were important factors when lower income and education came into play.

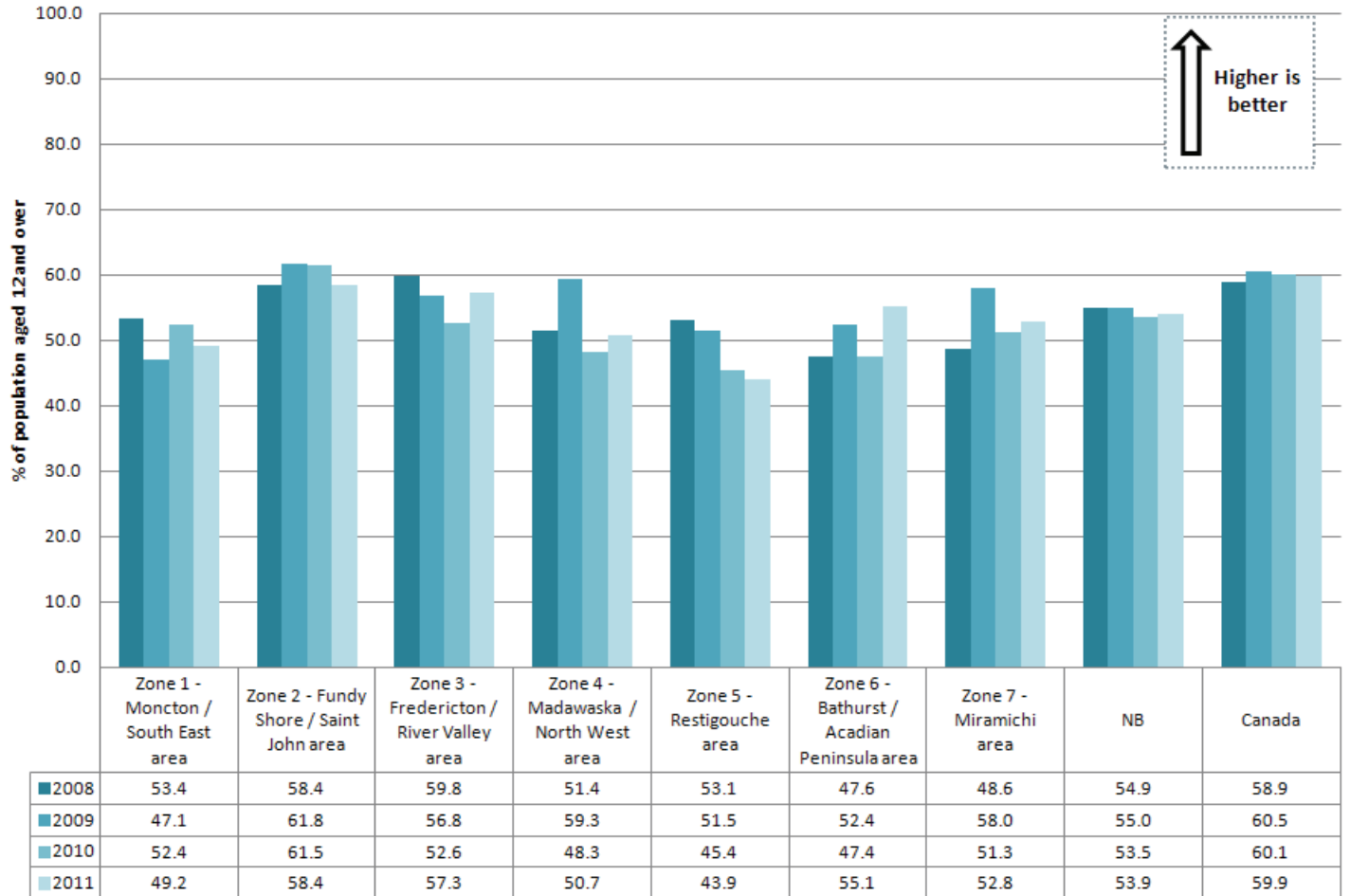
Health services utilization – Ill-health perception is associated with increased health services utilization

What are some limitations of this indicator?

Some researchers suggest a person's judgment about his or her health is too subjective. Others note that cultural differences between countries will influence how people evaluate their health. Still, people's perceptions of their own health have been found to be a predictor of future health care use and mortality rates. Self-reported health is also linked to age, with older people more likely to report poor health than younger people.

See their health as being very good or excellent

(Perceived health, very good or excellent)



Actual indicator: Perceived mental health, very good or excellent

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

Population aged 12 and over who reported perceiving their own mental health status as being excellent or very good. Perceived mental health provides a general indication of the population suffering from some form of mental disorder, mental or emotional problems, or distress, not necessarily reflected in self-reported (physical) health.

Why is this indicator important?

Perceived mental health provides a general indication of the population suffering from some form of mental disorder, mental or emotional problems, or distress. This is not necessarily reflected in perceived health. It has also been shown in the literature as being related to mortality, high job strain, and psychological distress.

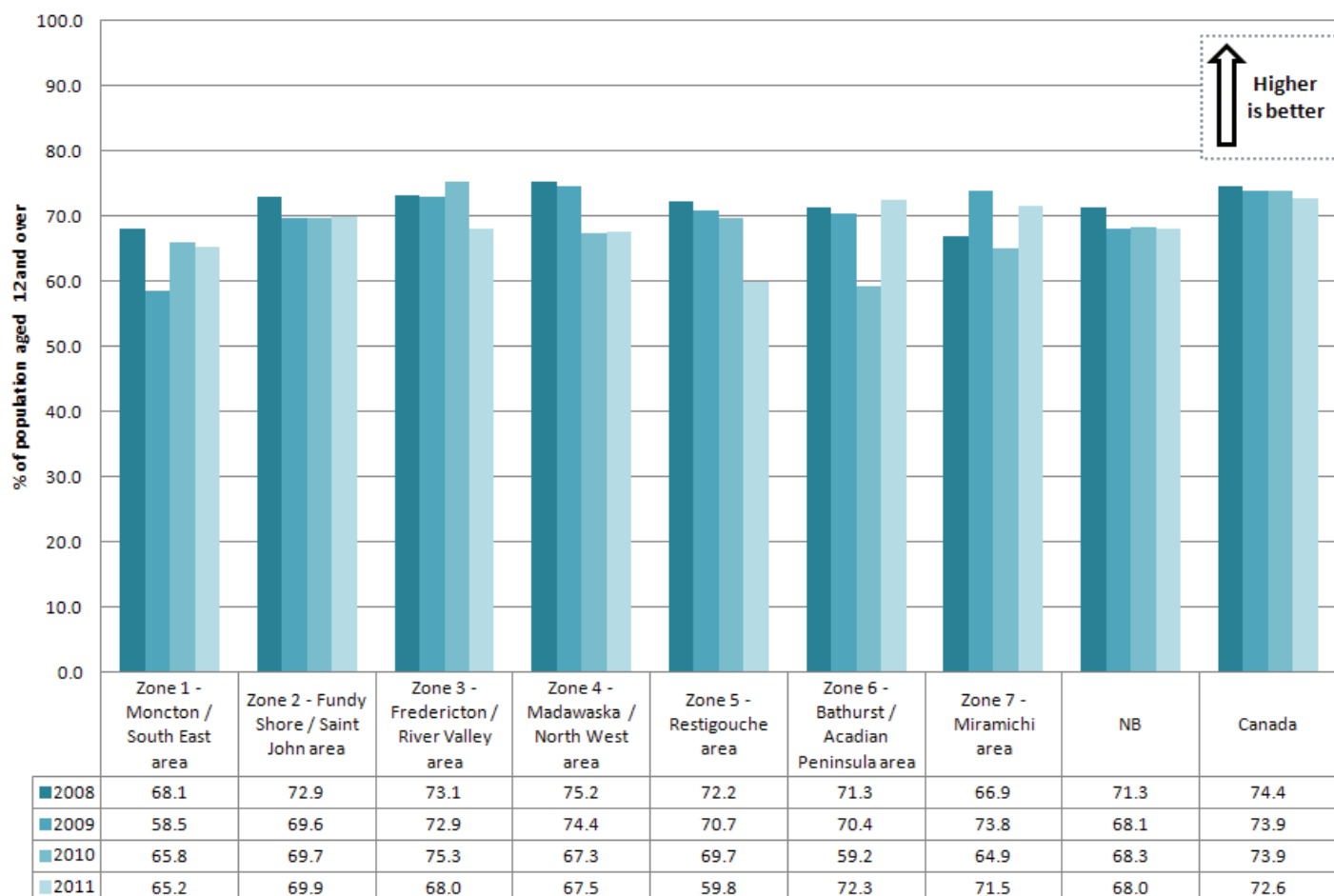
Mental health is fundamental to an individual's overall health and the health of communities. It is essential to personal well-being and the ability to lead a healthy, balanced and productive life. Mental health disorders often occur in younger people and their frequency and chronic course make them a notable cause of disability.

According to the World Health Organization, five of the 10 leading causes of disability are related to mental disorders. It predicts that in less than 20 years, depression will be the second-leading cause of disability in the world.



See their mental health as being very good or excellent

(Perceived mental health, very good or excellent)



Actual indicator: Pain or discomfort that prevents activities

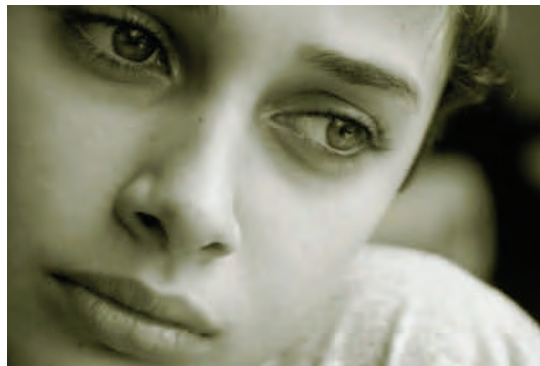
Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

Population aged 12 and over who report having pain or discomfort which prevents activities.

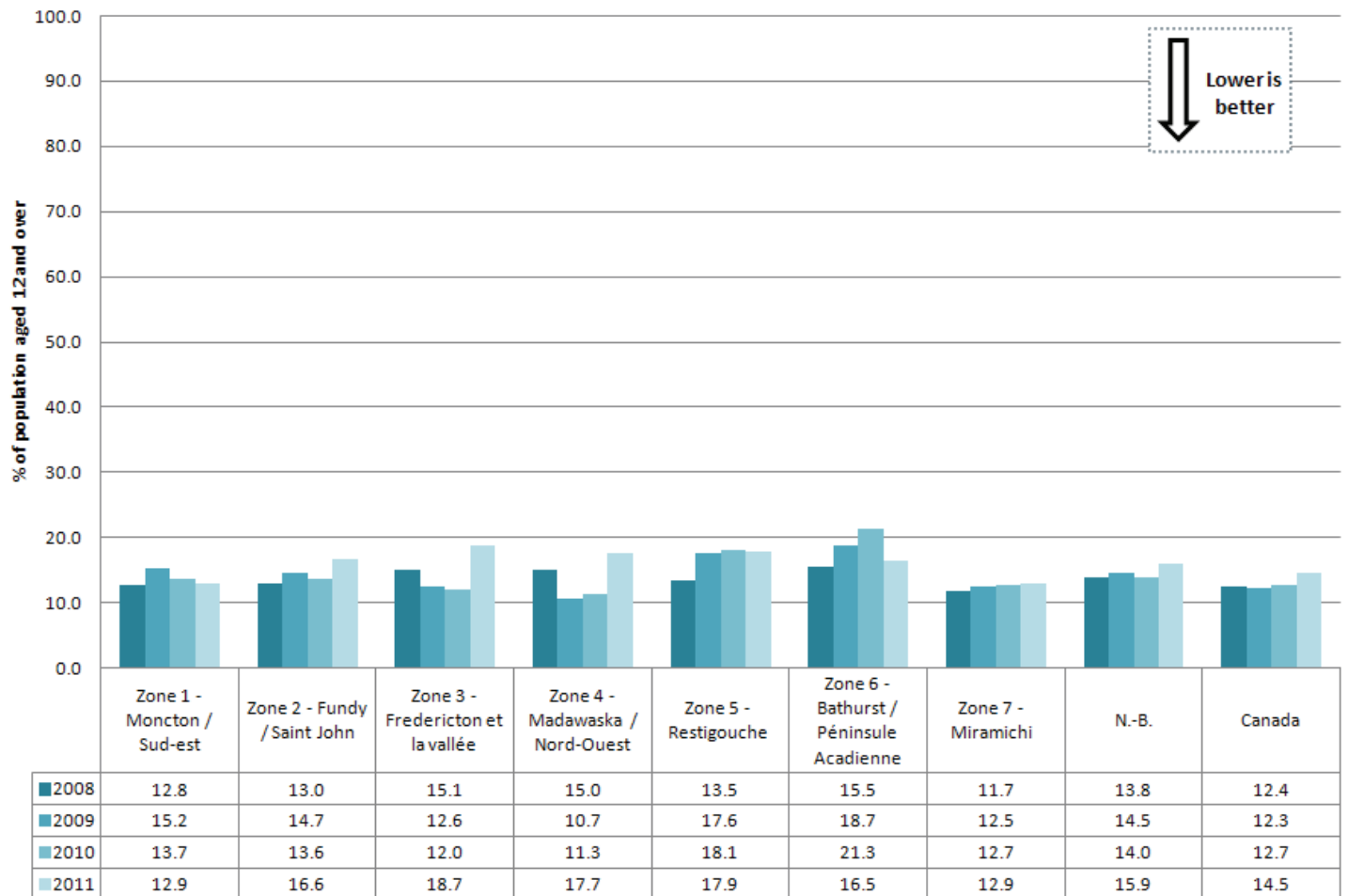
Why is this indicator important?

In combination with perceived health and perceived mental health, this helps indicate the level of disability one can have. Pain or discomfort that can prevent social/recreational activities or normal living activities can be very discomfoting and can reflect a level of chronic pain. *People with the most pain related disability tend to make use of primary care visits, increased emergency room visits and more often have a higher hospital admission rate.*



Pain or soreness that prevents activities (physical or emotional)

(Pain or discomfort that prevents activities)



Actual indicator: Life satisfaction, satisfied or very satisfied

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

Population aged 12 and over who reported being satisfied or very satisfied with their life in general.

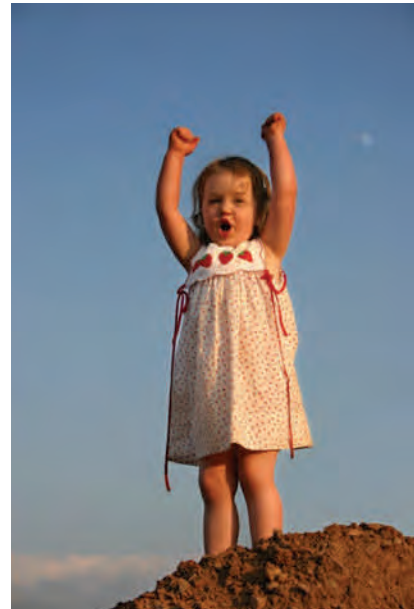
Starting in 2009, this indicator is based on a grouped variable. In 2009, the question was changed from 5-point answer category to an 11-point scale. The concordance between the two scales was found to be good.

Why is this indicator important?

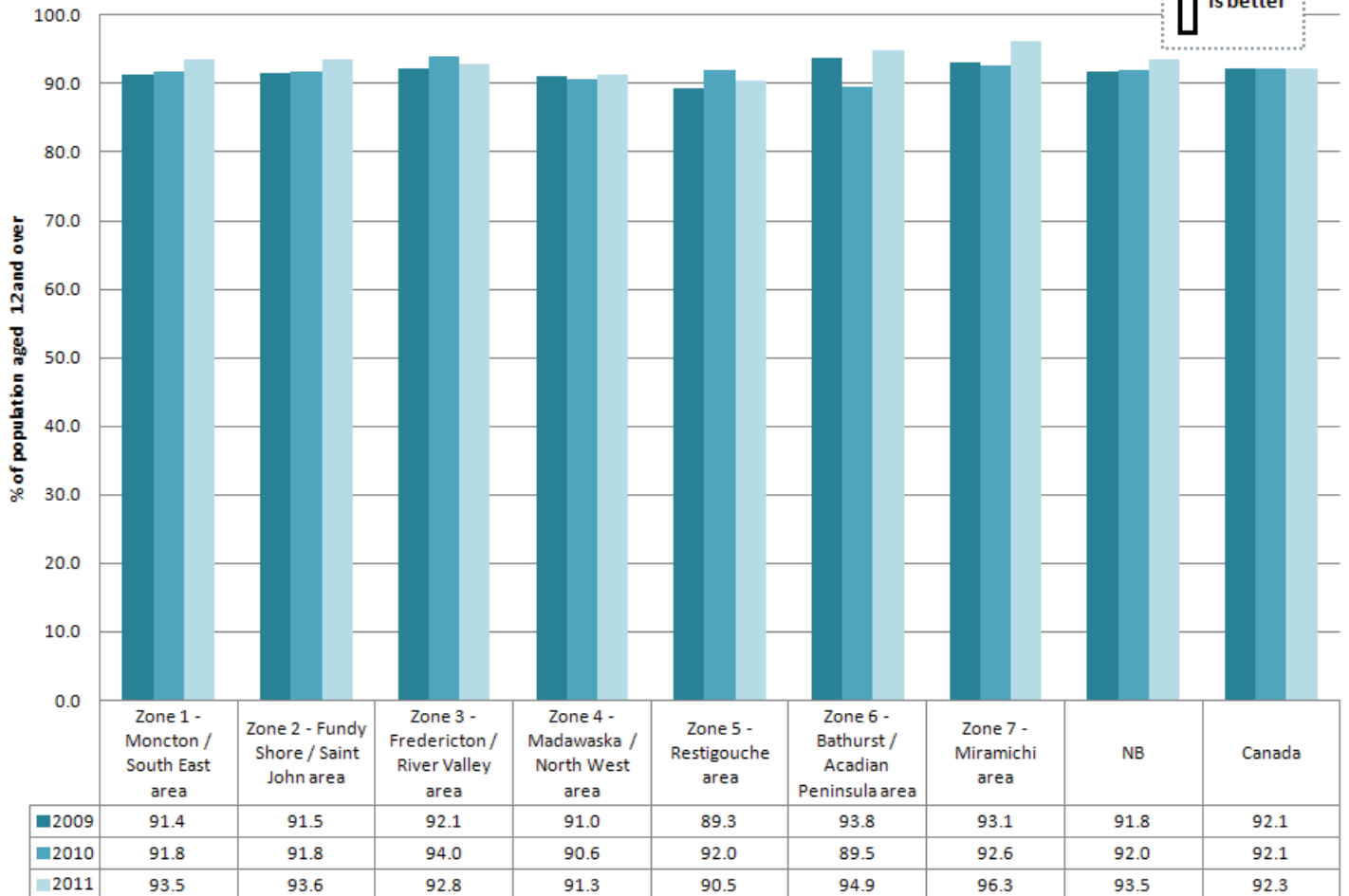
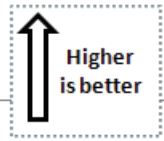
Life satisfaction is a personal subjective assessment of global well-being.

Life satisfaction can be based on many factors such as health status, health, income, home and family life, work life, social life, leisure activities and physical activities, happiness, job satisfaction, optimism, well being and coping capacities, to name a few. Depending on where you live, your life standards and expectations may also contribute to your life satisfaction.

Happy, fulfilled and engaged citizens are the hallmark for a thriving society.



Life satisfaction, satisfied or very satisfied (Life satisfaction, satisfied or very satisfied)



Actual indicator: Life expectancy at birth

Source: Statistics Canada, Vital Statistics – Birth database, Vital Statistics – Death database. CANISM 102-4307

Definition:

Life expectancy is the number of years a person would be expected to live, starting from birth (for life expectancy at birth) and similarly for other age groups, if the age- and sex-specific mortality rates for a given observation period (such as a calendar year) were held constant over the estimated life span.

The estimates are based on three consecutive years of death data and the population estimate of the middle year. The reference period associated with these data reflects the mid-point of the three-year period.

Life expectancy and related confidence intervals are based on Chiang's method (Chiang, CL., 'The Life Table and its Applications', Robert, E., Krieger Publishing Company, Malabar, Florida, 1984).

Rates used in this table for the calculation of life expectancy are calculated with data that exclude: births to mothers not resident in Canada; births to mothers resident in Canada, province or territory of residence unknown; deaths of non-residents of Canada; deaths of residents of Canada whose province or territory of residence was unknown; deaths for which age or sex of decedent was unknown. Rates used in this table for the calculation of life expectancy are based on data tabulated by place of residence.

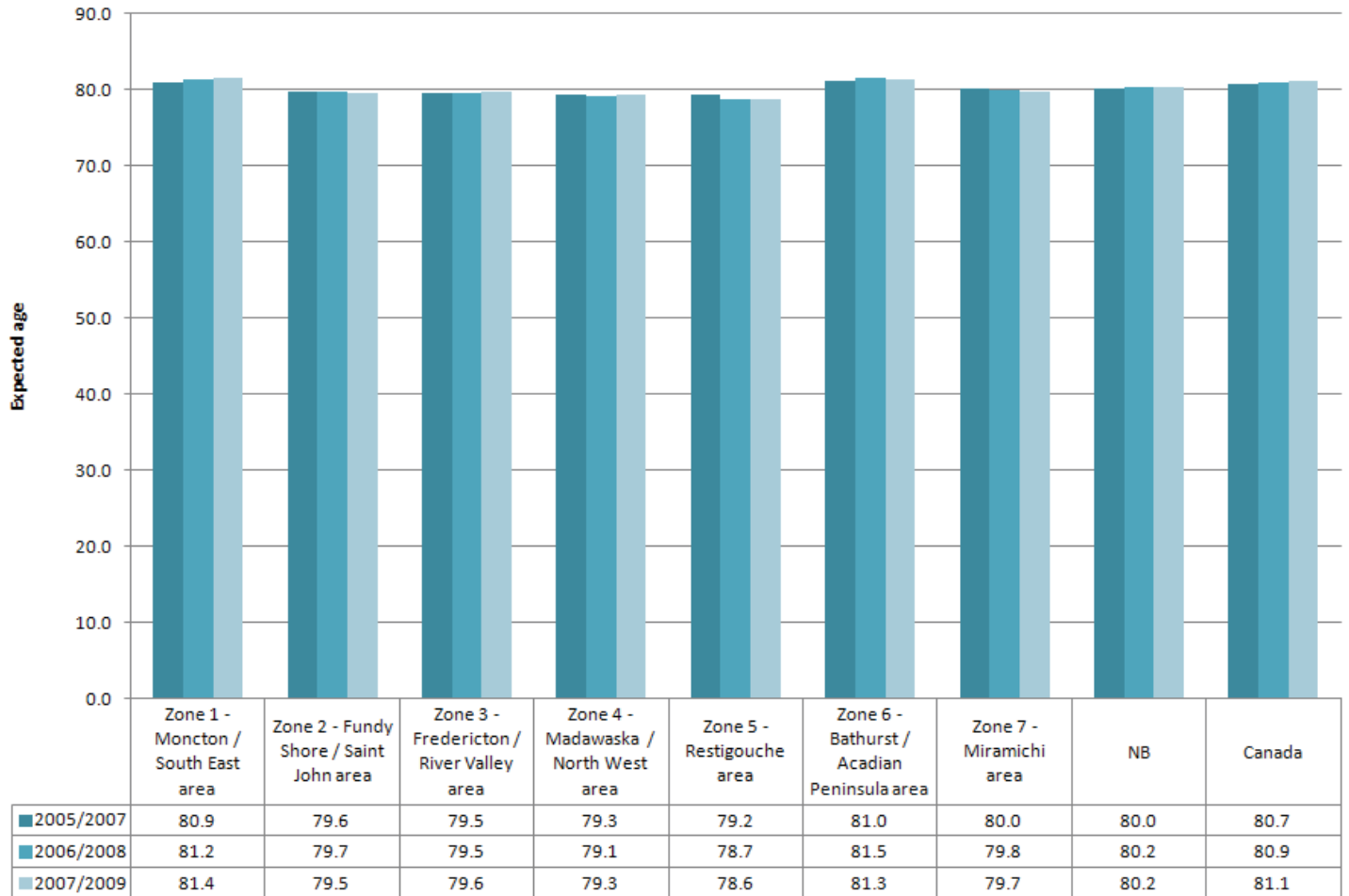
Why is this indicator important?

This is a widely used indicator of the health of a population, as *life expectancy measures quantity rather than quality of life*. It is widely regarded as an indicator of a country's overall health, or in this case, a province or health zone. Life expectancy has increased dramatically for most people in the world today, mostly due to better sanitation (physical environment), nutrition (health behaviors), and advances in medicine (health care).

Life expectancy is affected by a number of factors in addition to economic wealth, including lifestyle choices, education, environment, and access to quality health services.



Expected years of life (Life expectancy at birth)



Actual indicator: Low birth weight

Source: New Brunswick Vital Statistics – Birth database (New Source)

Definition:

Live births less than 2,500 grams, expressed as a percentage of all live births (birth weight known).

Counts and rates (percentages) in this table are based on three consecutive years of data which were summed and divided by three. Counts have been rounded and do not always add to the exact totals.



The reference period associated with these data reflects the mid-point of the three-year period.

Why is this indicator important?

Low birth weight infants face a higher risk of death within the first year of life and have higher rates of disability and disease than other infants. ***Low birth weight is a leading cause of infant mortality throughout the world.***

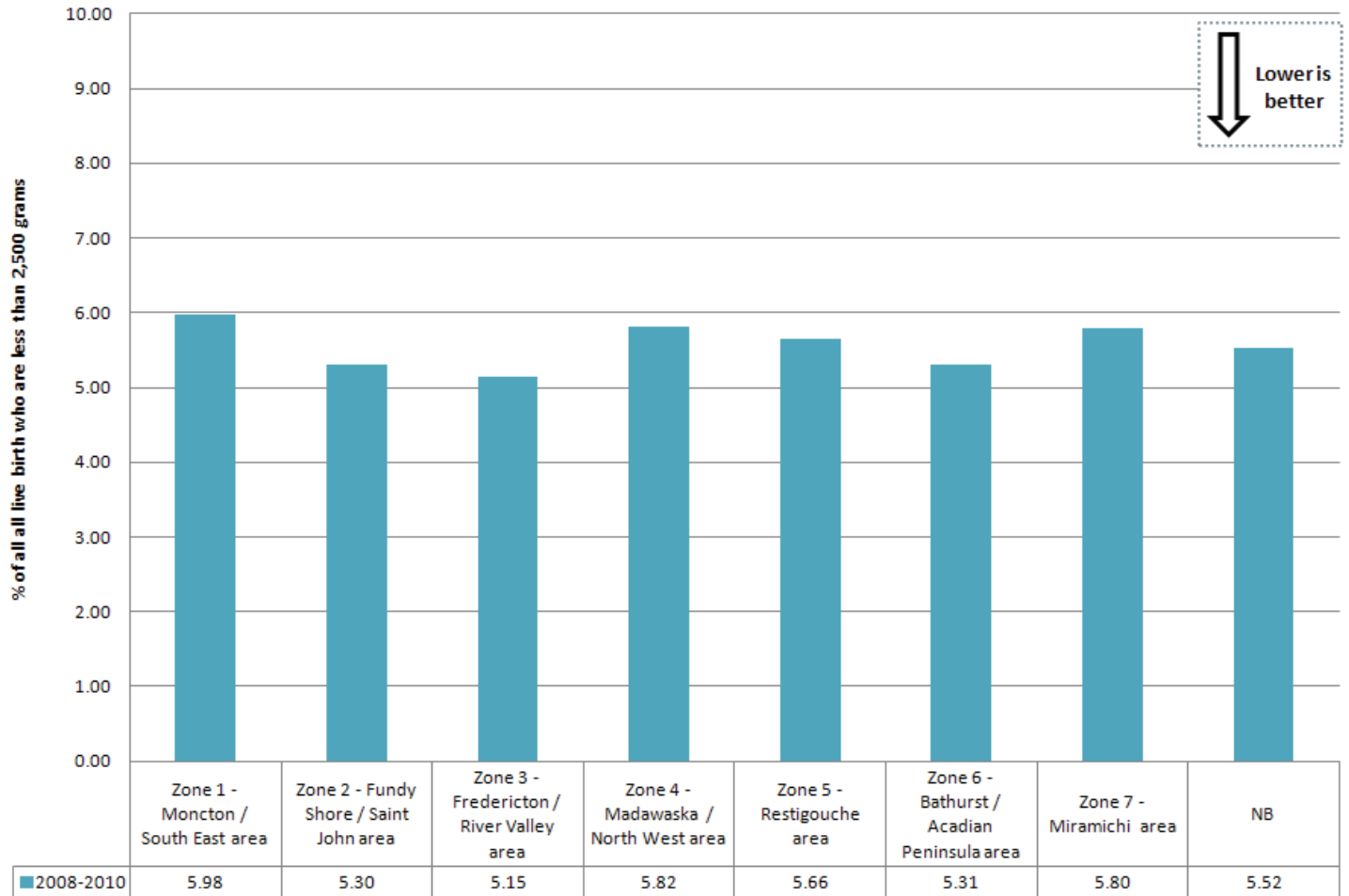
Some factors that may contribute to low birth weight are:

- A) Race** - African-American babies are twice as likely to have very low birth weight as Caucasian babies;
- B) Age** - Teenage mothers (especially those younger than 15 years old) have a much higher risk of having a baby with very low birth weight;
- C) Multiple births** - Multiple birth babies are at increased risk of very low birth weight because they are often premature. About 10 percent of twins and one-third of triplets have very low birth weight.
- D) Mother's health** - Women who are exposed to drugs, alcohol, and cigarettes during pregnancy are more likely to have low or very low birth weight babies. Mothers of lower socioeconomic status are also more likely to have poorer pregnancy nutrition, inadequate prenatal care, and pregnancy complications - all factors that can contribute to very low birth weight.

Prenatal care is a key factor in preventing preterm births and very low birth weight babies. Because maternal nutrition and weight gain are linked with fetal weight gain and birth weight, eating a healthy diet and gaining the proper amount of weight in pregnancy are essential. Mothers should also avoid alcohol, cigarettes, and illicit drugs, which can contribute to poor fetal growth, among other complications.

Special Note: Indicator was calculated with the New Brunswick Data only and therefore cannot be compared nationally at the moment

Infant with less than average birthweight (Low birth weight)



Actual indicator: Infant mortality

Source: New Brunswick Vital Statistics – Birth and Death database (New Source)

Definition:

Infant mortality corresponds to the death of a child less than one year of age.

Counts in this table are based on three consecutive years of data which were summed and divided by three. Counts have been rounded and do not always add to the exact totals. Rates are based on these counts per 1,000 live births.

The reference period associated with these data reflects the mid-point of the three-year period.

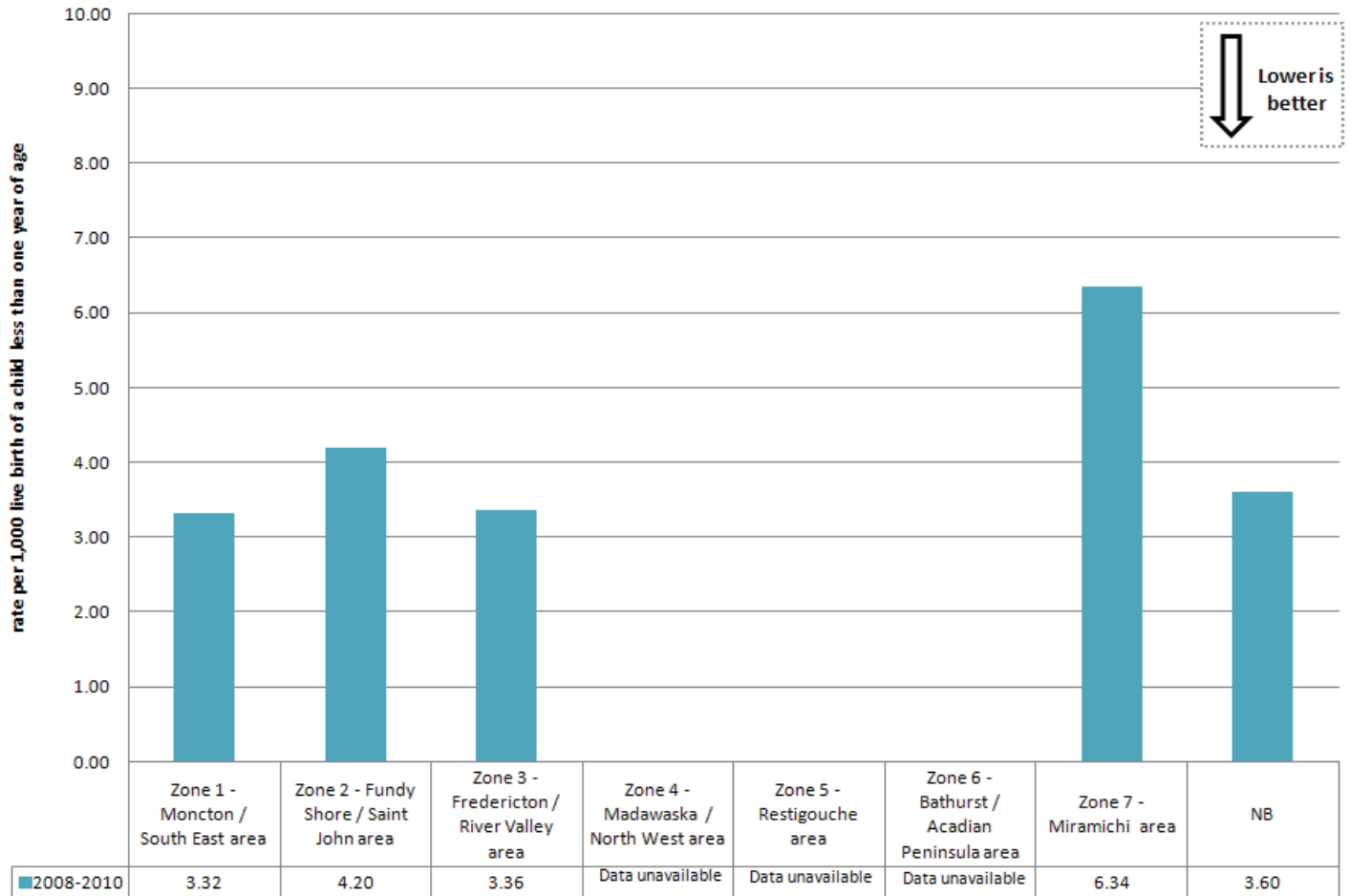
Why is this indicator important?

This indicator is recognized as a very important measure of the level of healthcare in a country, province or even health zone, because *it is directly linked with the health status of infants, children, and pregnant women as well as access to medical care, socioeconomic conditions and public health practices.*

Special Note: Indicator was calculated with the New Brunswick Data only and therefore cannot be compared nationally at the moment

Infant deaths

(Infant mortality, rate per 1,000 live births of a child less than one year of age)



Actual indicator: Potential years of life lost – Circulatory diseases

Source: New Brunswick Vital Statistics

Definition:

Potential years of life lost (PYLL) for all circulatory disease deaths (ICD–10 I00 to I99) and specific causes: ischemic heart disease (ICD–10 I20 to I25), cerebrovascular diseases (stroke) (ICD–10 I60 to I69) and all other circulatory diseases (ICD–10 I00 to I02, I05 to I09, I10 to I15, I26 to I28, I30 to I52, I70 to I79, I80 to I89, I95 to I99) is the number of years of life "lost" when a person dies "prematurely" from any circulatory disease – before age 75. A person dying at age 25, for example, has lost 50 years of life.

As a first step, the "years of life lost" are calculated for each person with a premature death from circulatory disease before age 75 (in any of the five years between 2004 and 2008), by taking the person's age at death and subtracting from 75. As a second step, the "ratio of life lost" is calculated by summing the total years of life lost for all premature deaths from circulatory disease and dividing this number by the total population (based on 2006 census data) with age below 75. As a final step, this ratio is multiplied by 10,000 and divided by five (5) to present the potential years of life lost as a five-year average rate per 10,000 population.

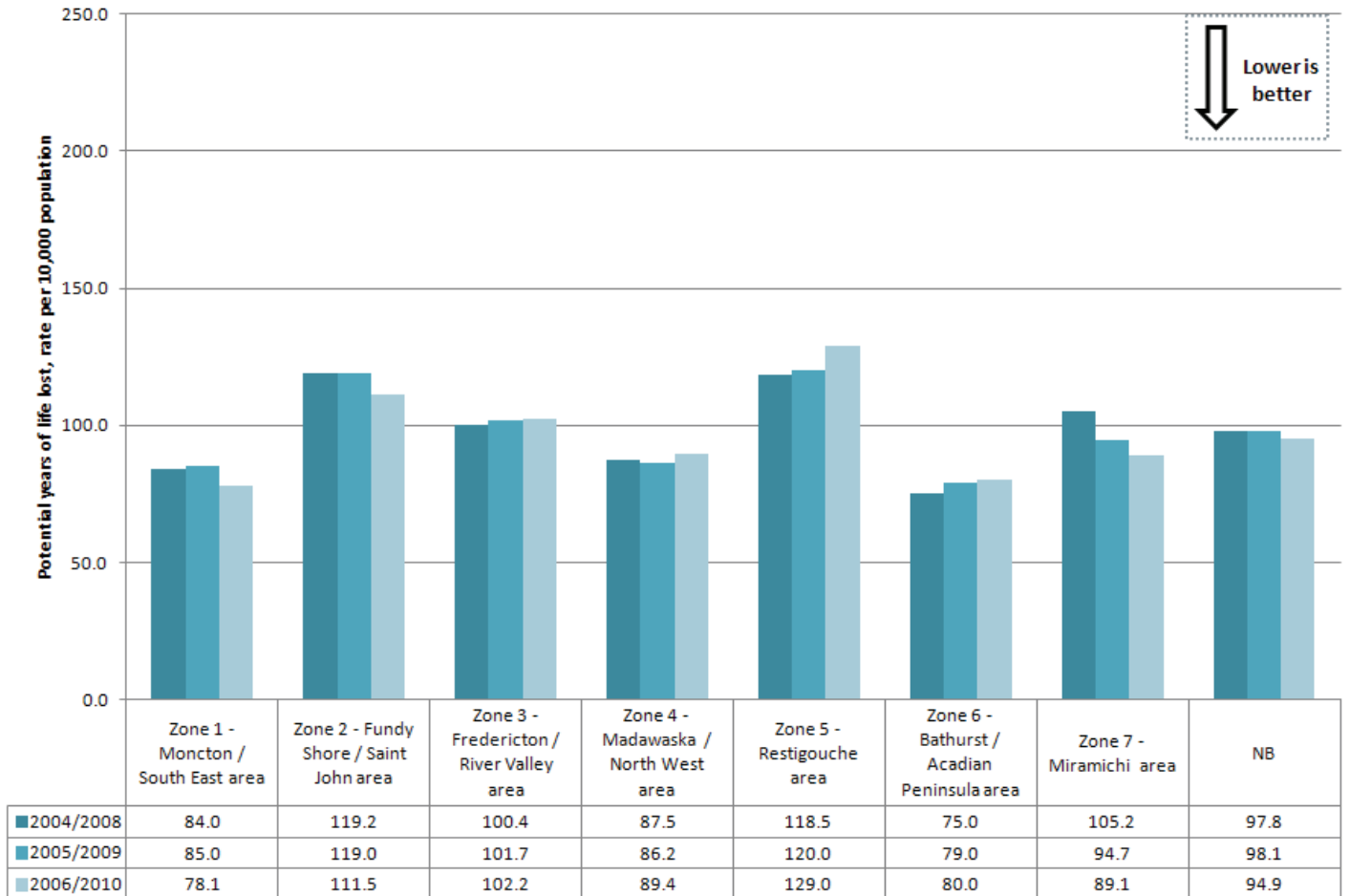
Why is this indicator important?

This indicator gives greater weight to causes of death occurring at a younger age than to those at later ages. By emphasizing the loss of life at an early age, *PYLL focuses on the need to deal with the major causes of early deaths of cardiovascular disease.*

Special Note: Indicator was calculated with the New Brunswick Data only and therefore cannot be compared nationally at the moment.

Premature death from hearth and stroke

(Potential Years of Life Lost - circulatory diseases)



Actual indicator: Potential years of life lost – all neoplasm (cancers)

Source: New Brunswick Vital Statistics

Definition:

Potential years of life lost (PYLL) for all malignant neoplasm (ICD–10 C00 to C97) and for specific sites: colorectal (ICD–10 C18 to C21), lung (ICD–10 C33 to C34), female breast cancer (ICD–10 C50), and prostate cancer (ICD–10 C61) is the number of years of life "lost" when a person dies "prematurely" from any cancer – before age 75. A person dying at age 25, for example, has lost 50 years of life.

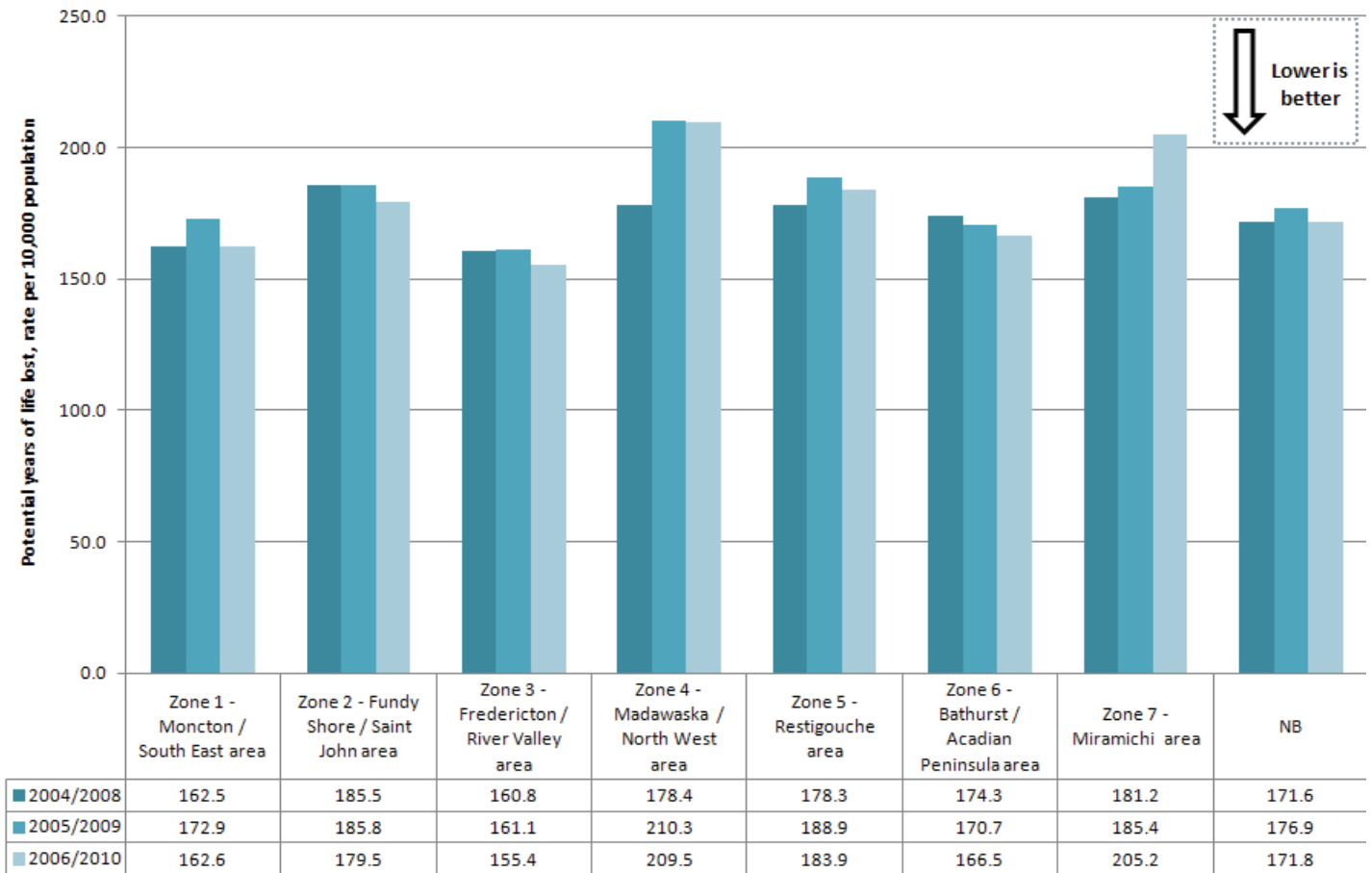
As a first step, the "years of life lost" are calculated for each person with a premature death from cancer before age 75 (in any of the five years between 2004 and 2008), by taking the person's age at death and subtracting from 75. As a second step, the "ratio of life lost" is calculated by summing the total years of life lost for all premature deaths from cancer and dividing this number by the total population (based on 2006 census data) with age below 75. As a final step, this ratio is multiplied by 10,000 and divided by five (5) to present the potential years of life lost as a five-year average rate per 10,000 population.

Why is this indicator important?

This indicator gives greater weight to causes of death occurring at a younger age than to those at later ages. By emphasizing the loss of life at an early age, *PYLL focuses on the need to deal with the major causes of early deaths of cancer.*

Special Note: Indicator was calculated with the New Brunswick Data only and therefore cannot be compared nationally at the moment.

Premature death from cancer
(Potential Years of Life Lost - all neoplasm (cancers))



Actual indicator: Potential years of life lost – Respiratory diseases

Source: New Brunswick Vital Statistics

Definition:

Potential years of life lost (PYLL) for all respiratory disease deaths (ICD–10 J00 to J99) and for specific causes: pneumonia and influenza (ICD–10 J10 to J18), bronchitis/emphysema/asthma (ICD–10 J40 to J43, J45 to J46) and all other respiratory diseases (ICD–10 J00 to J06, J20 to J22, J30 to J39, J44, J47, J60 to J70, J80 to J84, J85 to J86, J90 to J94, J95 to J99) is the number of years of life "lost" when a person dies "prematurely" from any respiratory disease – before age 75. A person dying at age 25, for example, has lost 50 years of life.

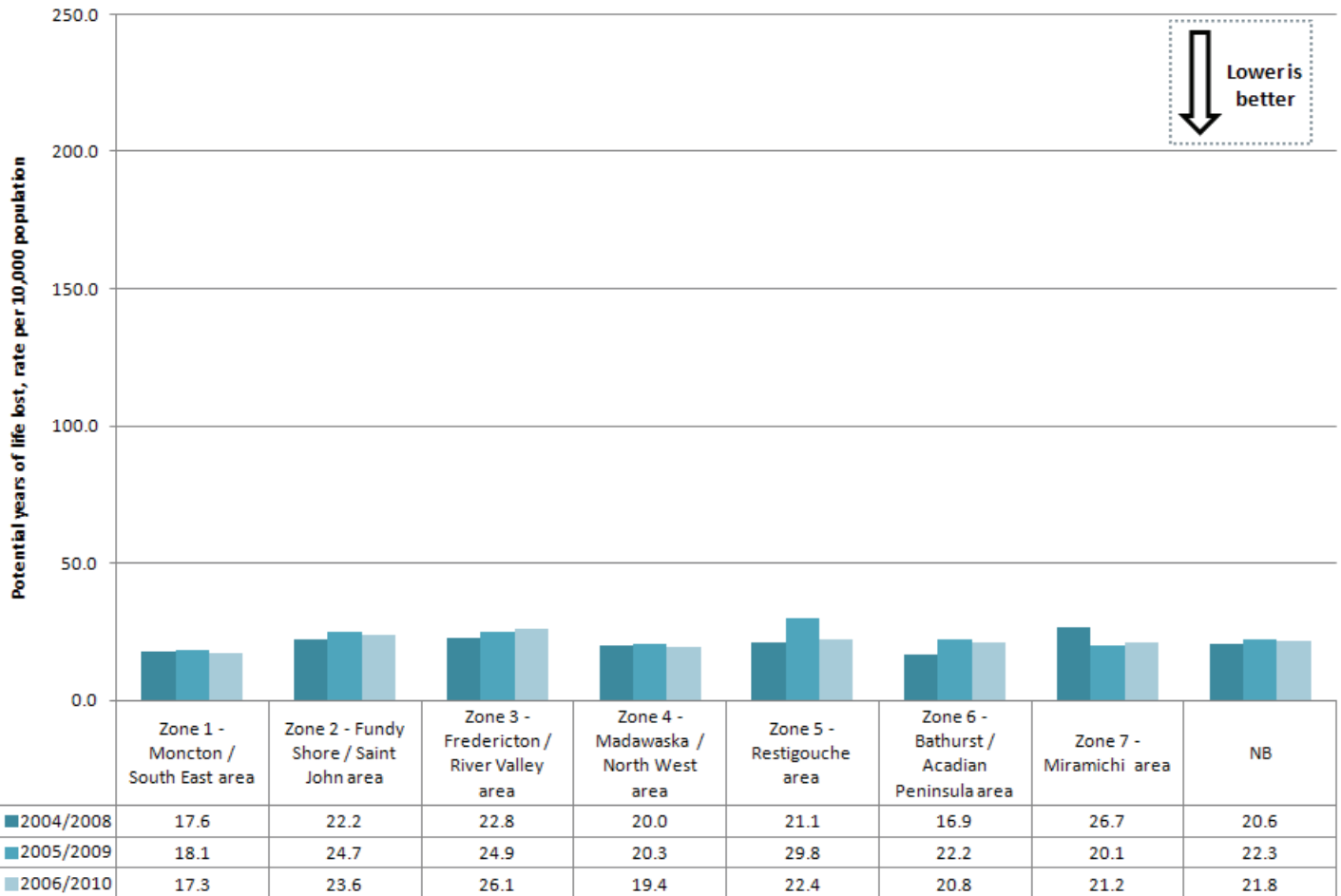
As a first step, the “years of life lost” are calculated for each person with a premature death from respiratory disease before age 75 (in any of the five years between 2004 and 2008), by taking the person’s age at death and subtracting from 75. As a second step, the “ratio of life lost” is calculated by summing the total years of life lost for all premature deaths from respiratory disease and dividing this number by the total population (based on 2006 census data) with age below 75. As a final step, this ratio is multiplied by 10,000 and divided by five (5) to present the potential years of life lost as a five-year average rate per 10,000 population.

Why is this indicator important?

This indicator gives greater weight to causes of death occurring at a younger age than to those at later ages. By emphasizing the loss of life at an early age, *PYLL focuses on the need to deal with the major causes of early deaths of breathing diseases.*

Special Note: Indicator was calculated with the New Brunswick Data only and therefore cannot be compared nationally at the moment.

Premature death breathing disease
(Potential Years of Life Lost - respiratory diseases)



Actual indicator: Potential years of life lost - Unintentional injuries

Source: New Brunswick Vital Statistics

Definition:

Potential years of life lost (PYLL) for unintentional injuries (ICD-10 V01 to X59, Y85 to Y86) is the number of years of life "lost" when a person dies "prematurely" from unintentional injuries – before age 75. A person dying at age 25, for example, has lost 50 years of life.

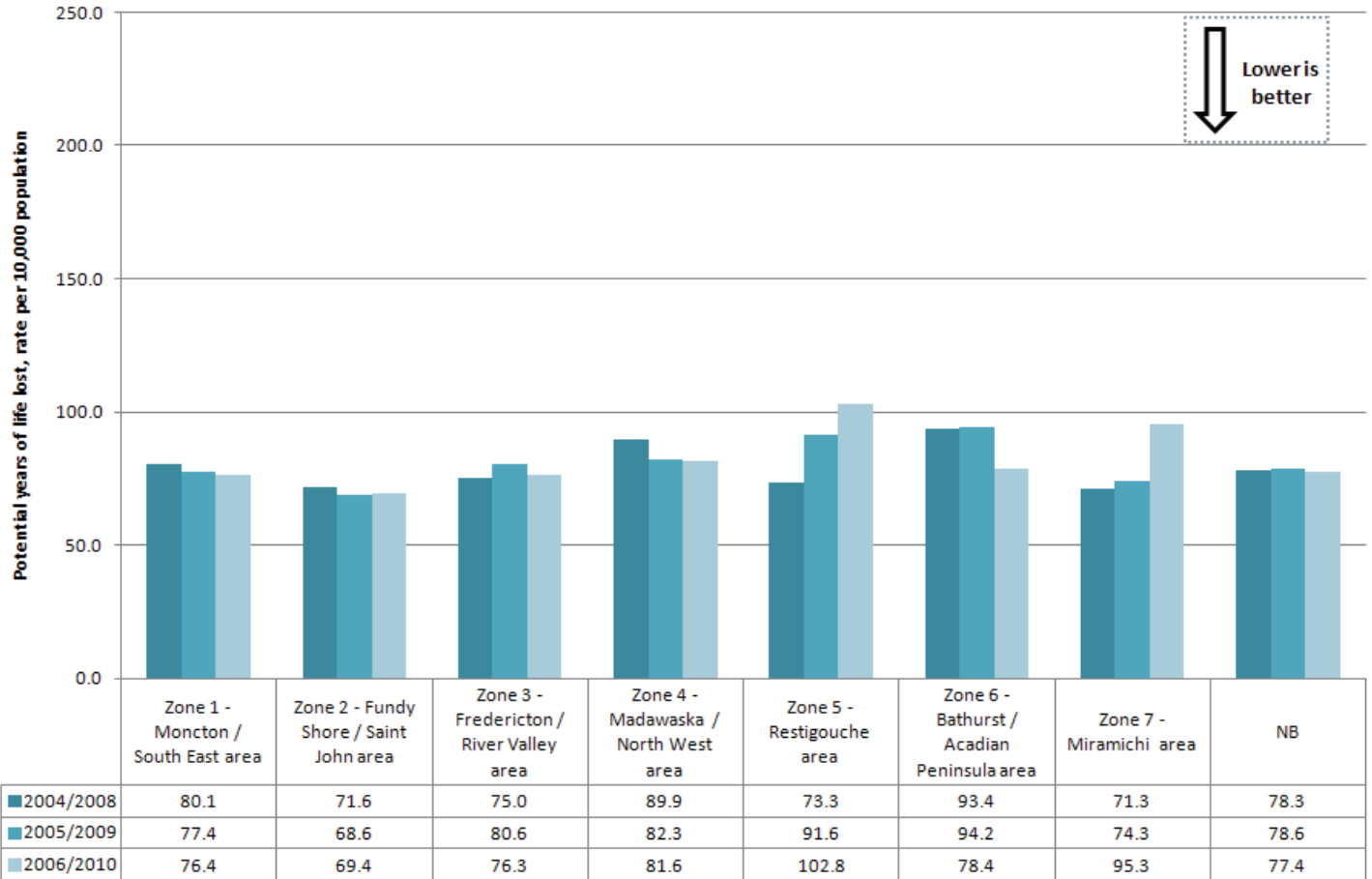
As a first step, the “years of life lost” are calculated for each person with a premature death from unintentional injuries before age 75 (in any of the five years between 2004 and 2008), by taking the person’s age at death and subtracting from 75. As a second step, the “ratio of life lost” is calculated by summing the total years of life lost for all premature deaths from unintentional injuries and dividing this number by the total population (based on 2006 census data) with age below 75. As a final step, this ratio is multiplied by 10,000 and divided by five (5) to present the potential years of life lost as a five-year average rate per 10,000 population.

Why is this indicator important?

This indicator gives greater weight to causes of death occurring at a younger age than to those at later ages. By emphasizing the loss of life at an early age, *PYLL focuses on the need to deal with the major causes of early deaths from injuries.*

Special Note: Indicator was calculated with the New Brunswick Data only and therefore cannot be compared nationally at the moment

Premature death from injuries
(Potential Years of Life Lost - unintentional injuries)



Actual indicator: Potential years of life lost - Suicides and self-inflicted injuries

Source: New Brunswick Vital Statistics

Definition:

Potential years of life lost (PYLL) for suicide and self-inflicted injuries (ICD–10 X60 to X84, Y870) is the number of years of life "lost" when a person dies "prematurely" from suicide – before age 75. A person dying at age 25, for example, has lost 50 years of life.

As a first step, the “years of life lost” are calculated for each person with a premature death from suicide and self-inflicted injuries before age 75 (in any of the five years between 2004 and 2008), by taking the person’s age at death and subtracting from 75. As a second step, the “ratio of life lost” is calculated by summing the total years of life lost for all premature deaths from suicide and self-inflicted injuries and dividing this number by the total population (based on 2006 census data) with age below 75. As a final step, this ratio is multiplied by 10,000 and divided by five (5) to present the potential years of life lost as a five-year average rate per 10,000 population.

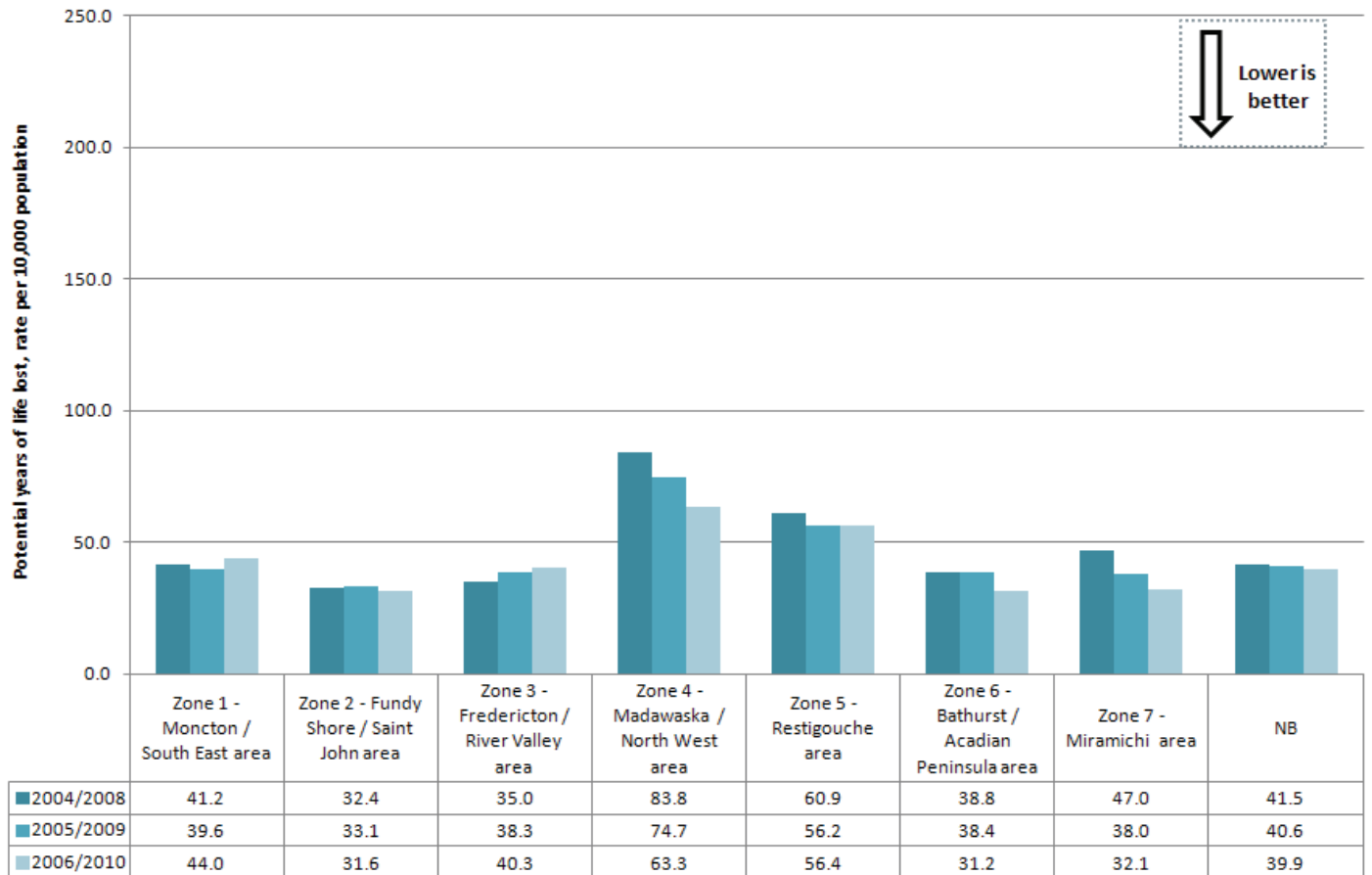
The term ‘self-inflicted injuries’ refers to suicidal and non-suicidal behaviors such as self-mutilation.

Why is this indicator important?

This indicator gives greater weight to causes of death occurring at a younger age than to those at later ages. By emphasizing the loss of life at an early age, *PYLL focuses on the need to deal with the major causes of early deaths from suicides / self-inflicted injuries.*

Special Note: Indicator was calculated with the New Brunswick Data only and therefore cannot be compared nationally at the moment

Premature death from suicides/self-inflicted injuries
(Potential Years of Life Lost - suicides and self-inflicted injuries)





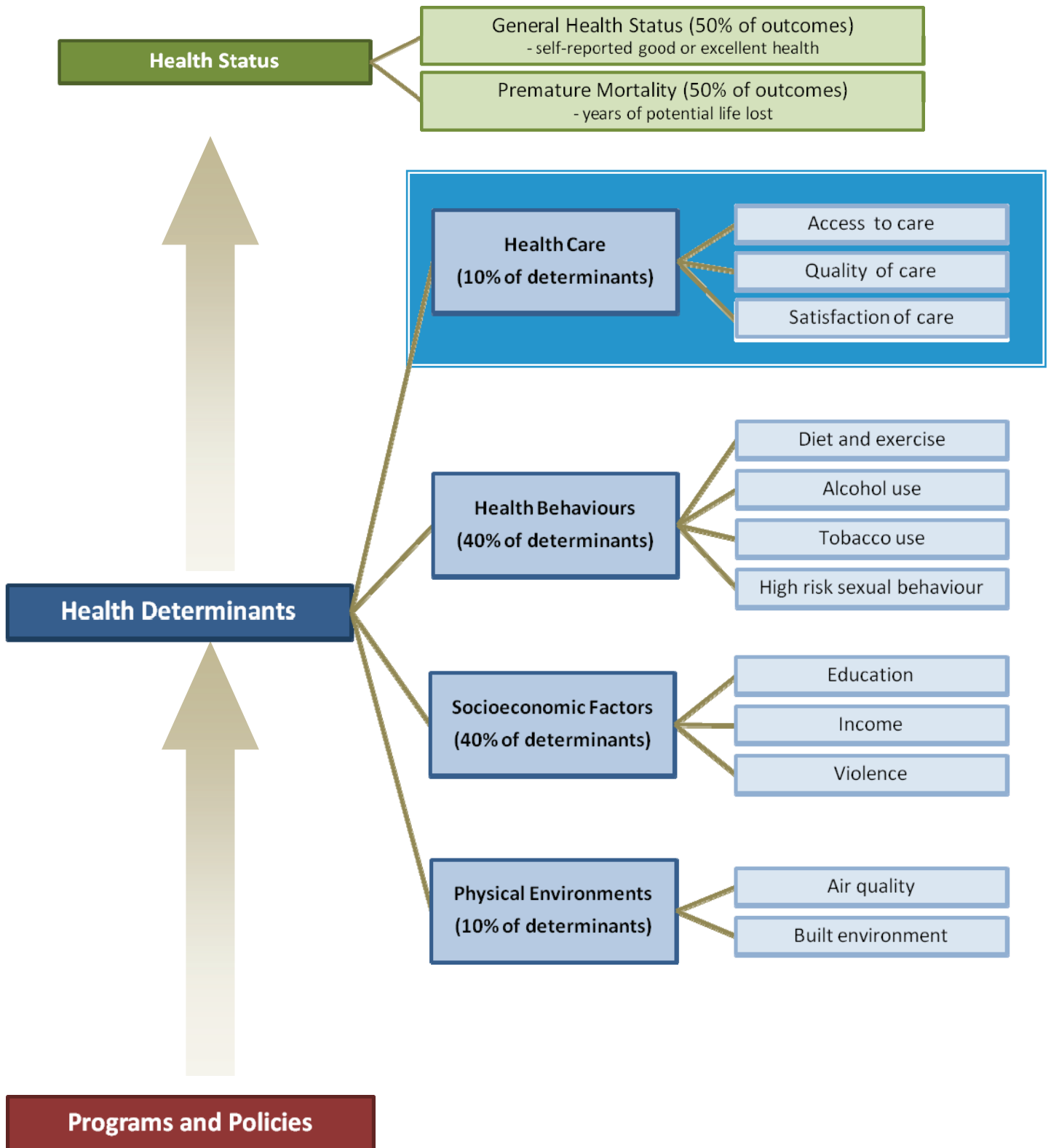
Section 2 — Health Determinants

**Health Care:
accounts for 10% of the health
status**

Everyone will be utilizing health care services
at some point in their life,
and some, more than others.

It is a factor that can't be ignored in our quest
for health and well being.

If you have good quality health services
when you require them,
it can have a profound impact on your health,
and quality of life.



Actual indicator: Regular medical doctor

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

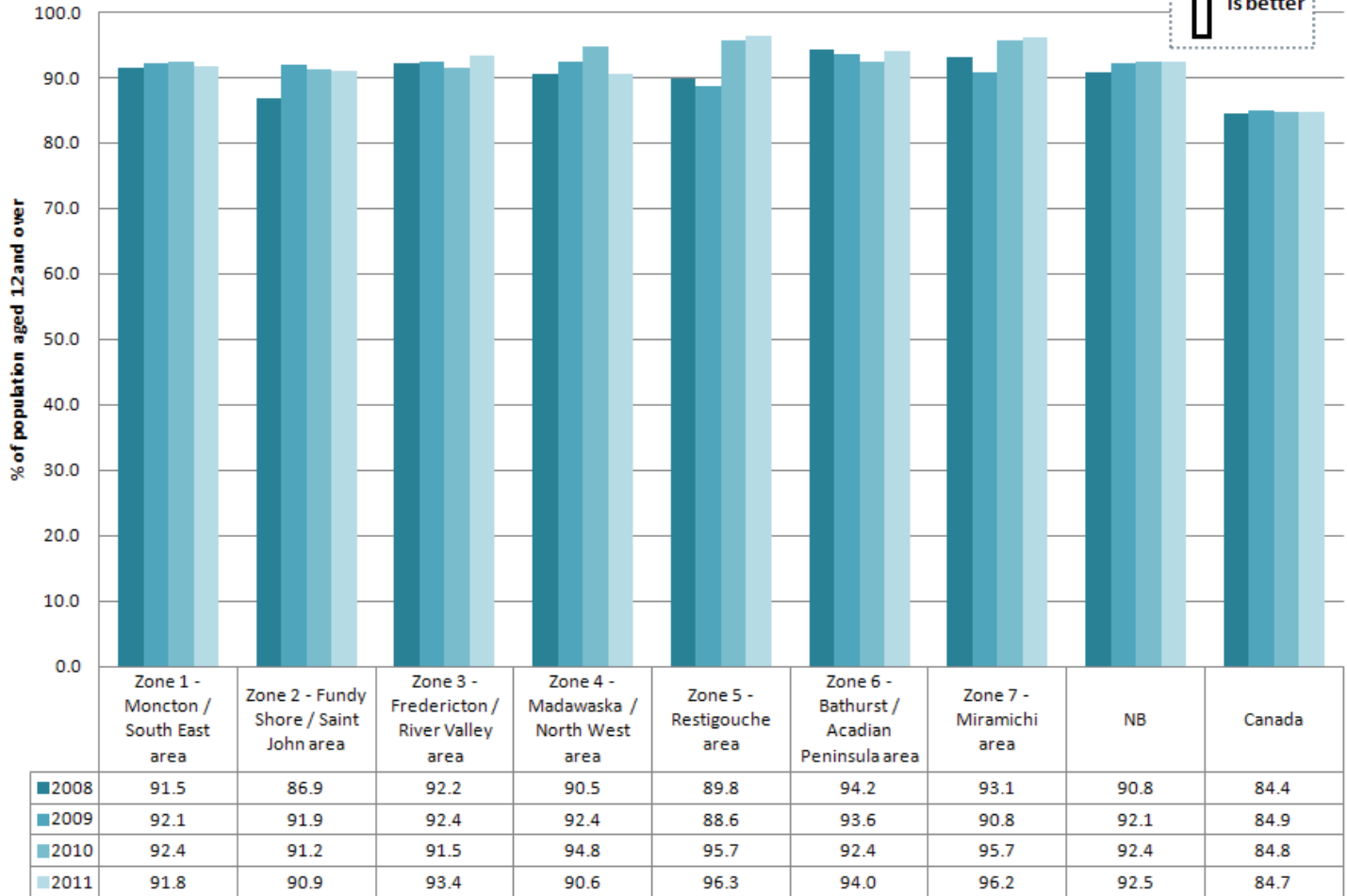
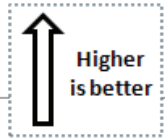
Population aged 12 and over who reported that they have a regular medical doctor, which includes family doctors/general practitioners, who provide primary medical care and are seen for routine procedures, annual exams, blood tests, or flu shots, but also includes specialists.

Why is this indicator important?

Canadians without a regular physician are more than twice as likely to report *difficulties in accessing routine* and *preventative services*. For example, women with little or no medical care were less likely to have had a mammogram within two years or to have ever had a pap smear, placing them at greater risk for breast and cervical cancer.



Has a regular medical doctor (Regular medical doctor)



Actual indicator: Contact with a medical doctor in the past 12 months

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

Population aged 12 and over who reported having consulted with a medical doctor in the past 12 months.

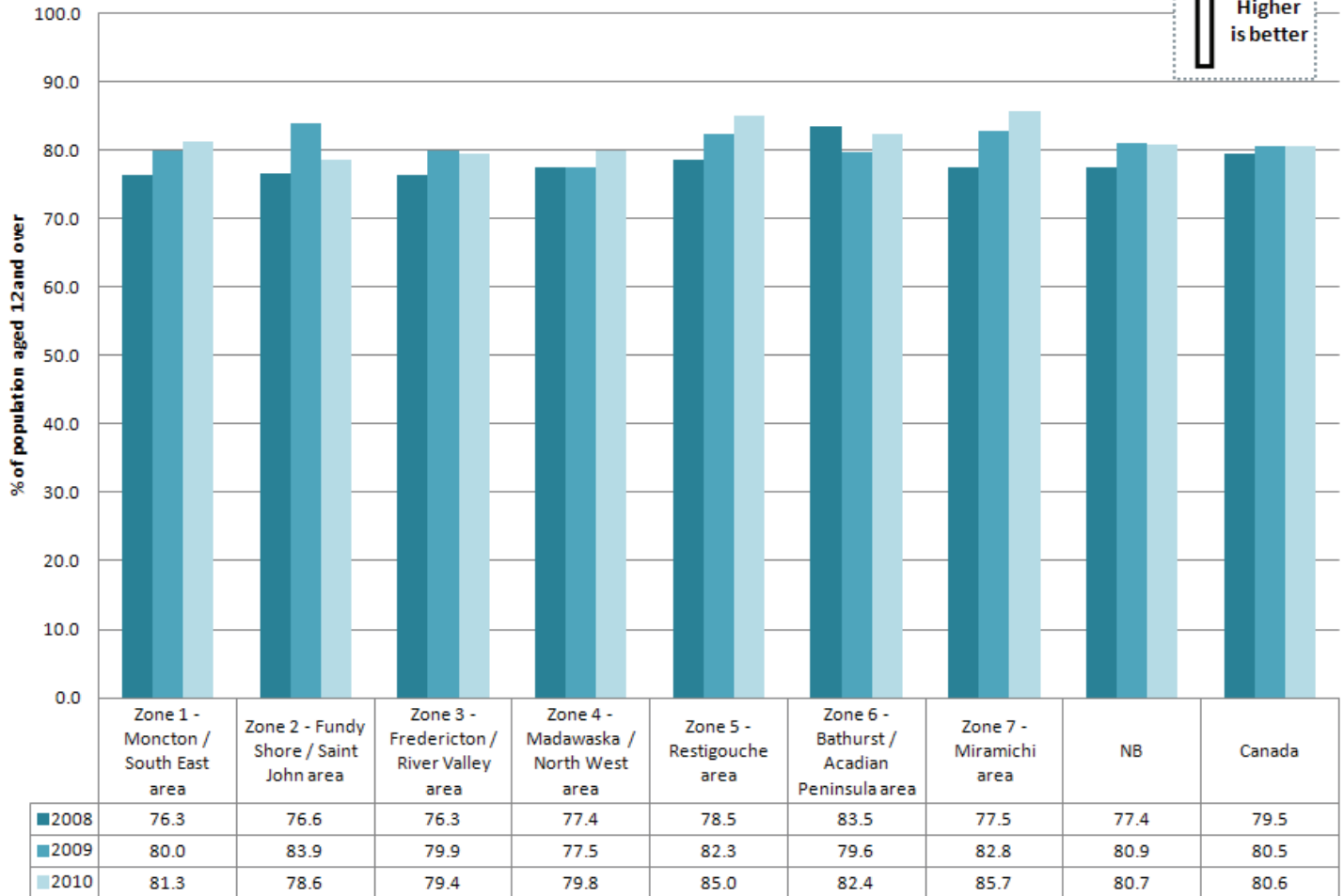
Medical doctor includes family or general practitioners as well as specialists such as surgeons, allergists, orthopedists, gynecologists or psychiatrists. For population aged 12 to 17 includes pediatricians.

Why is this indicator important?

An annual evaluation of a person's health status, which includes a physical exam, and routine screening tests, can work towards *ensuring continued health*, or *identify early and often treatable stages of a disease*.



Medical doctor visit within the last year (Contact with a medical doctor in the past 12 months)



Actual indicator: Contact with dental professionals in the past 12 months

Source: The New Brunswick Department of Health

Definition:

Population aged 12 and over who have consulted with a dental professional in the past 12 months.

Dental professionals include dentists or orthodontists.

Why is this indicator important?

Poor oral health can affect a person's quality of life. Oral pain, missing teeth or oral infections can influence the way a person speaks, eats and socializes. Some of the main problems can be dental decay in childhood, oral disorders, malnutrition and involuntary weight loss in the elderly, oral cancer, oral health and quality of life.

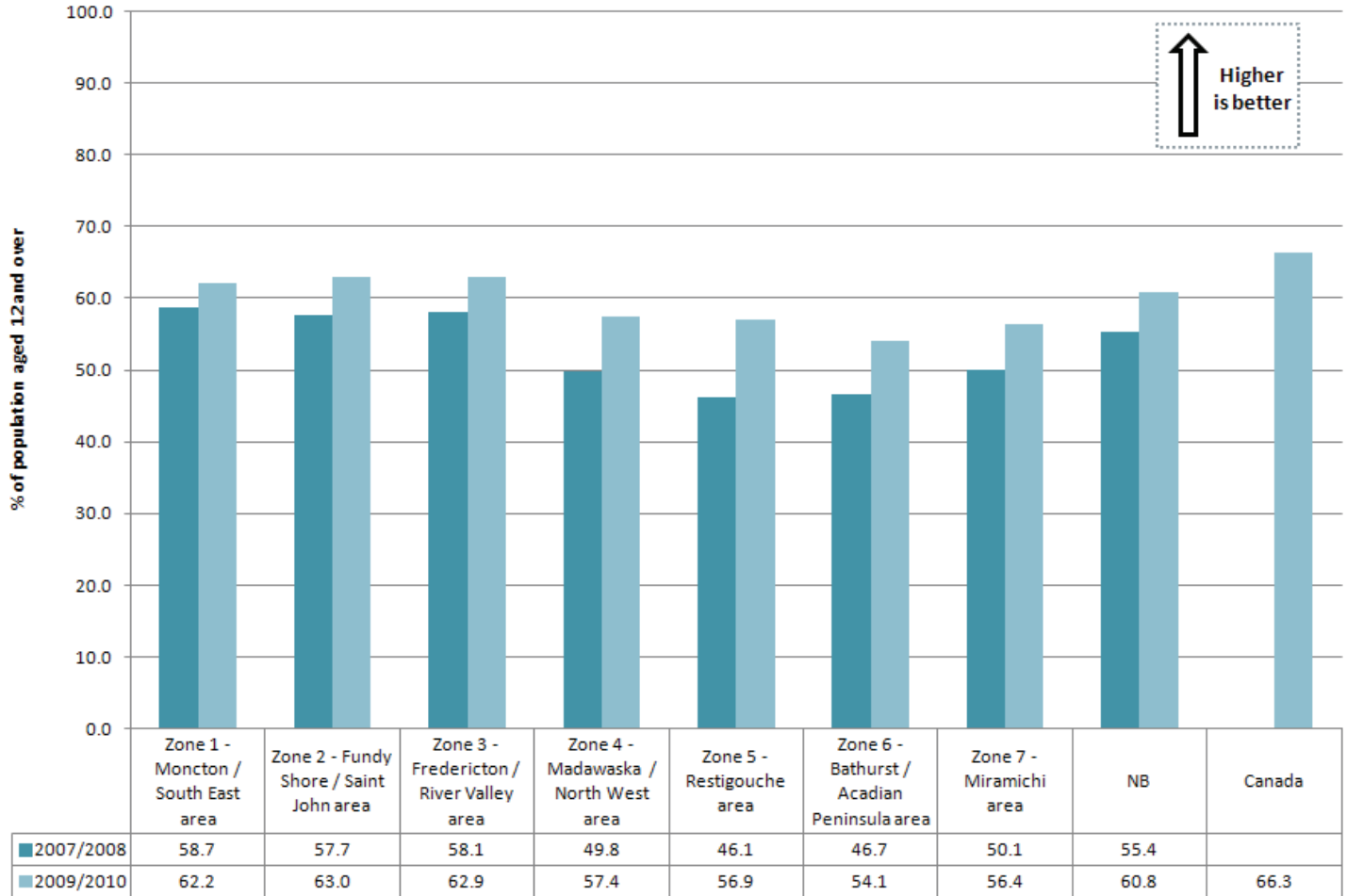
These oral health problems can reduce a person's quality of life by affecting their physical, mental and social well-being.

Proper oral health (or inappropriate oral health) can also show inequities and inequalities in oral health due to income, dental insurance coverage and access to dental care which can be some of the factors that affect oral health outcomes.

Everything that happens in your mouth affects your whole body, which is why it is so important to visit your dentist regularly.



Dental professional visit within the last year (Contact with dental professionals in the past 12 months)



Actual indicator: Ambulatory care sensitive conditions (ACSC)

Source: Hospital Morbidity Database and Discharge Abstract Database, Canadian Institute for Health Information.

Definition:

Age-standardized acute care hospitalization rate for conditions where appropriate ambulatory care prevents or reduces the need for hospitalization, per 100,000 populations younger than age 75. Hospitalizations for ambulatory care sensitive conditions are considered to be an indirect measure of access to appropriate primary health care. The conditions included in this indicator are angina, asthma, chronic obstructive pulmonary disease (COPD), diabetes, grand mal status and other epileptic convulsions, heart failure and pulmonary edema and hypertension.

Why is this indicator important?

While not all admissions for these conditions are avoidable, appropriate primary care could potentially prevent or reduce the onset of this type of illness or condition, control an acute episodic illness or help manage a chronic disease of condition.

Accessible and well-functioning primary health care service play an instrumental role in the management of chronic conditions, and factors such as access to services and quality care may be related to hospitalization rate for ACSC. There is some evidence that show residents of communities reporting 'poor' access to health care were found to have a higher ACSC hospitalization rate.

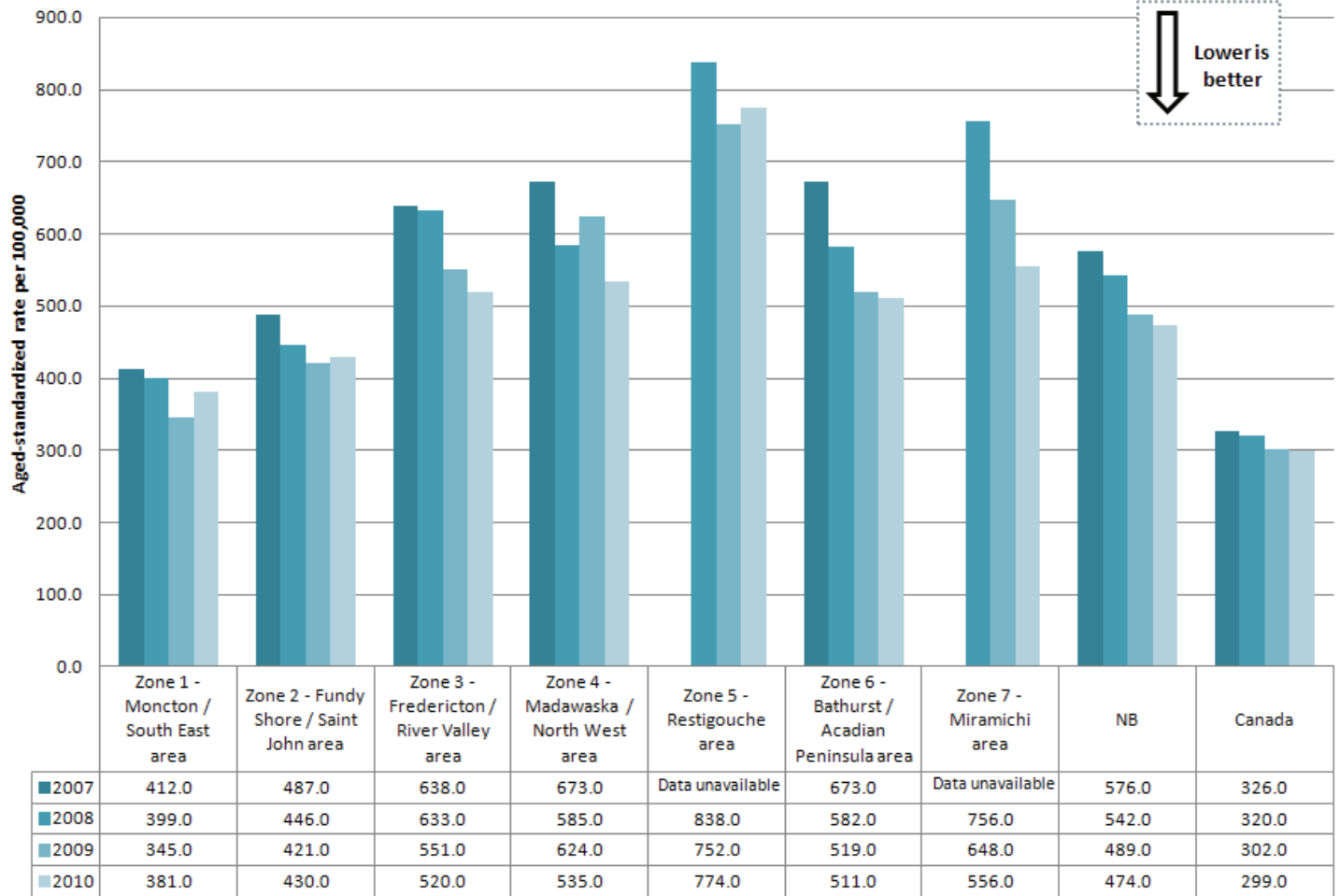
Limitations:

It is important to note that although ACSC hospitalizations are associated with primary health care, they may also be influenced by other factors. These include the severity of a patient's condition, the number of comorbidities present, the socio-economic status, the prevalence of the chronic condition in the community and the health system characteristics (such as admission practice and/or transfers between facilities) to name a few.



People being hospitalized for unnecessary conditions

(Ambulatory cases sensitive conditions (ACSC))



Actual indicator: Influenza immunization, less than one year ago, 65 years and over

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

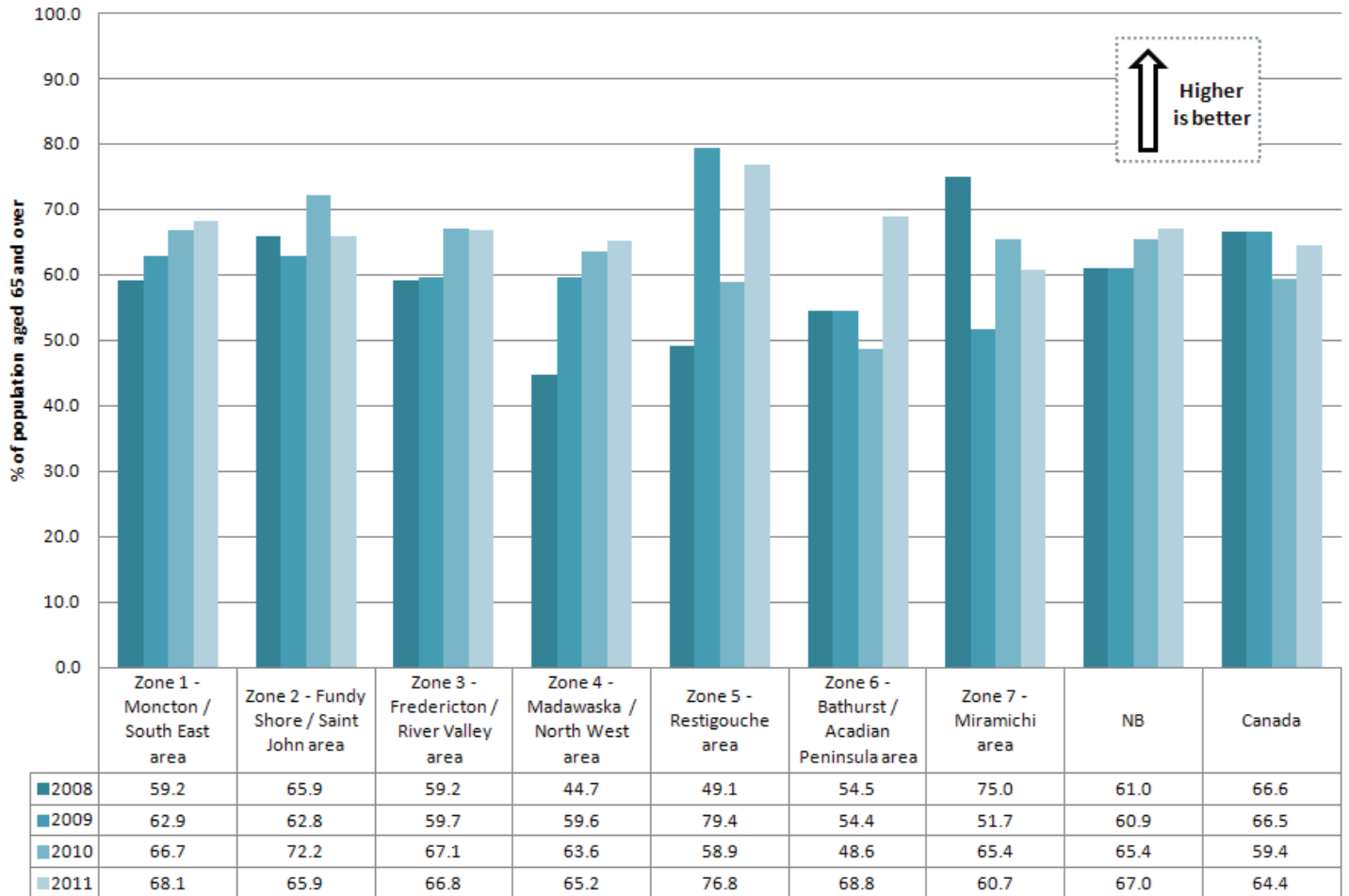


Population aged 65 and over who reported when they had their last influenza immunization (flu shot).

Why is this indicator important?

It has been recognized for many years that *older people are at greater risk of serious complications from the flu* because the human immune defenses become weaker with age. Influenza can be a very serious disease for people 65 and over.

Adults 65 years and up who have received the flu shot in the last year
(Influenza immunization, less than one year ago, 65 years and over)



Actual indicator: Pap smear within the last 3 years, by age group, females aged 18 to 69 years

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0442 and the New Brunswick Department of Health

Definition:

Women aged 18 to 69 who reported when they had their last Pap smear test.

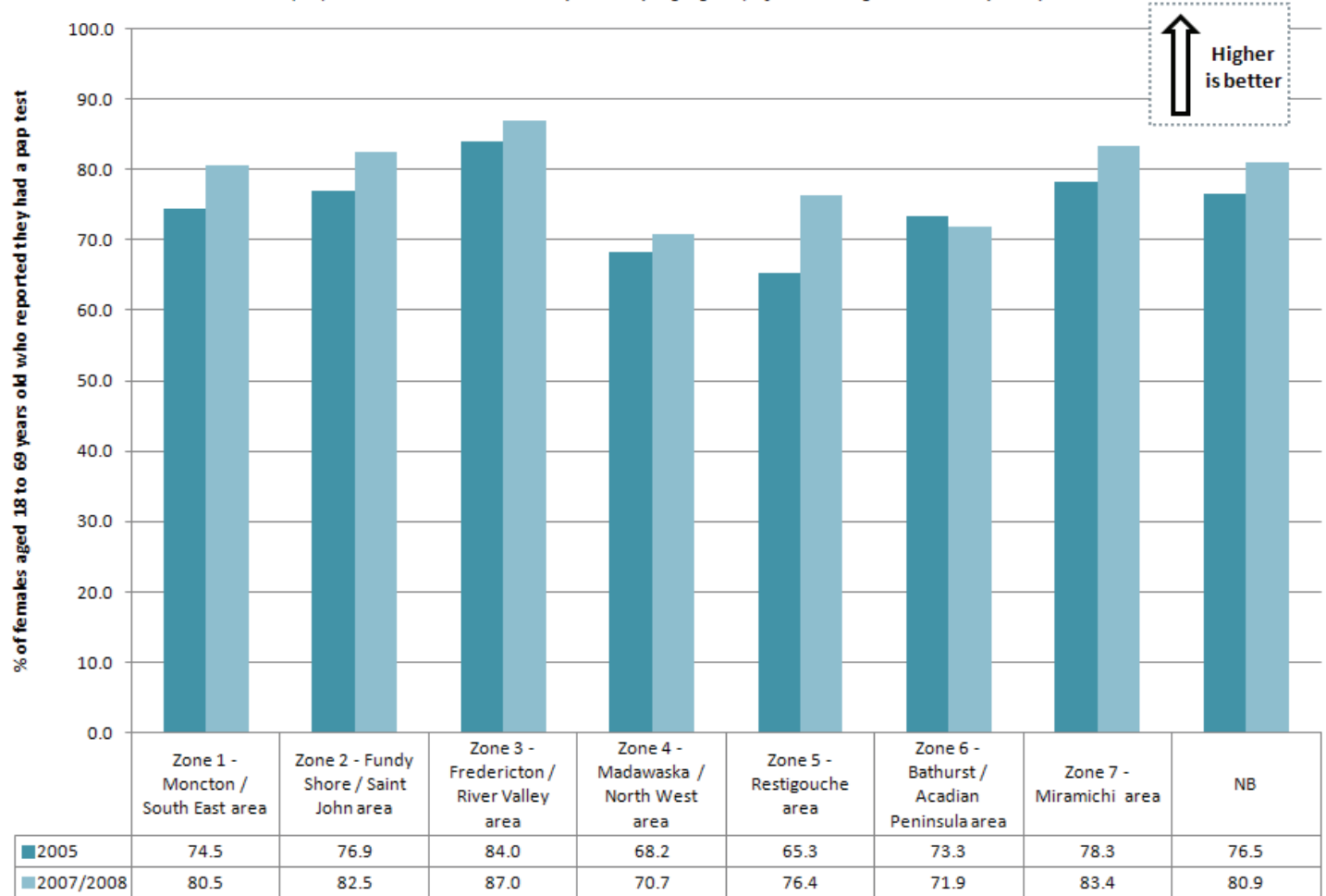
Why is this indicator important?

It can find the earliest signs of cervical cancer. If caught early, the chance of curing cervical cancer is very high. Pap tests can also find infections and abnormal cervical cells that can turn into cancer cells. Treatment can prevent most cases of cervical cancer from developing.

Getting regular Pap tests is the best thing you can do to prevent cervical cancer. In fact, regular Pap tests have led to a major decline in the number of cervical cancer cases and deaths. Women between the ages of 18 and 69 are recommended to have a pap smear at least once every three years based on personal risk factors and the advice of their health care provider.

Females (18 to 69 years old) who had a pap test within the last 3 years

(Pap smear within the last 3 years, by age group, females aged 18 to 69 years)



Actual indicator: Received mammogram within the last 2 years, females aged 50 to 69 years

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0543 and the New Brunswick Department of Health

Definition:

Women aged 50 to 69 who reported when they had their last mammogram for routine screening or other reasons.

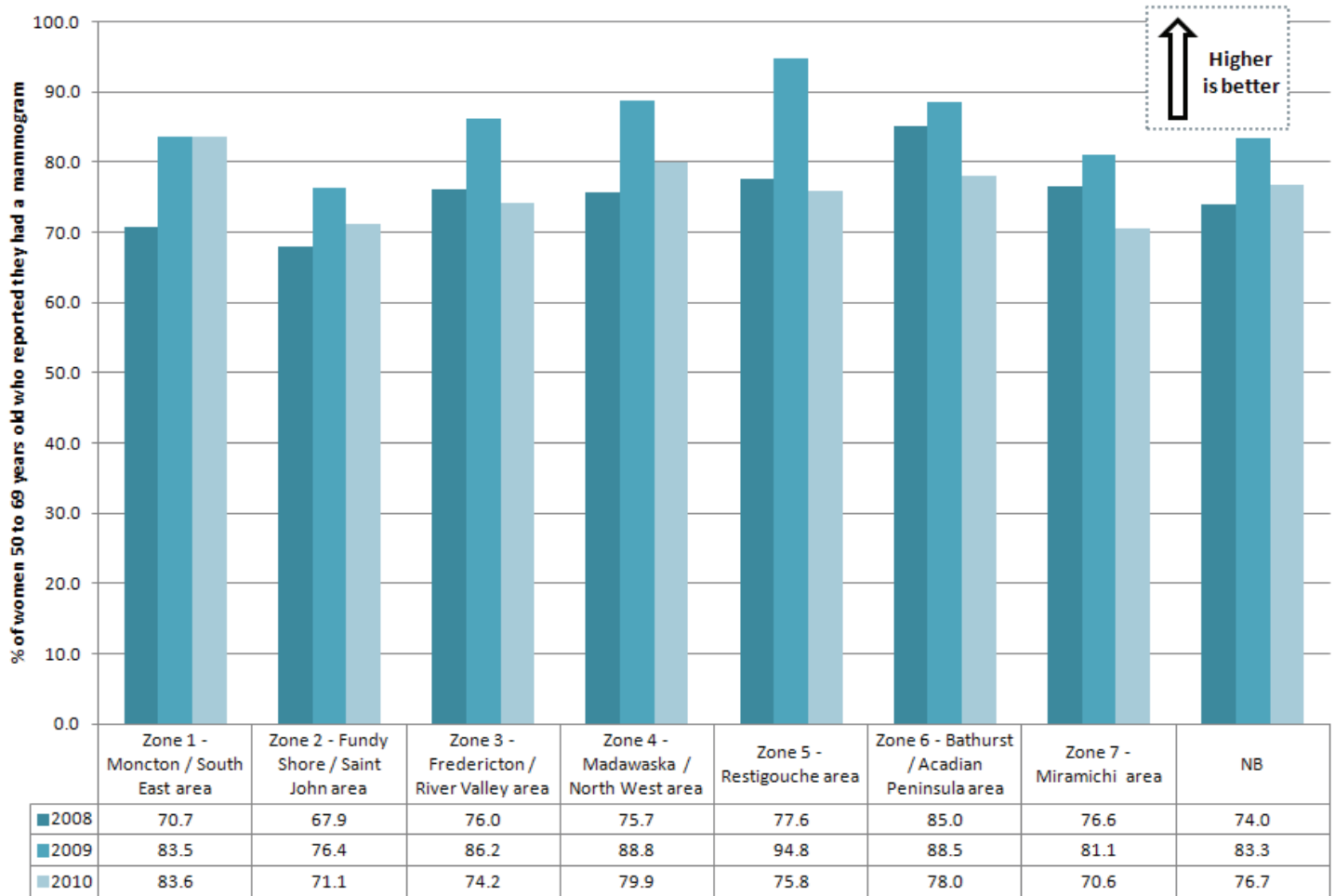
Why is this indicator important?

Screening mammography is an important strategy for early detection of breast cancer.

Screening mammography can find breast cancer not detected through breast examinations, which makes this an important screening tool to reduce breast cancer mortality. Women between the ages of 50 and 69 are recommended to have a screening mammography at least once every two years based on personal risk factors and the advice of their health care provider. Specifically, mammography screening reduces breast cancer mortality by 30% in women aged 50-69.

Females (50 to 69 years old) who had a mammogram in the last 2 years

(Received mammogram within the last 2 years, females aged 50 to 69 years)



Actual indicator: Overall Hospital rating

Source: Acute care Survey Results of the Hospital Patient Care, 2010 Experience in New-Brunswick, New Brunswick Health Council

Definition:

This indicator measures patients' overall satisfaction with their hospital experience. A combination of factors such as access to care, the physical environment within the hospital, interactions with hospital staff and perceived outcomes of care can contribute to patients' overall perception of global satisfaction. Other factors, such as hospital's reputation in the community may also influence patients' overall hospital rating.



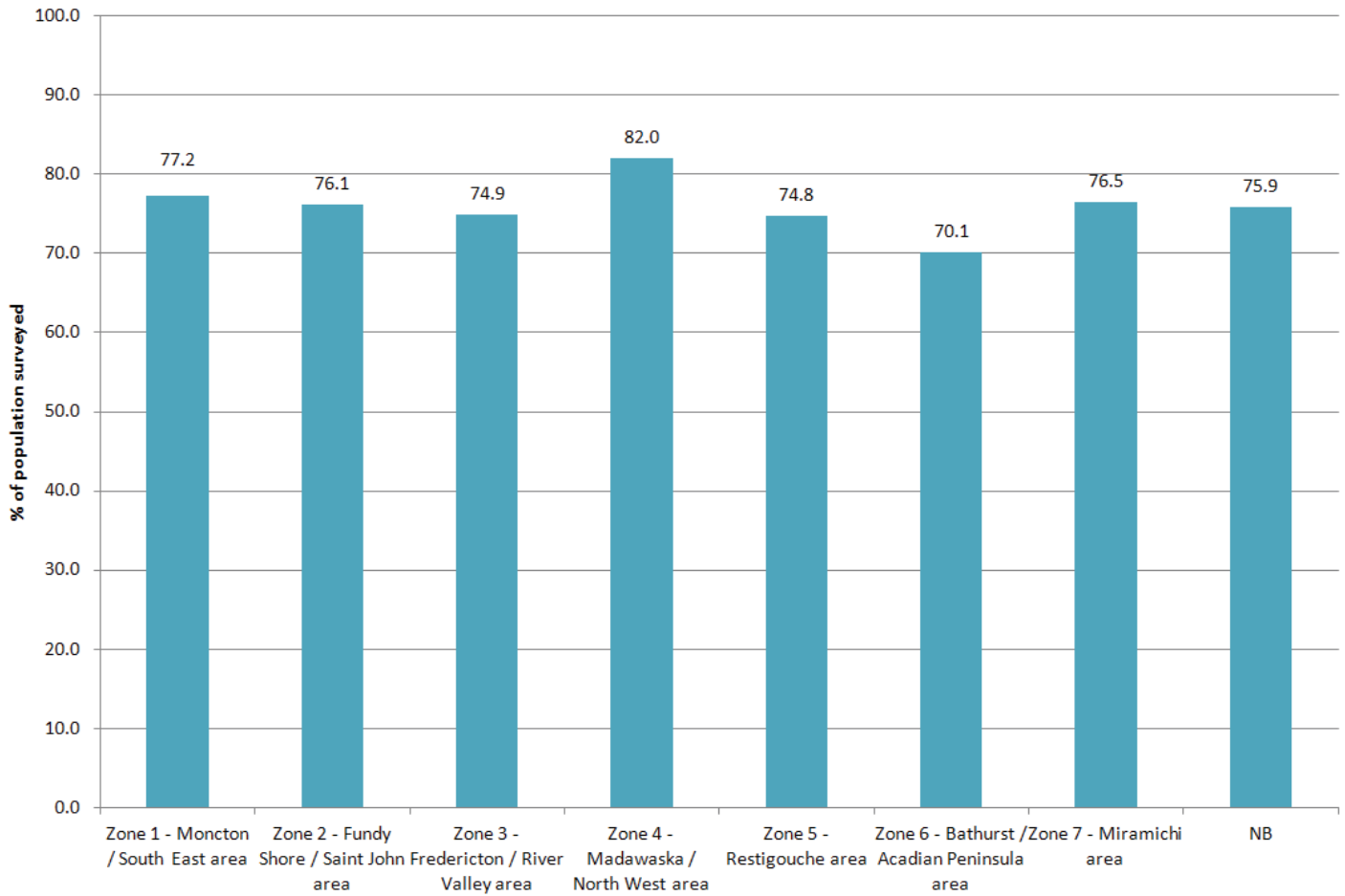
The indicator score is the percentage of patients who gave their hospital a rating of “8”, “9” or “10” on a scale from “0” (Worst hospital possible) to “10” (Best hospital possible).

Why is this indicator important?

Patient-centeredness is an important element of health care quality. Any change in the health system is an improvement only if the patient thinks it is. *Patients bring a unique perspective to the health care system and their feedback can be a powerful force for positive change.* There is also compelling evidence in the medical literature suggesting that when patients are satisfied with their hospital care, they are more likely to follow prescribed treatments and have better health status.

Overall Hospital Rating - 2010

(Overall hospital rating)



Actual indicator: Global Satisfaction Ratings

Source: New Brunswickers' Experiences with Primary Health Care, 2011 Survey Results (NBHC 2011)

Definition:

The satisfaction score is an overall measure of experiences with primary health care services. In the NBHC 2011 Primary Health Care Survey, the satisfaction score is an overall score that combines responses to individual ratings of services received from/at the personal family doctor, nurse practitioner, hospital emergency department, specialist, after-hours or walk-in clinic, community health centre, Tele-Care, ambulance services, and alternative practitioner.

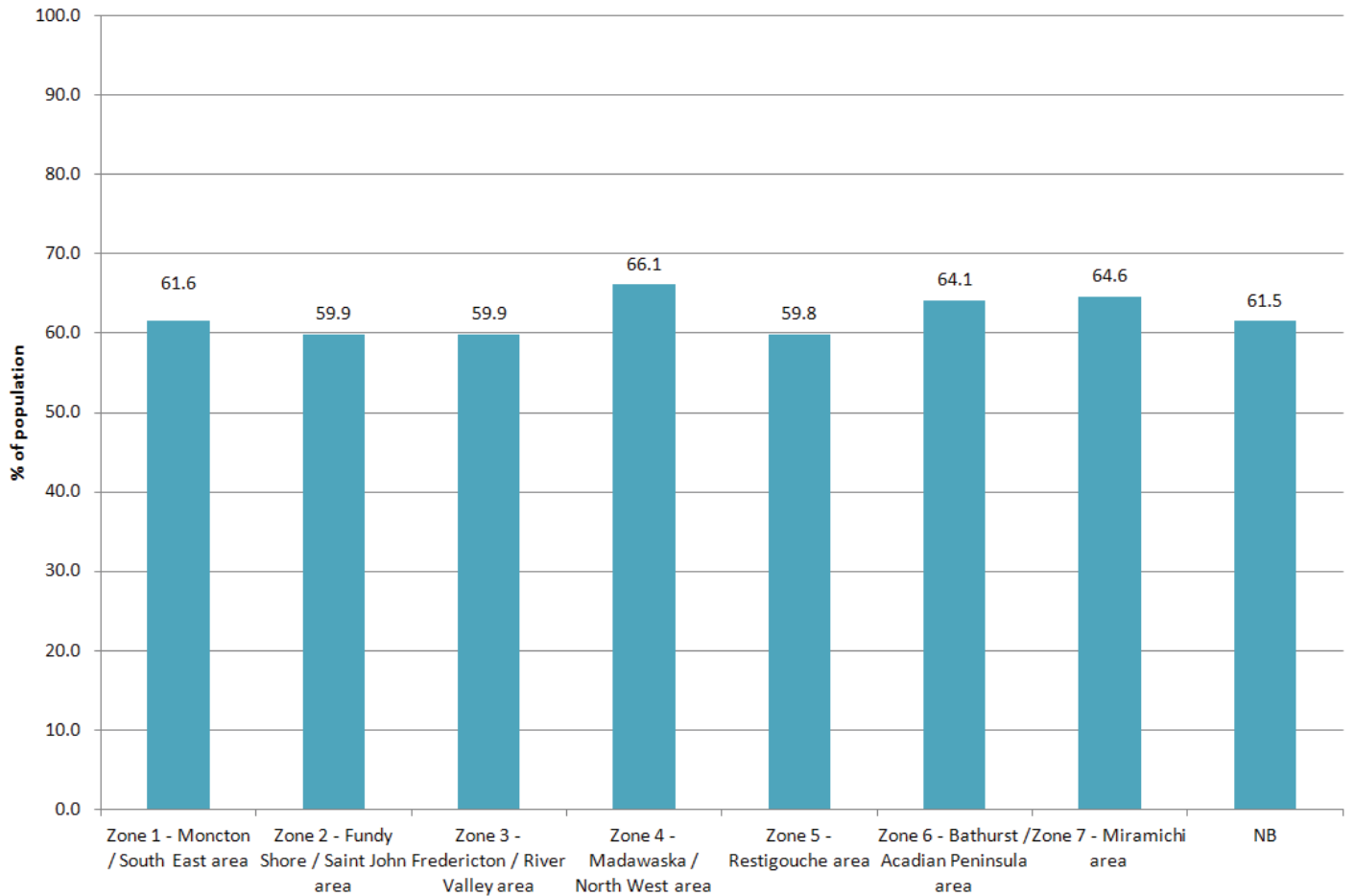


Why is this indicator important?

Patient-centeredness is an important element of health care quality. Any change in the health system is an improvement only if the patient thinks it is. *Patients bring a unique perspective to the health care system and their feedback can be a powerful force for positive change.* There is also compelling evidence in the medical literature suggesting that when patients are satisfied with their health care services, they are more likely to follow prescribed treatments and have better health status.

Overall health care services - 2011

(Global Satisfaction Ratings)



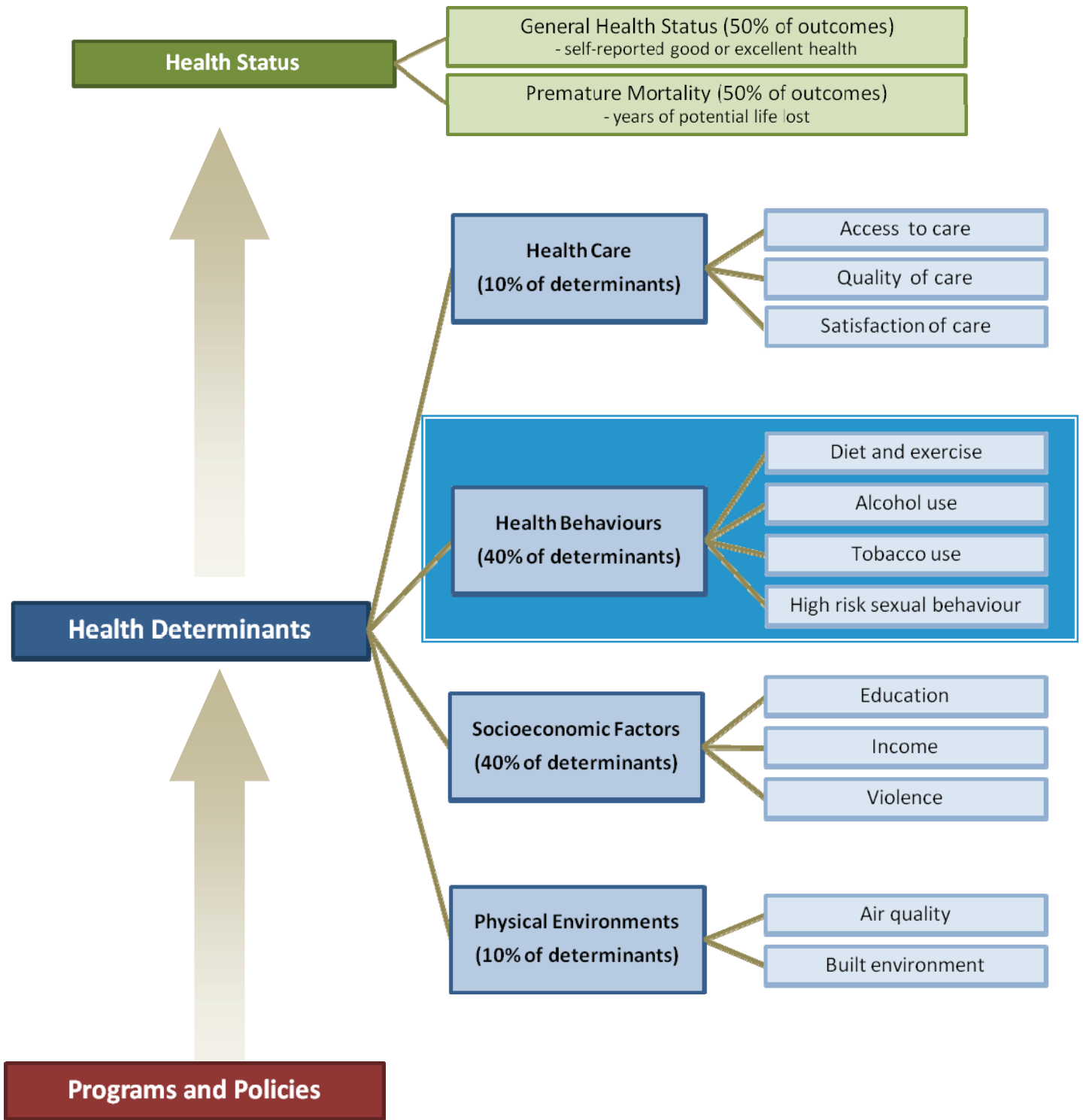


Section 3 — Health Determinants

**Health Behaviours:
accounts for 40% of the health status**

You can change your health by choosing
positive health behaviours in your life.





Actual indicator: Leisure-time physical activity, moderately active or active

Source: Statistics Canada, Canadian Community Health Survey,
CANSIM table no.: 105-0501

Definition:

Population aged 12 and over who reported a level of physical activity, based on their responses to questions about the nature, frequency and duration of their participation in leisure-time physical activity.

Respondents are classified as active, moderately active or inactive based on an index of average daily physical activity over the past three months. For each leisure time physical activity engaged in by the respondent, average daily energy expenditure is calculated by multiplying the number of times the activity was performed by the average duration of the activity by the energy cost (kilocalories per kilogram of body weight per hour) of the activity. The index is calculated as the sum of the average daily energy expenditures of all activities. Respondents are classified as follows: 3.0 kcal/kg/day or more = physically active; 1.5 to 2.9 kcal/kg/day = moderately active; less than 1.5 kcal/kg/day = inactive.

Why is this indicator important?

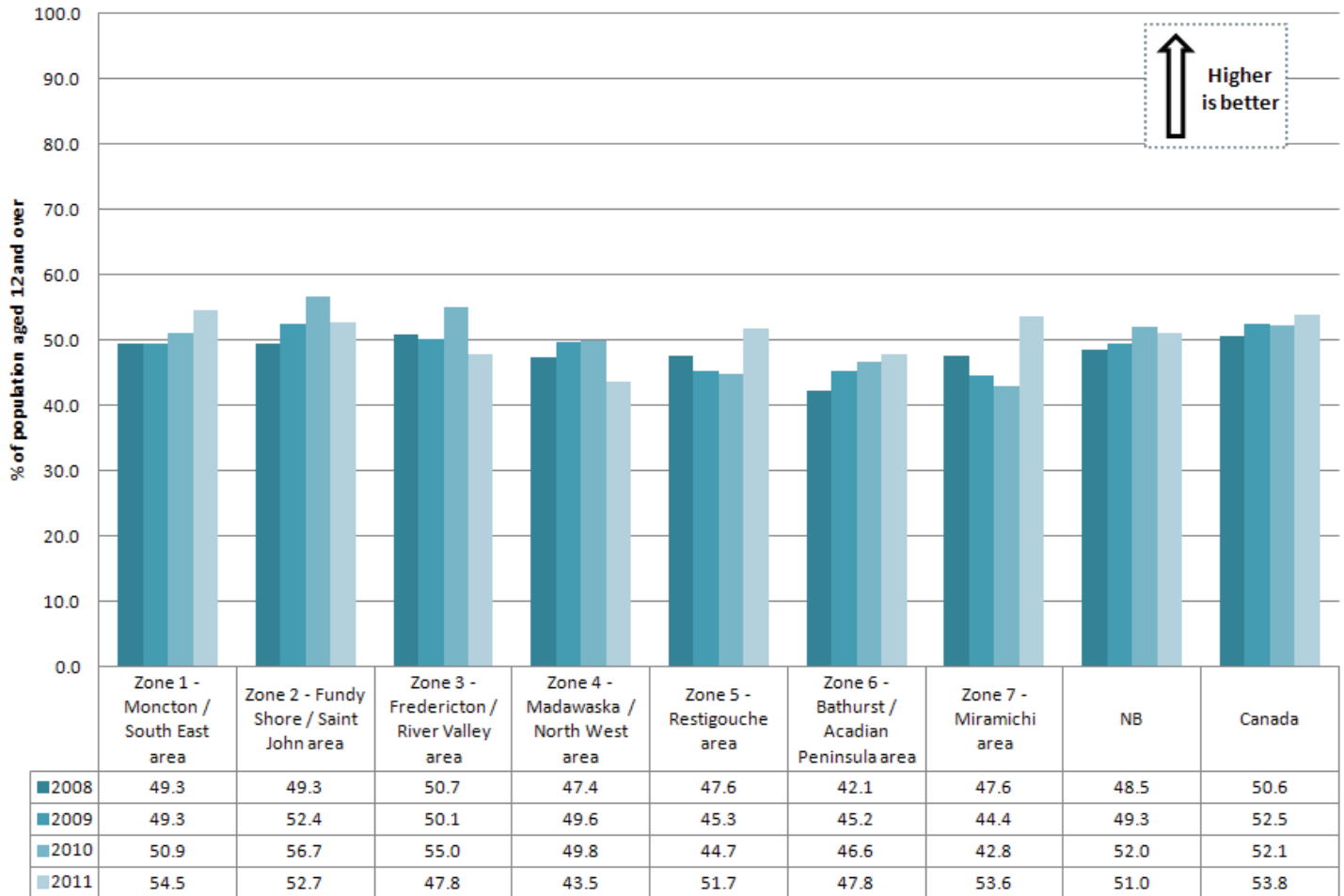
Industrialization, urbanization and motorized transport have reduced physical activity in the last years. Physical activity is probably one of public health's most cost effective tools:

Reduces the risk of conditions such as cardiovascular disease, non-insulin-dependent diabetes and obesity;

By improving people's physical coordination, balance and strength, *reduces the risk of injuries* and is likely to prevent, for example, falls among elderly people; and *contributes to mental well-being*.



Physical activity during free-time, moderately active or active (Leisure-time physical activity, moderately active or active)



Actual indicator: Fruit and vegetable consumption, 5 times or more per day

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

Indicates the usual number of times (frequency) per day a person reported eating fruits and vegetables. Measure does not take into account the amount consumed.

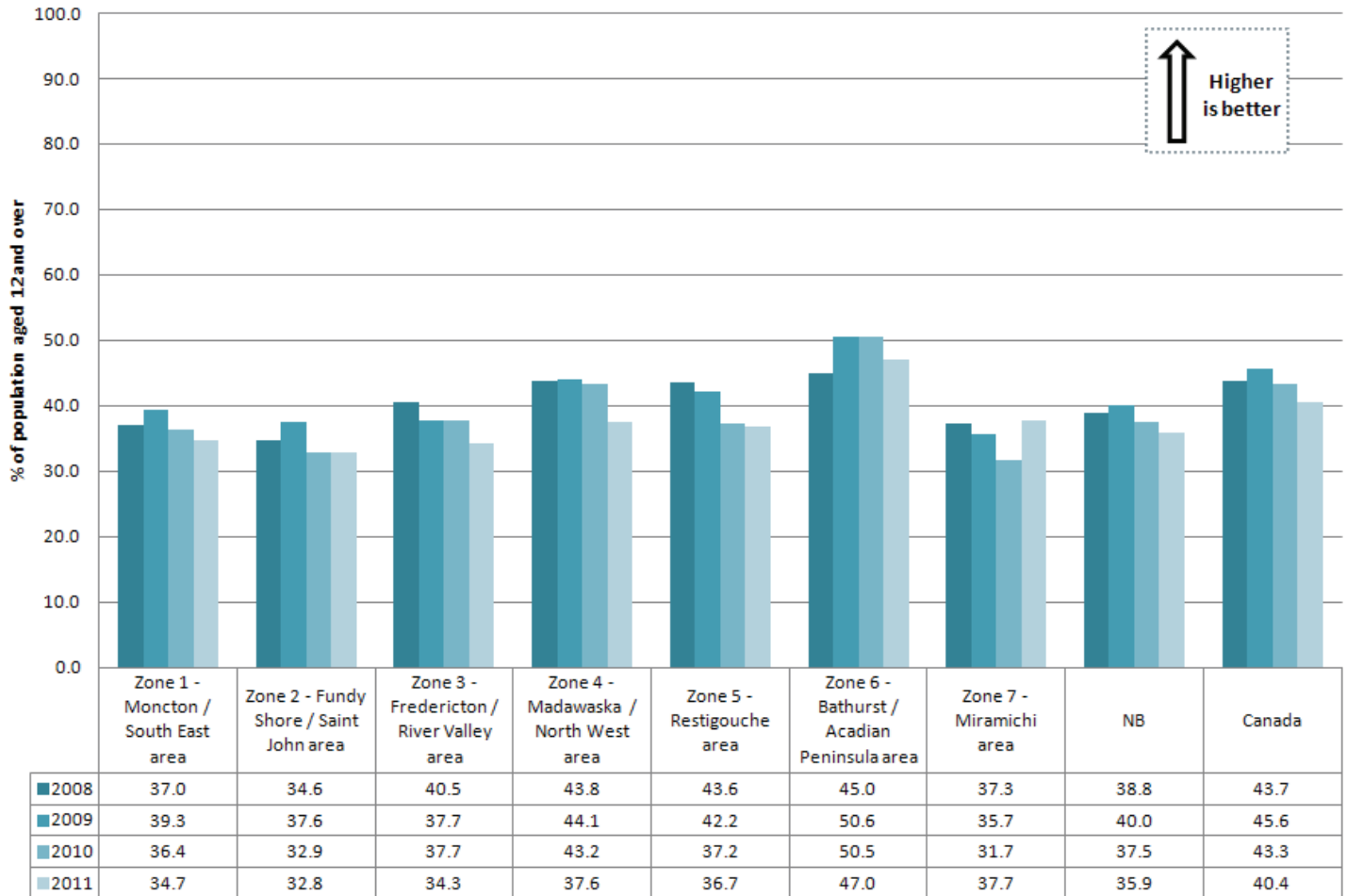
Canada and provincial estimates are based on sub-sample weights for 2005 data.

Why is this indicator important?

Increased fruit and vegetable intake has the potential to bring important health gains. They are an important part of a healthy diet. Low intake can cause some cancers, ischemic heart disease and stroke.



Eat 5 or more fruits or vegetables a day
(Fruit and vegetable consumption, 5 times or more per day)



Actual indicator: Obese

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501



Definition:

Body mass index (BMI) is calculated by dividing the respondent's body weight (in kilograms) by their height (in metres) squared.

A definition change was implemented in 2004 to conform to the World Health Organization (WHO) and Health Canada guidelines for body weight classification. The index is calculated for the population aged 18 and over, excluding pregnant females and persons less than 3 feet (0.914 metres) tall or greater than 6 feet 11 inches (2.108 metres).

According to the World Health Organization (WHO) and Health Canada guidelines, the index for body weight classification is:

- less than 18.50 (underweight);
- 18.50 to 24.99 (normal weight);
- 25.00 to 29.99 (overweight);
- 30.00 to 34.99 (obese, class I);
- 35.00 to 39.99 (obese, class II);
- 40.00 or greater (obese, class III).

In this case, we are only looking at the BMI 30.00 or greater.

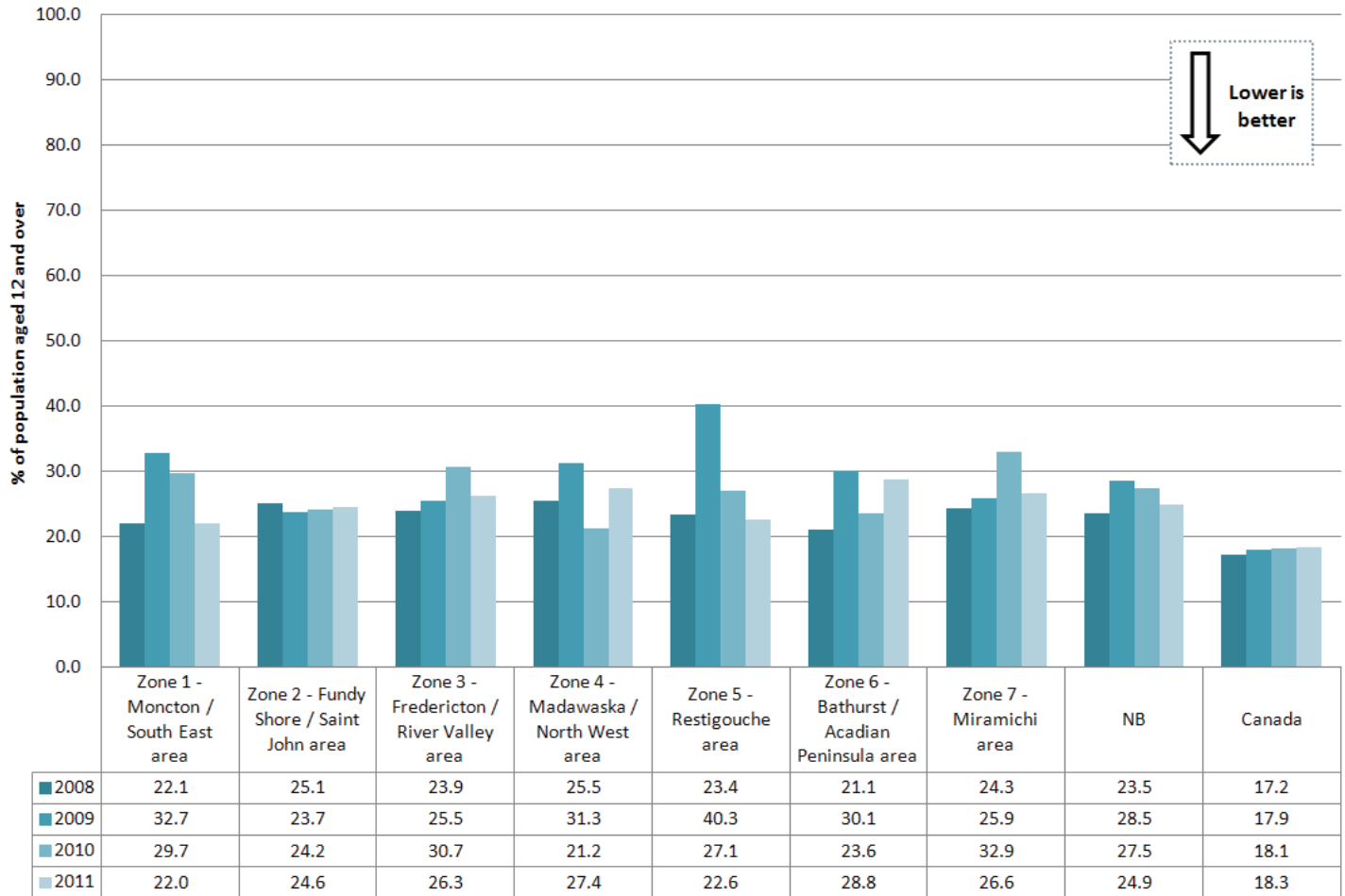
Why is this indicator important?

Body mass index (BMI) is a method of classifying body weight according to health risk. According to the World Health Organization (WHO) and Health Canada guidelines, health risk levels are associated with each of the following BMI categories:

- normal weight → least health risk;
- underweight and overweight → increased health risk;
- *obese, class I* → *high health risk*;
- *obese, class II* → *very high health risk*;
- *obese, class III* → *extremely high health risk*.

Some of the risk factors associated with obesity are diabetes, cardiovascular disease, joint diseases and cancer. They can have a strong negative impact on the quality of life.

Adults with unhealthy weight (obese) (% Obese)



Actual indicator: Frequency of drinking

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

Population aged 12 and over who reported having 5 or more drinks on one occasion, at least once a month in the past year.

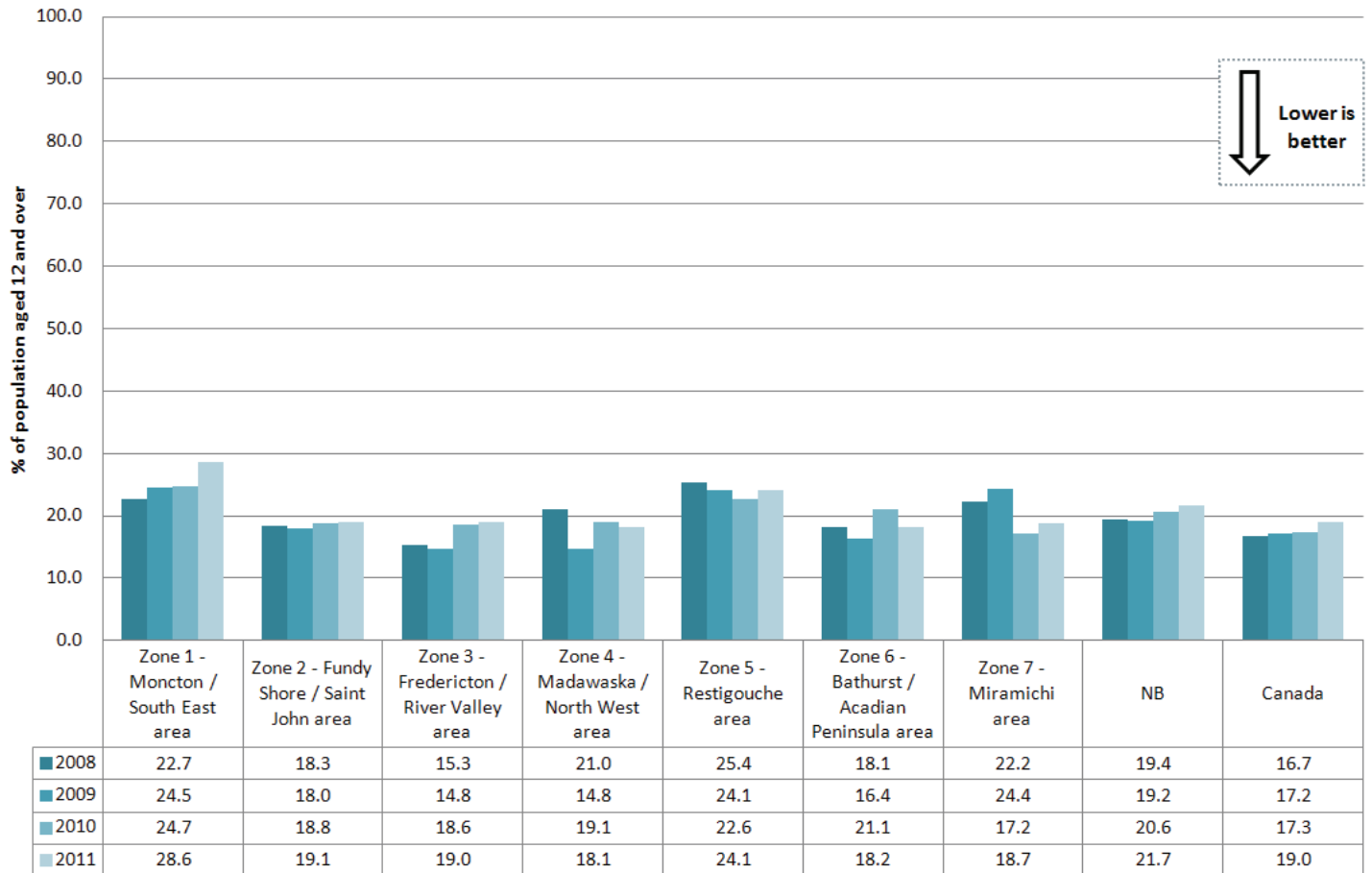
Starting in 2009, the denominator includes all the population aged 12 and over. This change applies to rates from all years in this table. In data released before 2009, the denominator included only the population who reported having had at least one drink in the past 12 months. Increasing the population in the denominator reduces the estimate rates. This change was implemented to produce more comparable rates over time and is more consistent with methods used in calculating other indicators.

Why is this indicator important?

The long term effects of alcohol in excessive quantities can be damaging to nearly every organ and system in the body. *Regularly consuming high amounts of alcohol is correlated with an increased risk of developing alcoholism, cardiovascular disease, chronic pancreatitis, liver disease, and cancer.*



**5 or more drinks at one time, at least once a month in the past year
(heavy drinking)**
(Frequency of drinking)



Actual indicator: Perceived life stress

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

Population aged 15 and over who reported perceiving that most days in their life were quite a bit or extremely stressful. Perceived life stress refers to the amount of stress in the person's life, on most days, as perceived by the person or, in the case of proxy response, by the person responding.

Why is this indicator important?

Stress is a fact of daily life and is the result of both the good and bad things that happen. Too much stress can cause serious health concerns, but there are many ways of dealing with stress that can reduce your risk. While some people may appear to thrive on it, stress is considered to be a risk factor in many diseases, including:

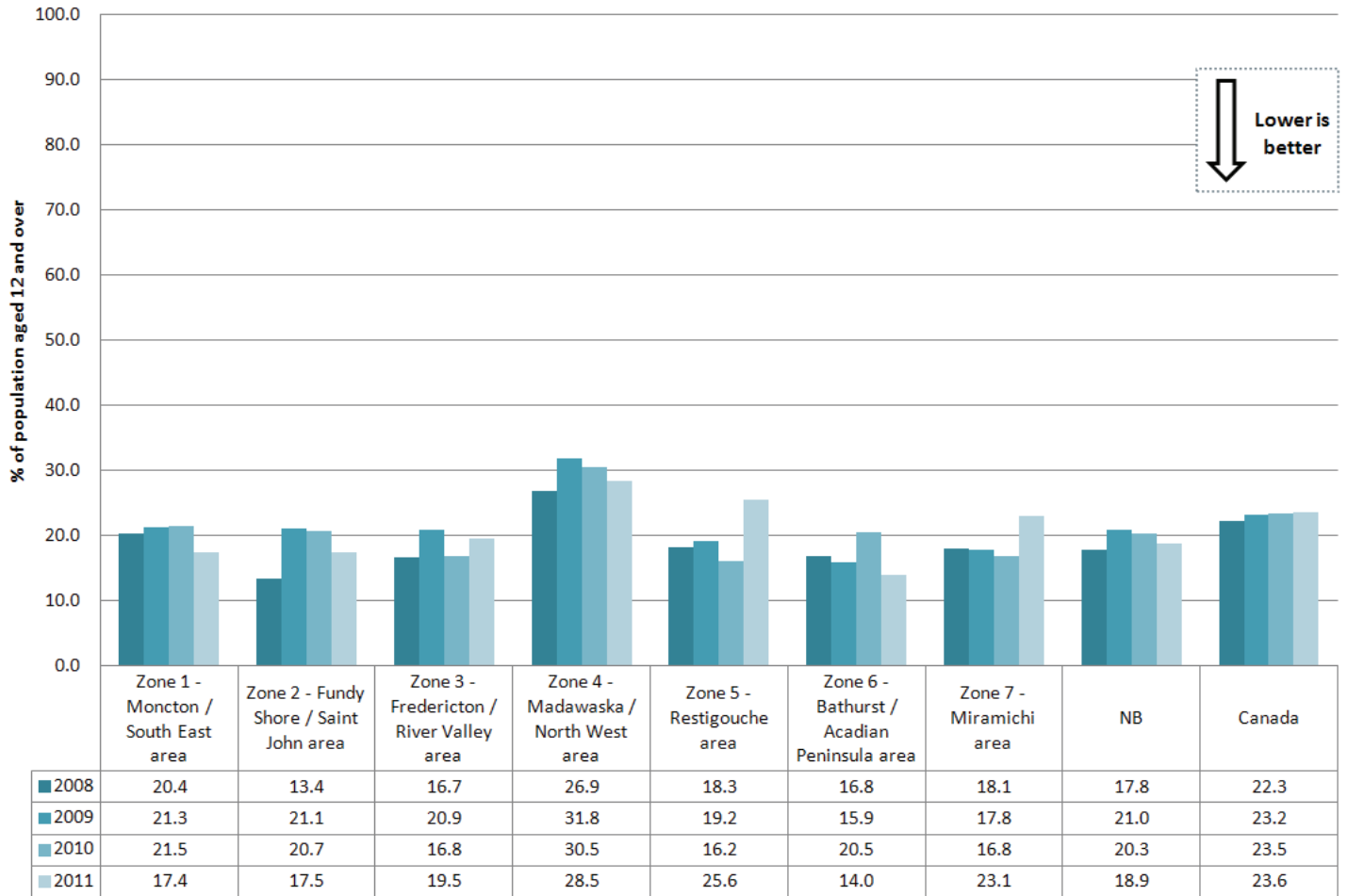
- *heart disease*
- *some types of bowel disease*
- *Herpes*
- *mental illness*

Stress also makes it hard for people with diabetes to control their blood sugar.

Stress is also a risk factor in alcohol and substance abuse, as well as weight loss and gain. Stress has even been identified as a possible risk factor in Alzheimer's disease.



Seeing your stress as being a lot (Perceived life stress)



Actual indicator: Current smoker

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

Population aged 12 and over who reported being a current smoker. A daily smoker refers to those who reported smoking cigarettes every day. Does not take into account the number of cigarettes smoked.

Why is this indicator important?

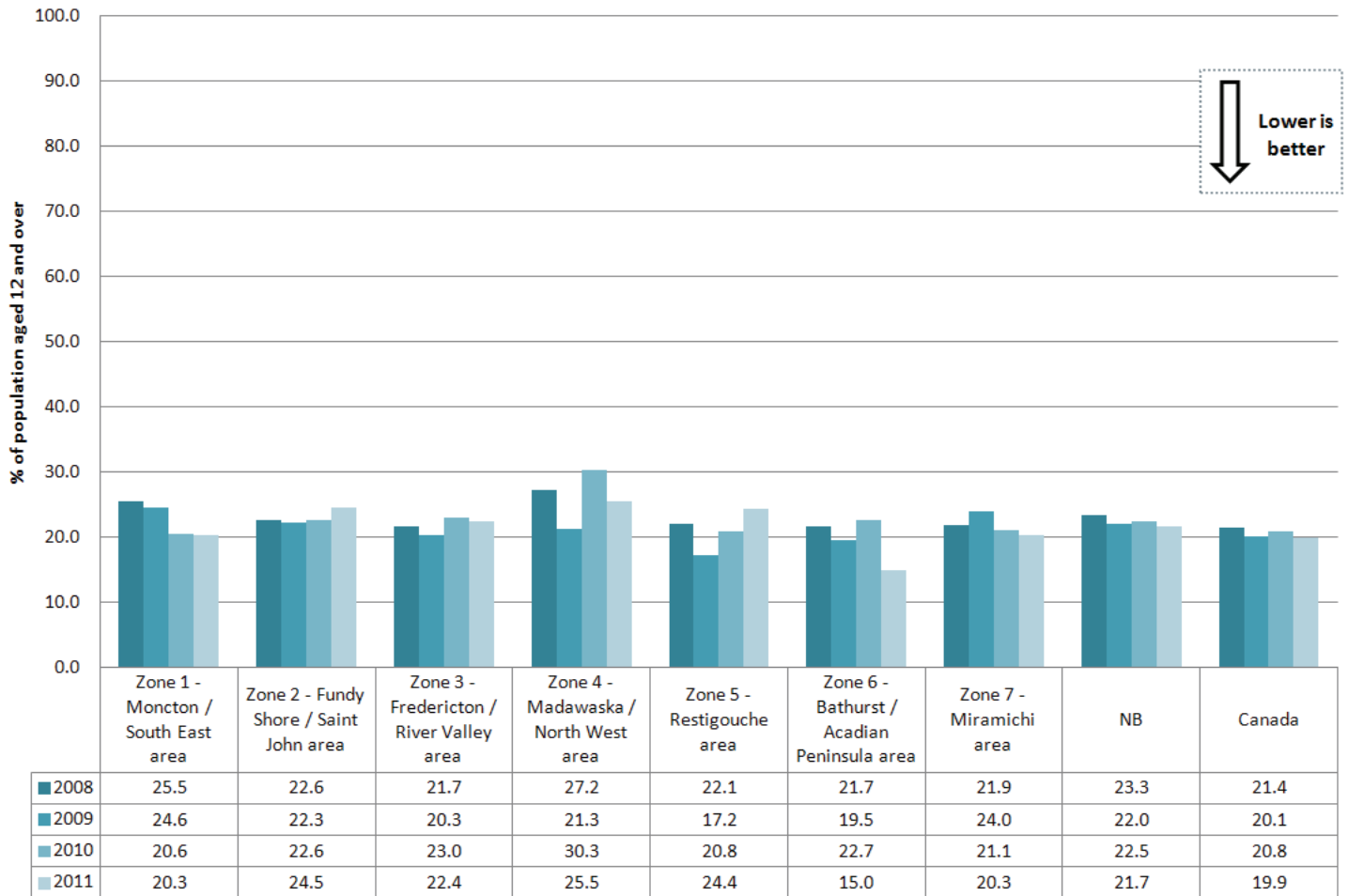
Smoking has become the single biggest preventable cause of death in the world. Half of tobacco users will die of a tobacco-related disease. The morbidity or impaired health caused by tobacco is more widespread. As most of these deaths occur in middle age, the loss of income and the effects of chronic illness severely affect the quality of life and well-being of tobacco users' families.

Limitations:

Although the Canadian Tobacco Use Monitoring Survey (CTUMS) and the Canadian Community Health Survey (CCHS) produce estimates of national and provincial smoking rates, data users should be aware of a number of differences between the two surveys. Firstly, the surveys use different sampling frames. Secondly, the annual sample for CTUMS is 20,000 compared to 65,000 for CCHS. Thirdly, in CCHS, smoking questions are asked in the context of a wide range of health-related behaviours whereas in CTUMS all questions are related to smoking. These differences could influence the accuracy of information provided by the respondent. Although these factors can influence the estimates produced at a single point in time, the trends produced by the two surveys have been noted to be very consistent over time. Rather than comparing smoking rates produced from the two surveys, Statistics Canada advises data users to choose a single source, based on their objectives, and to use that source consistently.



Current smoker, daily or occasional (% Current smokers)



Actual indicator: Number of sexually transmitted illnesses, genital Chlamydia (STI)

Source: New Brunswick Department of Health

- Numerator data extracted from RDSS on Nov. 30, 2011. No extensive data cleaning has been realized on RDSS data since 2008.
- Denominator data: Population estimates by age and sex for census subdivisions, July 1, 1996 to 2010, New Brunswick. Statistics Canada, Demography Division, customized data – received April 5th 2011.

Definition:

Communicable diseases are capable of being transmitted from an infected person or species to a susceptible host, either directly or indirectly.

Specifically, a sexually transmitted illness is an infection that has a negligible probability of transmission by means other than sexual contact, but has a realistic means of transmission by sexual contact (more sophisticated means — blood transfusion, sharing of hypodermic needles —are not taken into account). The Chlamydia rate is what was looked at here.

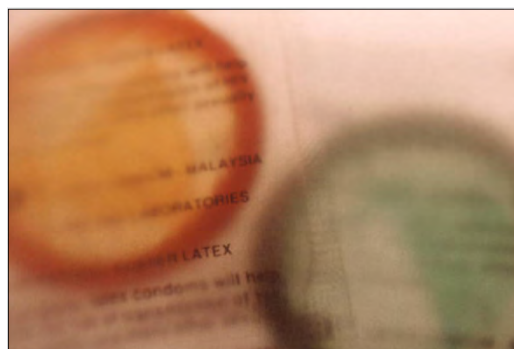
Limitation:

Numerator has been annualized to reflect the two months missing

Why is this indicator important?

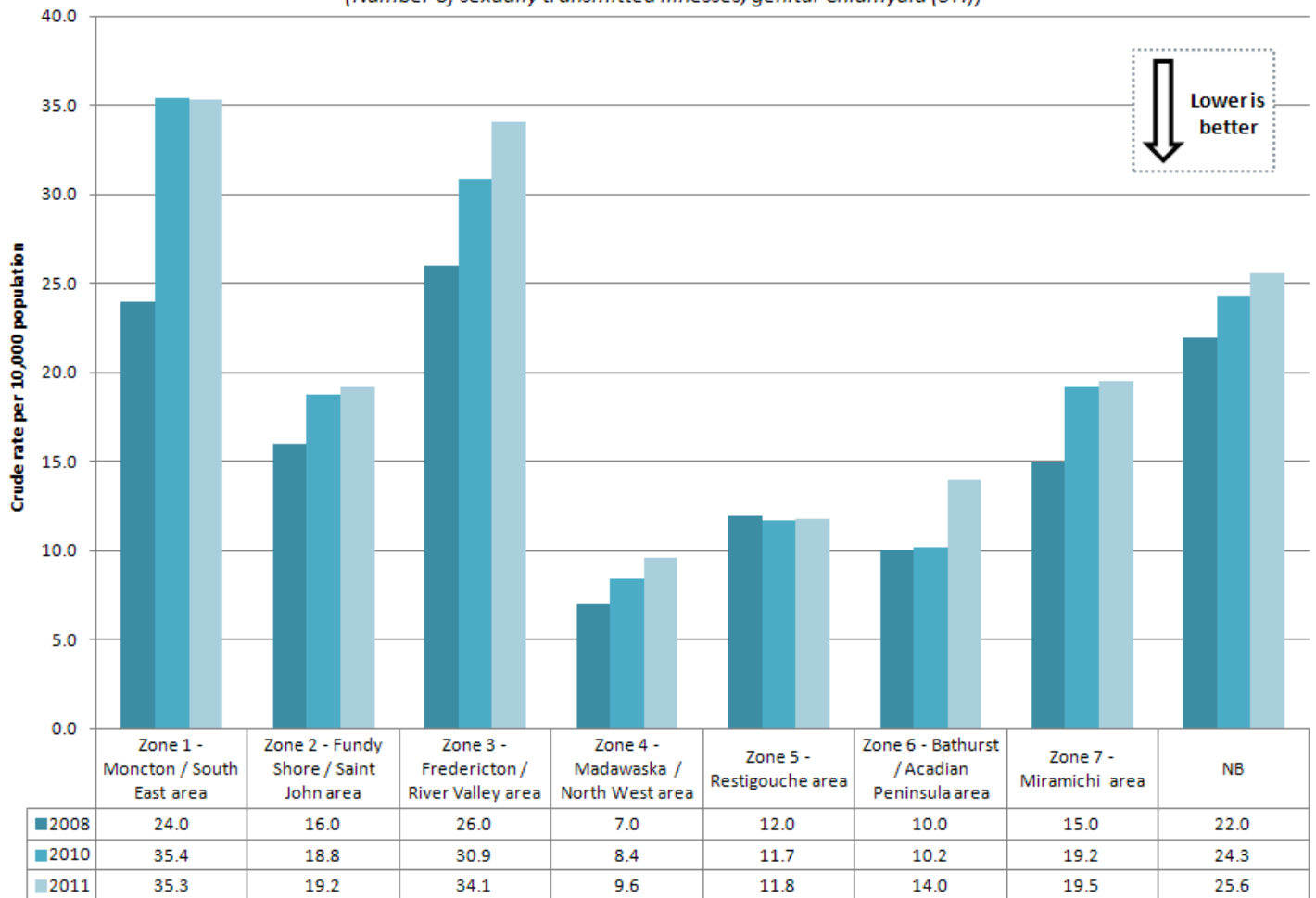
Some sexually transmitted infections can have severe consequences, especially in women, *if not treated*, which is why it is important to do testing. Some sexually transmitted illnesses can lead to pelvic inflammatory disease, which can cause infertility, while others may even be fatal. Prevention strategies are very important.

Between 1999-2003, sexually transmitted diseases were the most frequently diagnosed communicable disease in New Brunswick and accounted for 64% of the reported communicable diseases.



Number of sexually transmitted illnesses (genital Chlamydia)

(Number of sexually transmitted illnesses, genital Chlamydia (STI))



Actual indicator: Teens who gave birth, under 20 years old

Source: New Brunswick Vital Statistics

Definition:

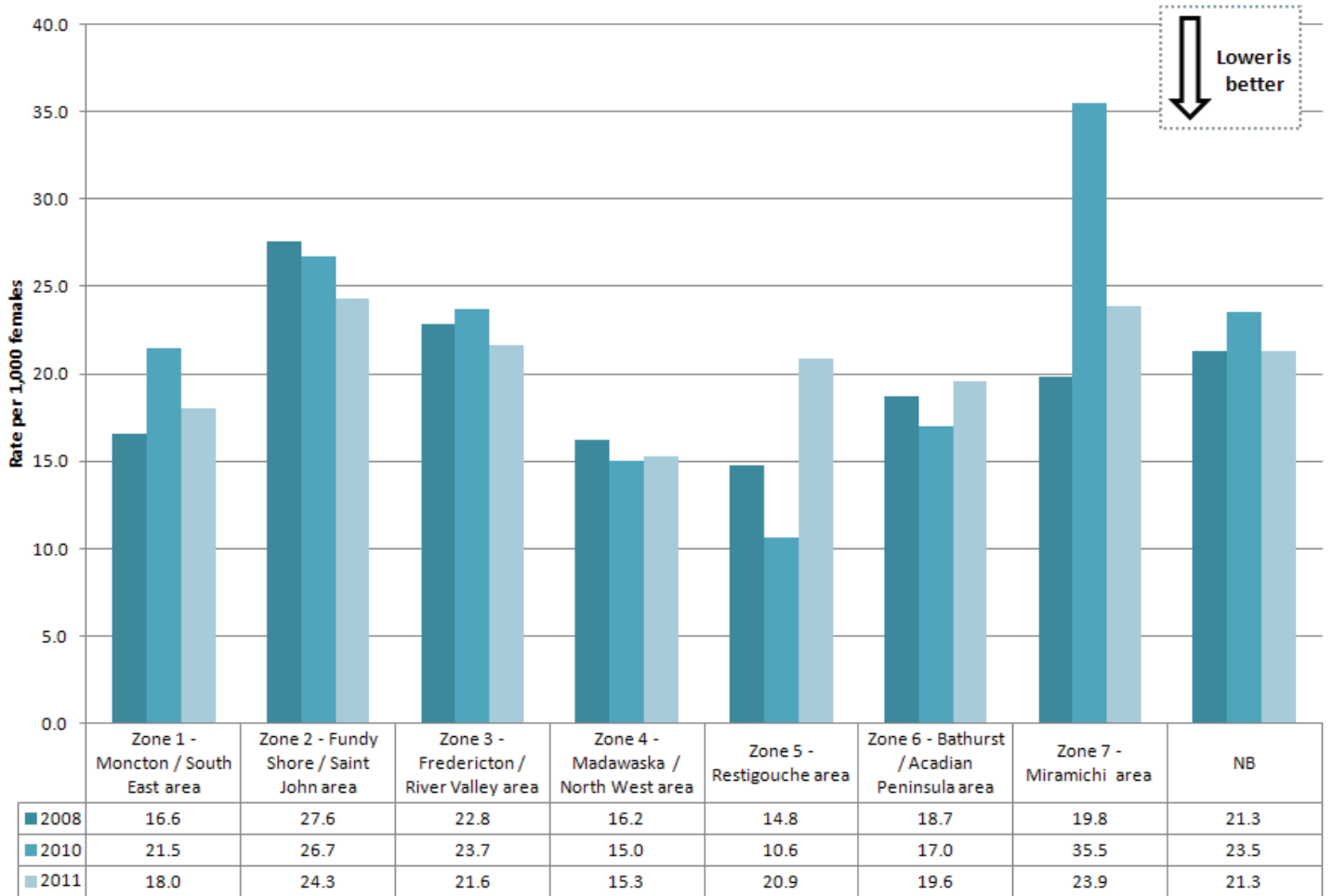
Teens who gave birth is defined as a teenaged or underage girl (under 20 years old) who have had a live birth.

Why is this indicator important?

Teenage pregnancy and early parenthood can lead to poor educational achievement, poor physical and mental health, poverty and social isolation for mothers and their children. *Socioeconomic disadvantage can be both the cause and effect of youth parenthood.*



Teens who gave birth (who gave birth, under 20 years old)



Actual indicator: Always wears a bicycle helmet while on a bike

Source: Statistics Canada, Canadian Community Health Survey.

CANSIM table no.: 105-0501

Definition:

Population aged 12 and over who reported that they always wore a helmet when riding a bicycle in the last 12 months.

Why is this indicator important?

Cycling is a popular past-time among children and adults and is highly beneficial as a means of transport and obtaining exercise. However, cycling related injuries are common and can be severe, particularly head injuries.

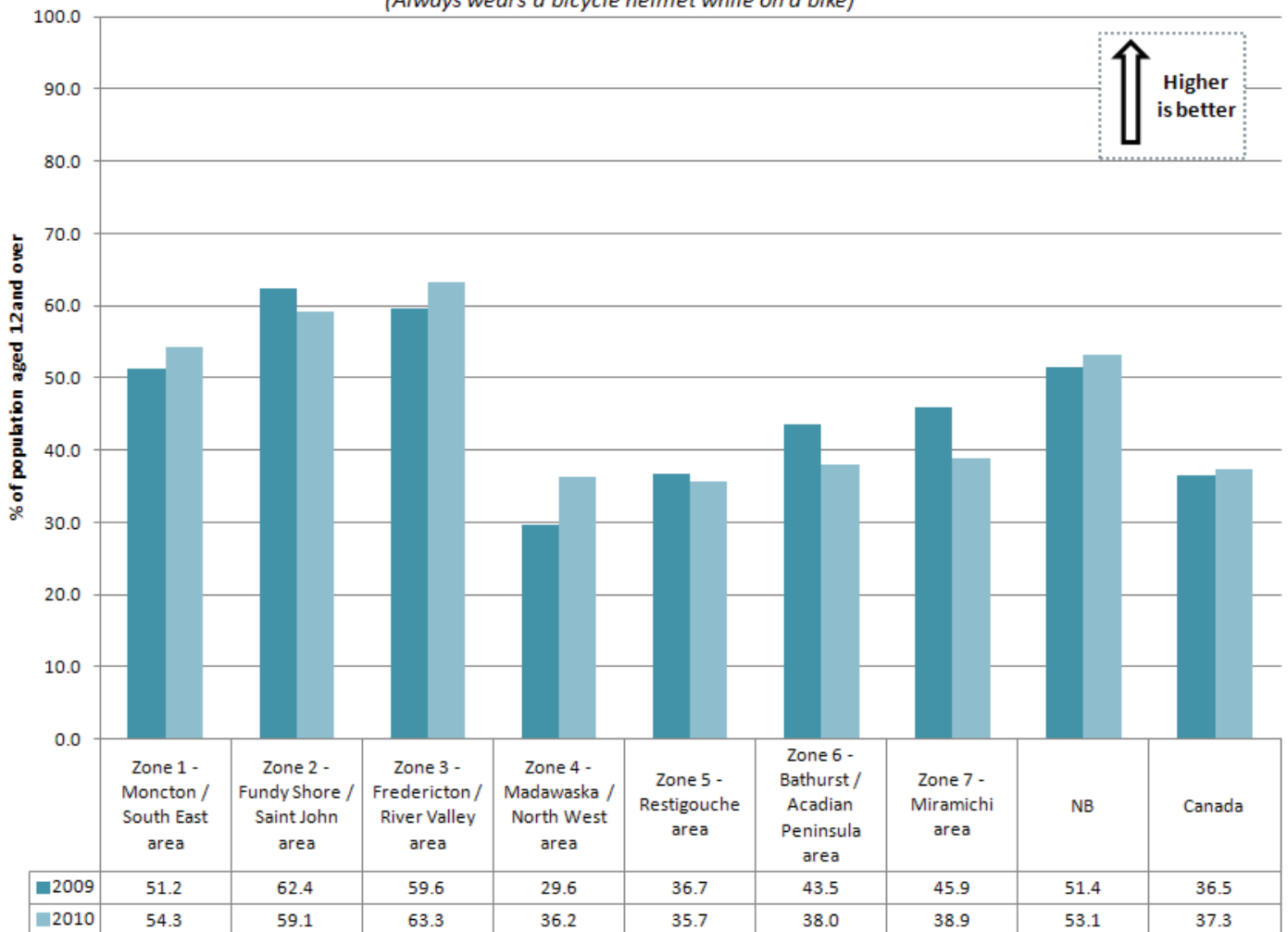
Modern bicycle helmets are designed to reduce the effects of impact to the head, such as brain injuries, memory loss and even death, from falling off a bicycle.

In New Brunswick, it is also the law to wear a bicycle helmet while riding a bicycle.



Cyclist who always wore a bicycle helmet

(Always wears a bicycle helmet while on a bike)

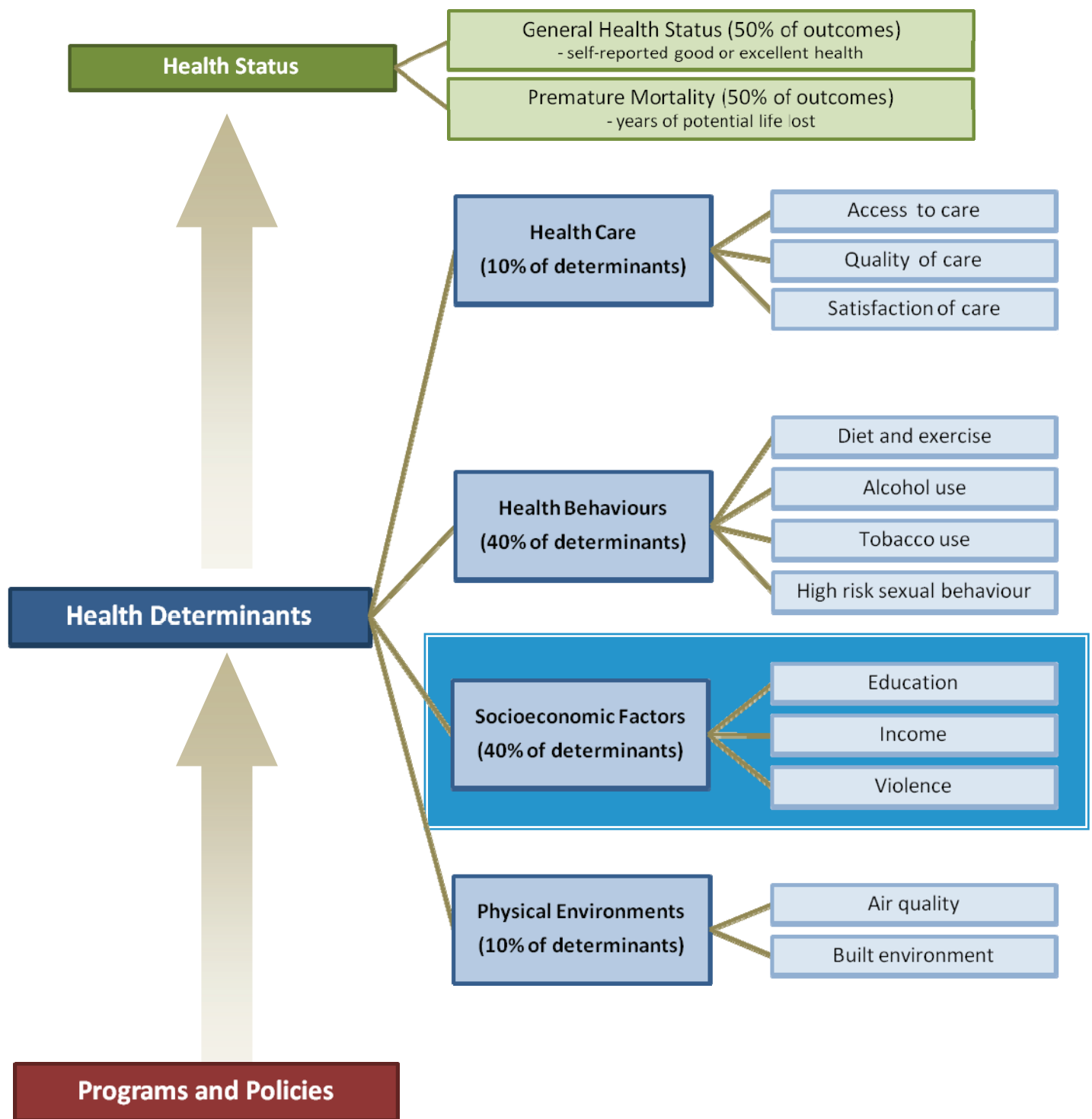




Section 4 — Health Determinants

**Socioeconomic Factors:
accounts for 40% of the health status**

Education, income, violence,
are very important factors in your health.



Actual indicator: No certificate, diploma or degree

Source: Statistics Canada, 2006 Census.
CANSIM table no.: 109-0300

Definition:

This indicator was calculated by dividing the group that had '*no certificate, diploma or degree*' and it was divided by the '*total population aged 25 and up*' (as per Census 2006).

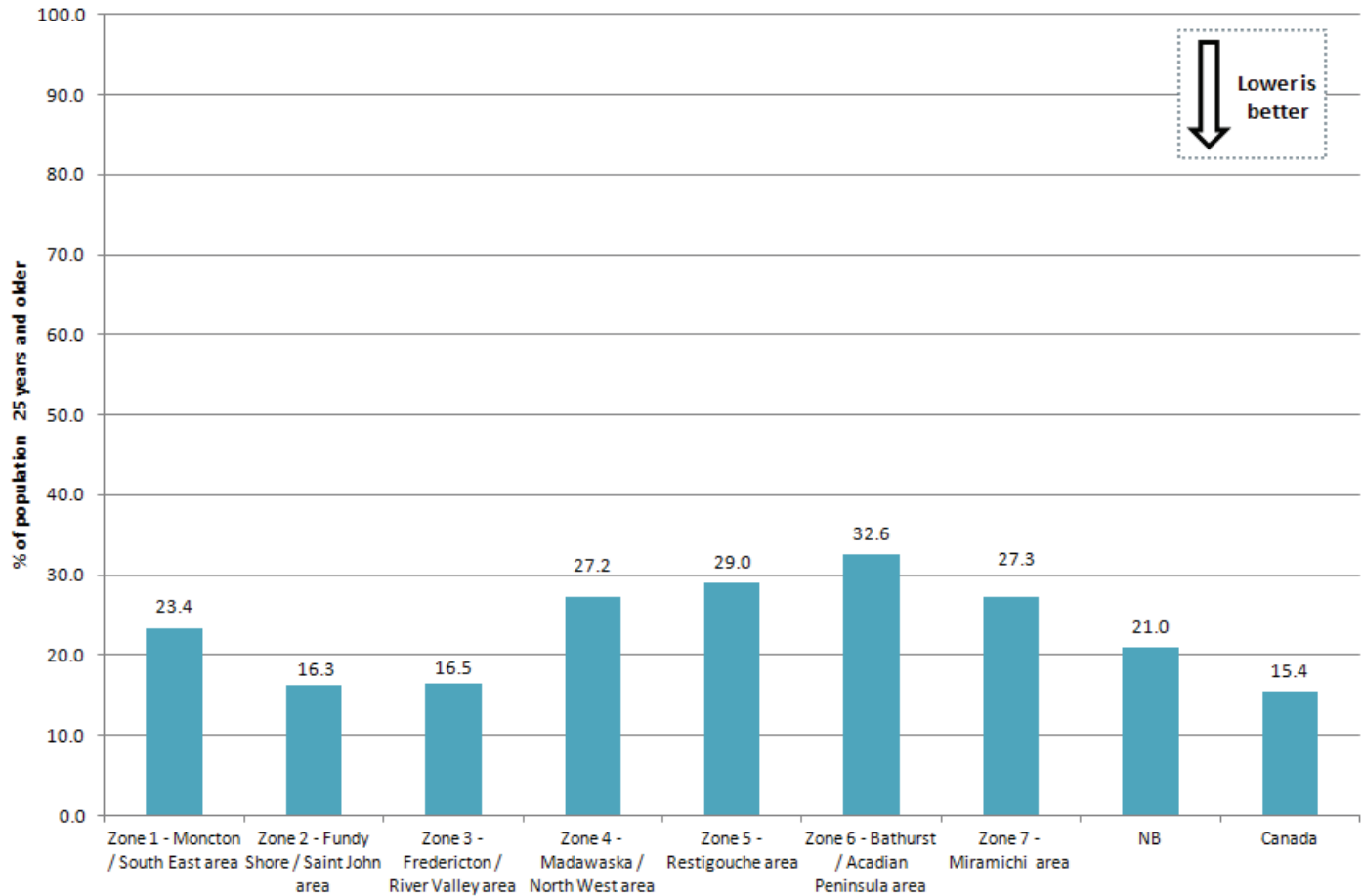
Why is this indicator important?

Education and literacy have a significant influence on health status by virtue of their effects on employability income, and the basic ability to read and understand health-related information and instruction such as prescription drug instructions. *Lower levels of educational attainment and literacy are associated with poorer health status.*

Canadians with lower levels of education have a lower life expectancy and experience higher rates of infant mortality than Canadians with higher levels of education.

No high school diploma (25 years and older) - 2006

(No certificate, diploma or degree)



Actual indicator: Adult unemployment, 15 years and over

Source: Statistics Canada, Labour Force Survey (special tabulations).
CANSIM table no.: 109-5324

Definition:

The unemployment rate is the number of unemployed persons expressed as a percentage of the labour force. The unemployment rate for a particular group (age, sex, marital status or others) is the number of unemployed in that group expressed as a percentage of the labour force for that group.

The labour force consists of people who are currently employed and people who are unemployed but were available to work in the reference week and had looked for work in the past 4 weeks. Reference week refers to a one-week period (from Sunday to Saturday) that usually includes the 15th day of the month. The Labour Force Survey excludes residents of Indian Reserves, the Yukon, Northwest Territories and Nunavut, inmates of institutions and full-time members of the Armed Forces. Labour Force Survey exclusions account for less than 2% of the population aged 15 and over.

Data where the province-specific minimum sample size was not met were suppressed (x) due to confidentiality.

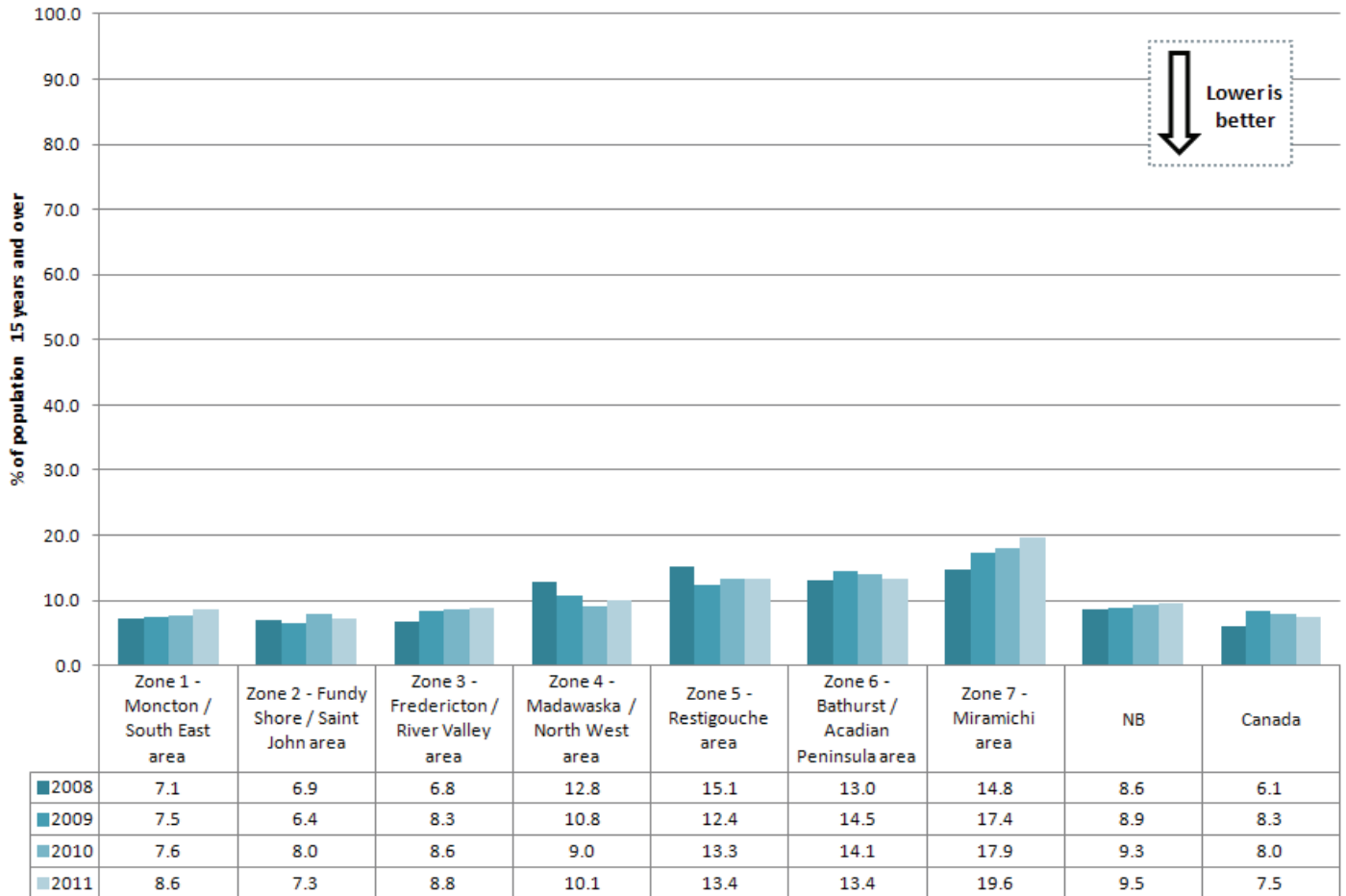
In June 2006, these estimates were revised due to sample redesign in 2005 and rebasing of the population estimates used for the Labour Force Survey (LFS). See 'Improvements in 2005 to the Labour Force Survey (LFS)' at <http://www.statcan.gc.ca/bsolc/olc-cel/olc-cel?catno=71F0031XIE&lang=eng> for more information.

Why is this indicator important?

Unemployment has been shown to have a significant negative impact on *income security* and can lead to *isolation, despair, and unhealthy coping behaviours* such as smoking and drinking.

Unemployment

(Adult unemployment, 15 years and over)



Actual indicator: Divorced

Source: Statistics Canada, Census. Profile
Catalogue no. 98-316-XWE. Ottawa. Released September 19 2012

Definition:

Persons who have obtained a legal divorce and who have not remarried.

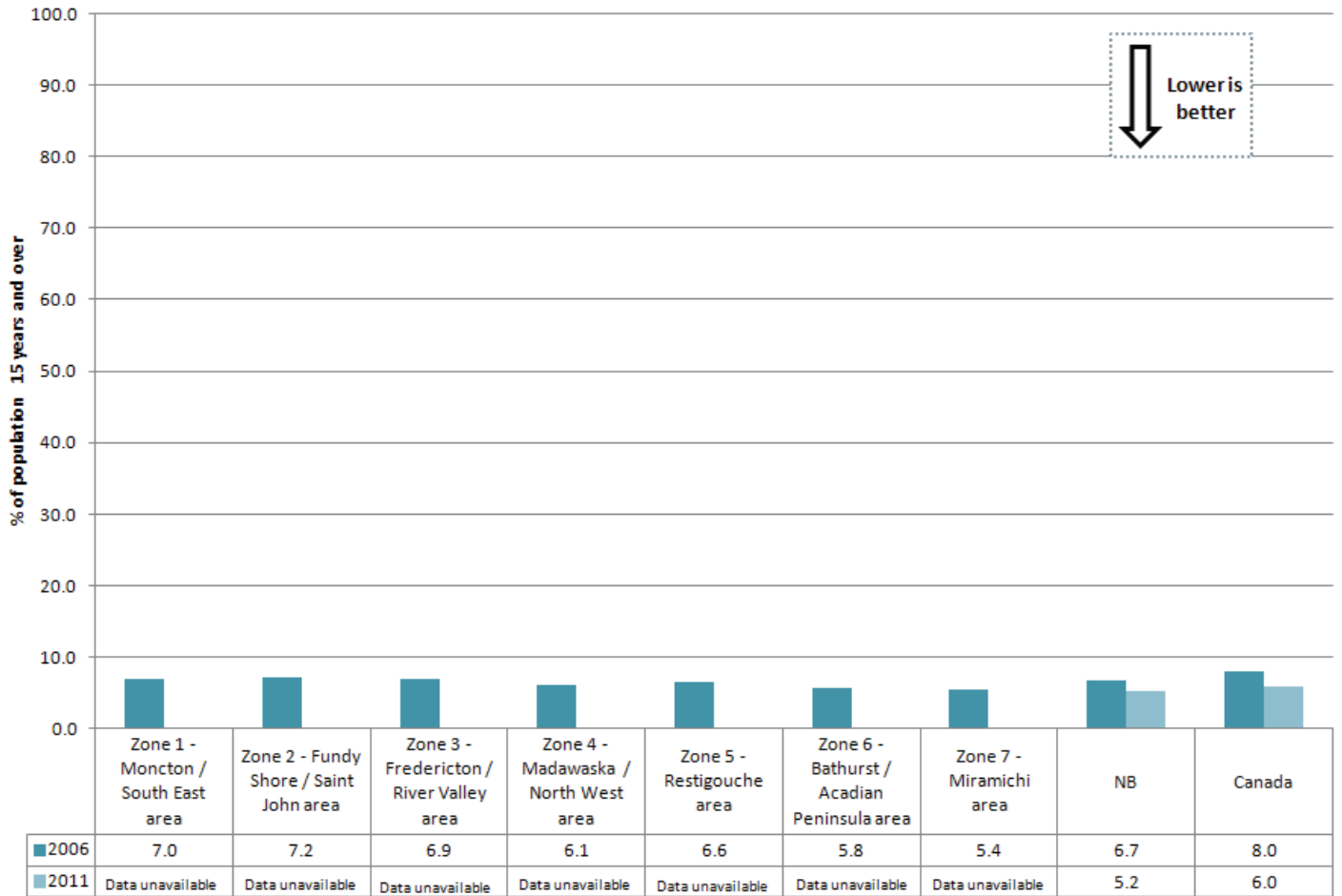
Why is this indicator important?

Parental divorce can have a long term effect on the mental health of children. As well, mortality rates can be higher for divorced and single parents due to a lack of social ties.

Middle-aged divorced or widowed people have a higher incidence of chronic health conditions, such as heart disease, diabetes, or cancer, than married/common-law people. It has also been shown that they also have more mobility limitations, such as trouble climbing stairs or walking a block.



Divorced
(% Divorced)



Actual indicator: Lone-parent families

Source: Statistics Canada, Census. Profile
Catalogue no. 98-316-XWE. Ottawa. Released September 19 2012

Definition:

A lone parent of any marital status, with at least one child living in the same dwelling

Why is this indicator important?

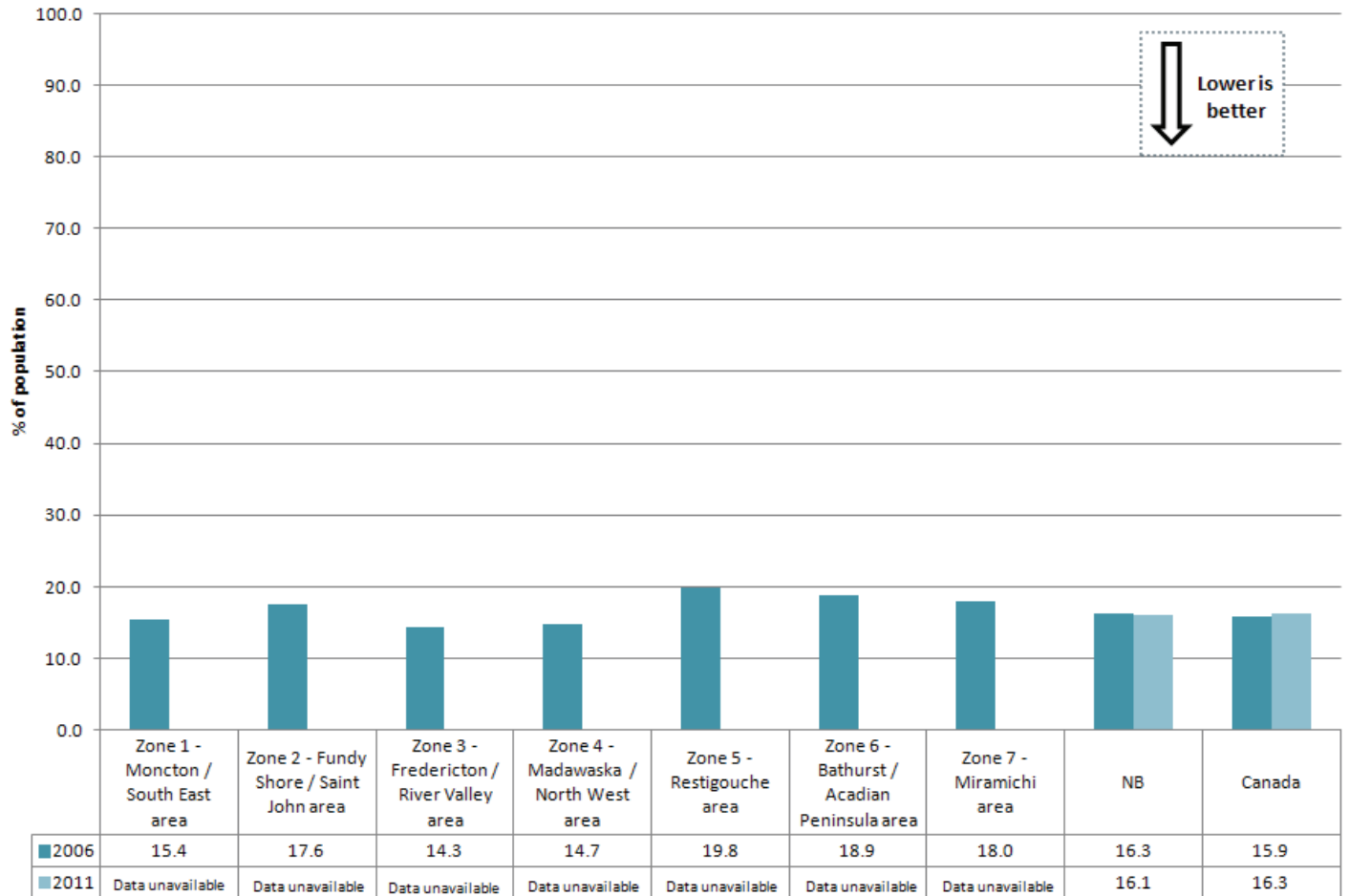
Countless studies show that children in single parent households are under a lot more stress. Economic hardship, a lack of emotional support, loss of contact with a parent, and inter-parental conflict can all serve as stressors in a child's life.

Single parent families tend to experience short and longer-term economic and psychological disadvantages; children have higher absentee rates at school, lower levels of education, and higher dropout rates (with boys more negatively affected than girls); and more delinquent activity, including alcohol and drug addiction. Adolescents, on the other hand, are more negatively affected by parental discord prior to divorce than by living in single parent families and actually gain in responsibility as a result of altered family routines.

Although the research findings are mixed on long-term effects, the majority of children adjusts and do not experience severe problems over time. It is possible for the negative effects to be balanced out if the parents make an extra effort to provide their child with all the emotional support they need.



Single-parent family (Lone-parent families)



Actual indicator: Prevalence of low income before tax for persons in private household (percent)

Source: Statistics Canada, Census. Profile Catalogue no. 98-316-XWE. Ottawa. Released September 19 2012

Definition:



An economic family refers to a group of two or more persons who live in the same dwelling and are related to each other by blood, marriage, common-law or adoption. By contrast, the census family concept requires that family members be a male or female spouse, a male or female common-law partner, a male or female lone parent, or a child with a parent present. The concept of economic family may therefore refer to a larger group of persons than does the census family concept. All census family persons are economic family persons. For 2006, foster children are considered economic family members. Note that as of 2001, same-sex partners are considered to be common-law partners. Thus they are considered related and members of the same economic family.

As of 1971, published family statistics included families living in private households (including those enumerated outside Canada) and all collective households.

For 2006, married spouses may be of opposite or same sex. The persons not in economic families refer to household members who do not belong to an economic family. Persons living alone are included in this category.

Low-income cut-offs (LICOs) represent levels of income where people spend disproportionate amounts of money for food, shelter and clothing. They are based on family and community size and are updated to account for changes in the consumer price index. LICO data exclude institutional residents and were not derived for economic families or unattached individuals in the territories or on Indian reserves. Prevalence of low income rates are calculated from rounded counts of low income persons or families and the total number of persons or families. These counts have been rounded independently of the rounded counts shown in the table; thus, there may be a small difference between the rate shown and the one derived from the counts shown. Users are advised to interpret prevalence of low income rates based upon small counts with caution. For additional information and a table of low income cut-offs, please refer to the 2006 Census Dictionary, catalogue number 92-566-XWE, and 2011 census profiles, Catalogue no. 98-316-XWE.

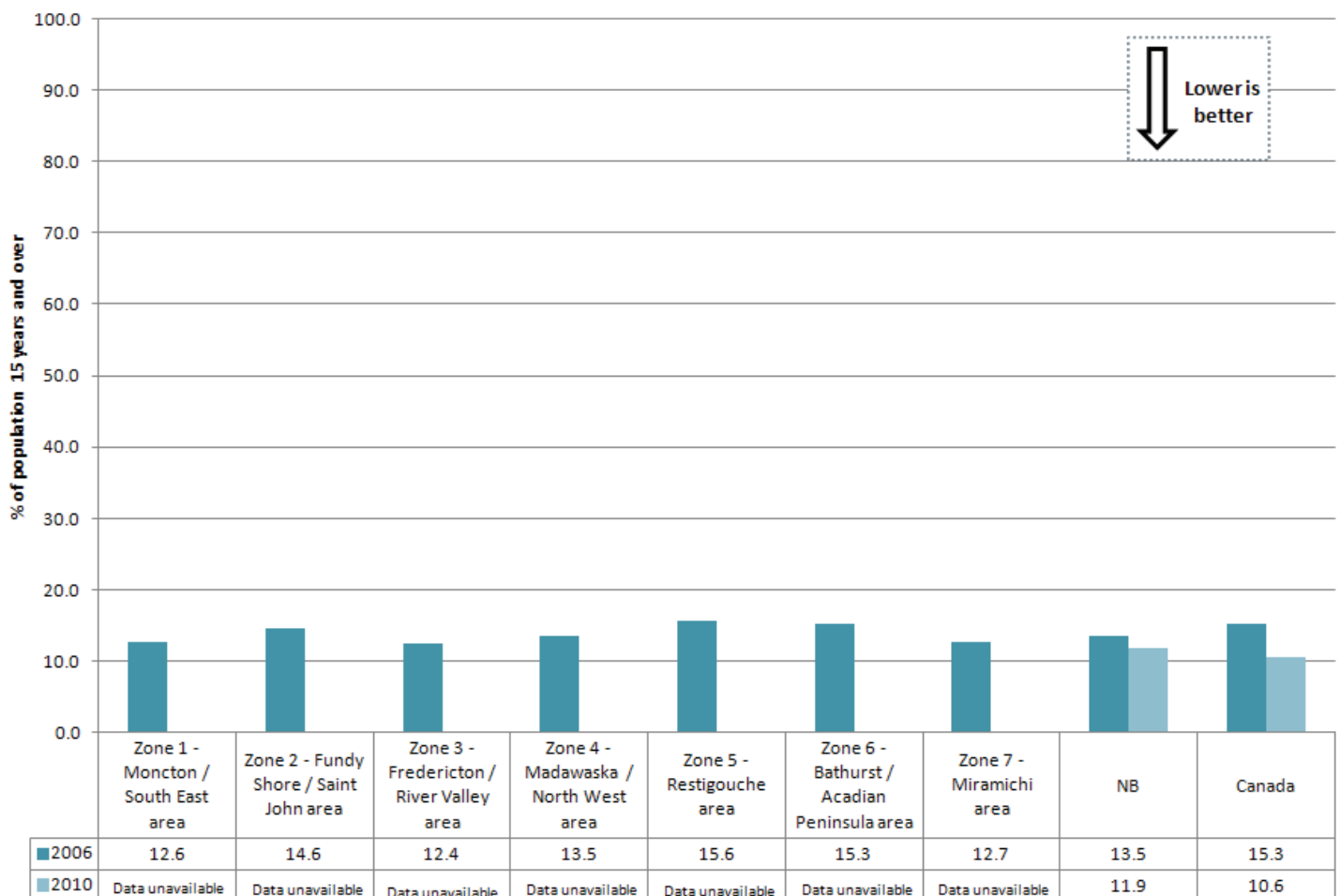
Why is this indicator important?

This is a widely used measure of socioeconomic status. *Less than sufficient household incomes can be associated with poorer overall health and higher hospital admission rates.*

Low income can affect your food choices, your dental hygiene, affording your prescription drugs and the quality of your housing, to name a few. It can have an effect on your mental health and your stress level as well.

Low income

(% of low income before tax for persons in private household % of population 15 years and over)



Actual indicator: Total Violent Crime

Source: Statistics Canada, Crime Statistics, CANSIM 252-0051

Definition:

A violent crime or crime of violence is a crime in which the offender uses or threatens to use violent force upon the victim. This entails both crimes in which the violent act is the objective, such as murder, as well as crimes in which violence is the means to an end, such as robbery. Violent crimes include crimes committed with and without weapons.

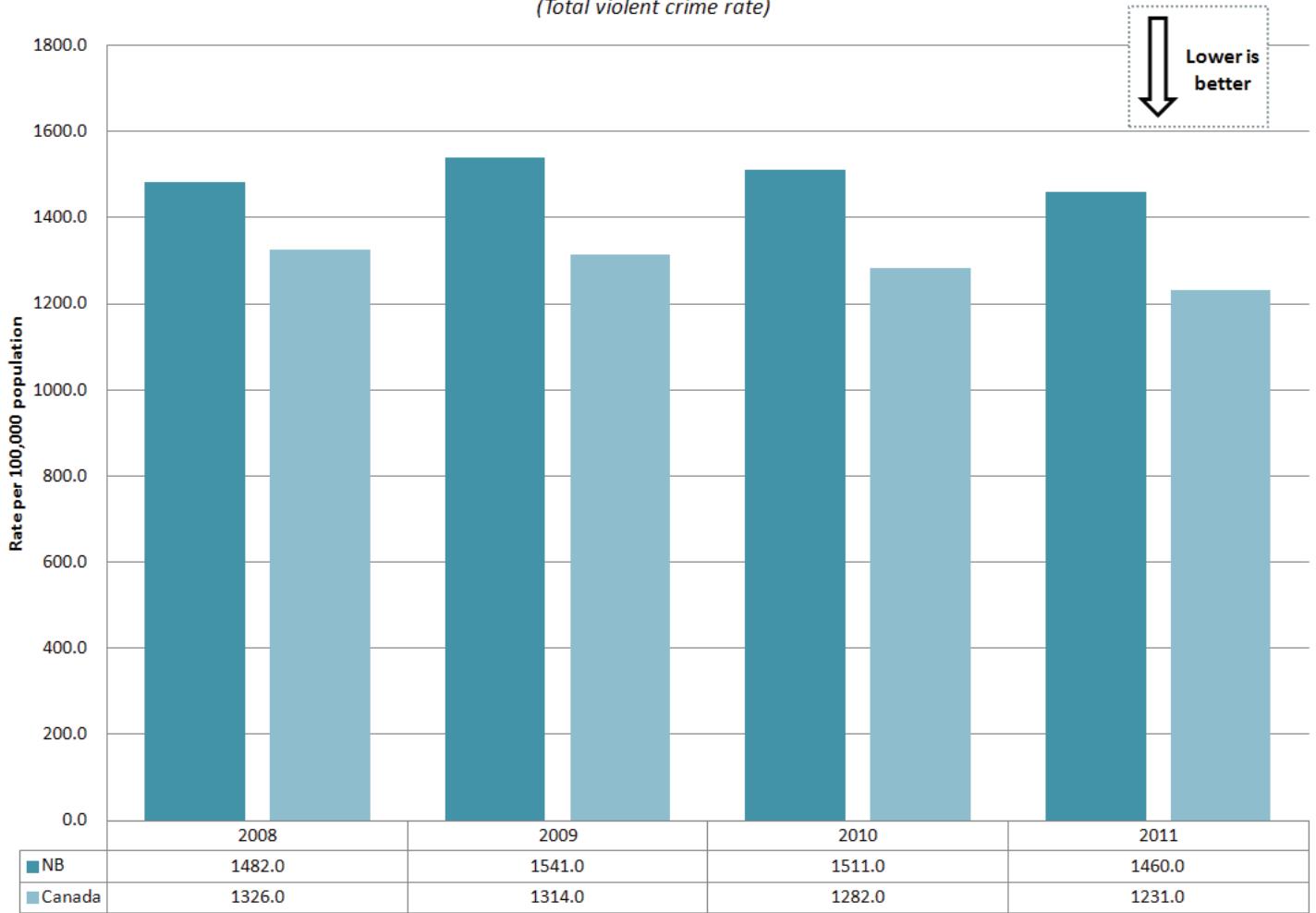
Why is this indicator important?

Fear of crime is thought to contribute to an underlying mechanism explaining differences in health and has been directly associated with poor health outcomes.

Crimes such as rape and physical attacks will affect a person's mental health. The quality adjusted life years are affected for victims of crime.



Violent Crime
(Total violent crime rate)



Actual indicator: Total Property Crime rate

Source: Statistics Canada, Crime Statistics, CANSIM 252-0051

Definition:

Property crime is a category of crime that includes, among other crimes, burglary, larceny, theft, motor vehicle theft, arson, shoplifting, and vandalism. Property crime only involves the taking of money or property, and does not involve force or threat of force against a victim.

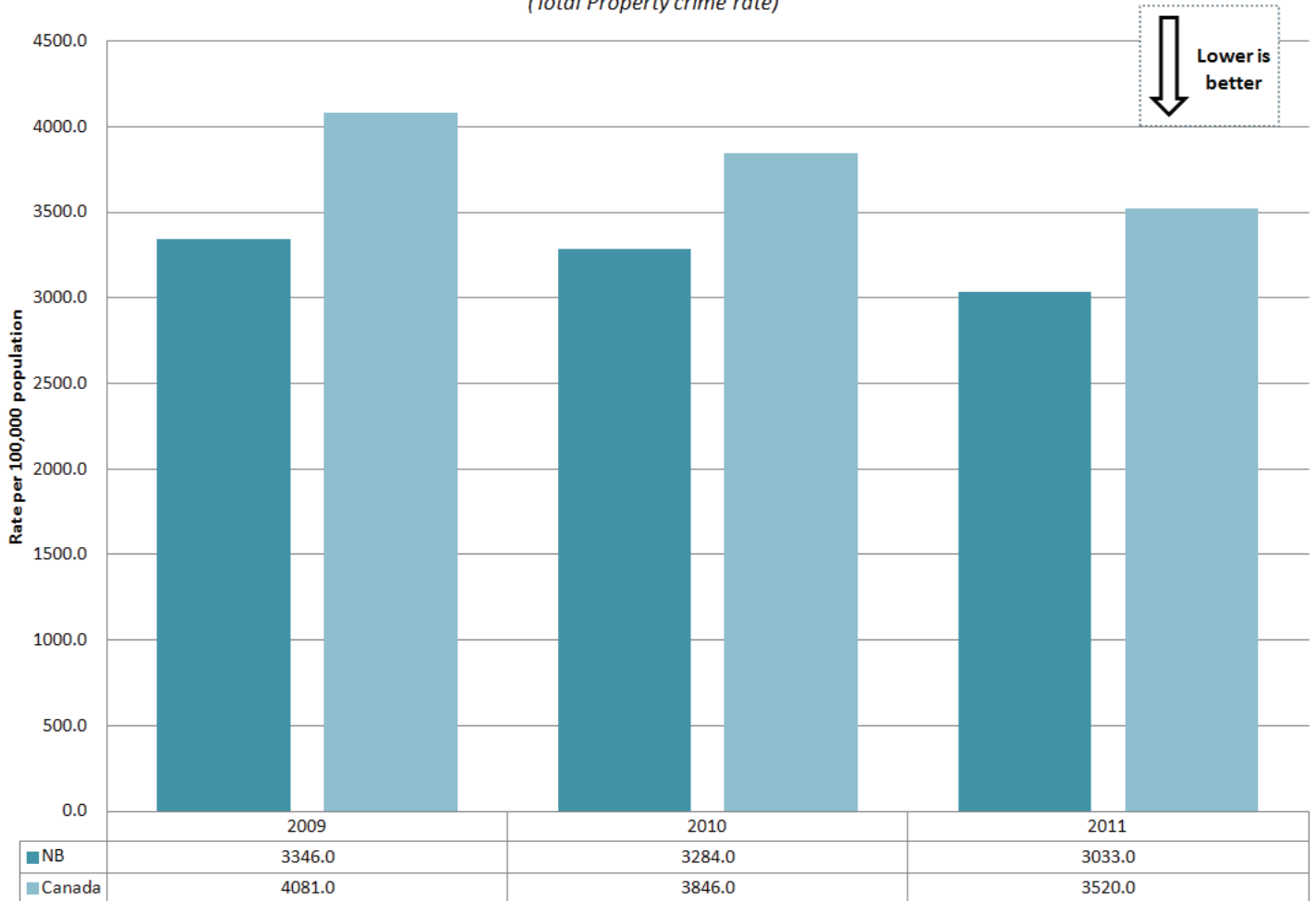
Why is this indicator important?

Fear of crime is thought to contribute to an underlying mechanism explaining area differences in health and has been directly associated with poor health outcomes.

Crimes such robbery or vandalism can contribute to some mental health issues with the victims.



Property Crime
(Total Property crime rate)



Actual indicator: Rate of Total charged for driving under the influence (drugs or alcohol)

Source: Statistics Canada, Crime Statistics, CANSIM 252-0051

Definition:

Impaired driving involves operating a motor vehicle, while one's ability to operate that vehicle is impaired by alcohol, or a drug.

Why is this indicator important?

Every year, driving impaired is responsible for hundreds of deaths and thousands of injuries on our roads. It is a sad record, with lives claimed or ruined and massive costs imposed on the community.

Of course passengers in the car may be affected by being injured in accidents, but they may be affected emotionally by the trauma of accidents as well. But beyond that, there is the emotional trauma to family members and friends who may lose loved ones or have to cope with severely injured loved ones.

Family members or friends may also feel guilty for “letting” loved ones drive while drunk, although ultimately the driver is responsible for his or her own actions.

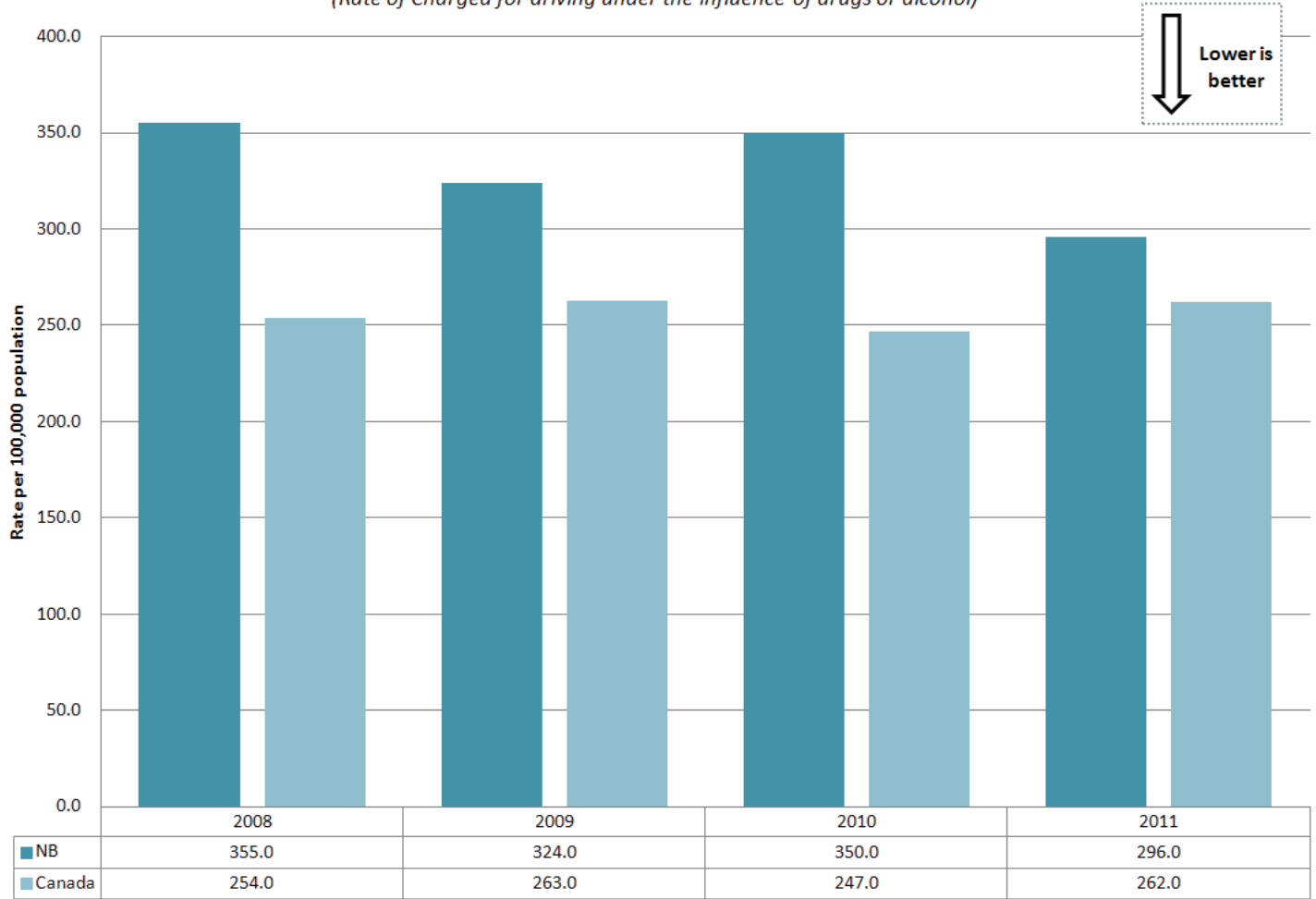
We should not ignore the consequences of drunk driving to the driver, however. In addition to possible injury and death, there is the emotional trauma that may occur if he or she causes injury or death to someone else. The guilt can be overwhelming. There can also be legal problems as a result.

Fortunately, for some years now, more and more people from all segments of society have developed a sound attitude towards impaired driving. There is a growing understanding that drinking and driving is no longer acceptable.



Driving under the influence

(Rate of Charged for driving under the influence of drugs or alcohol)



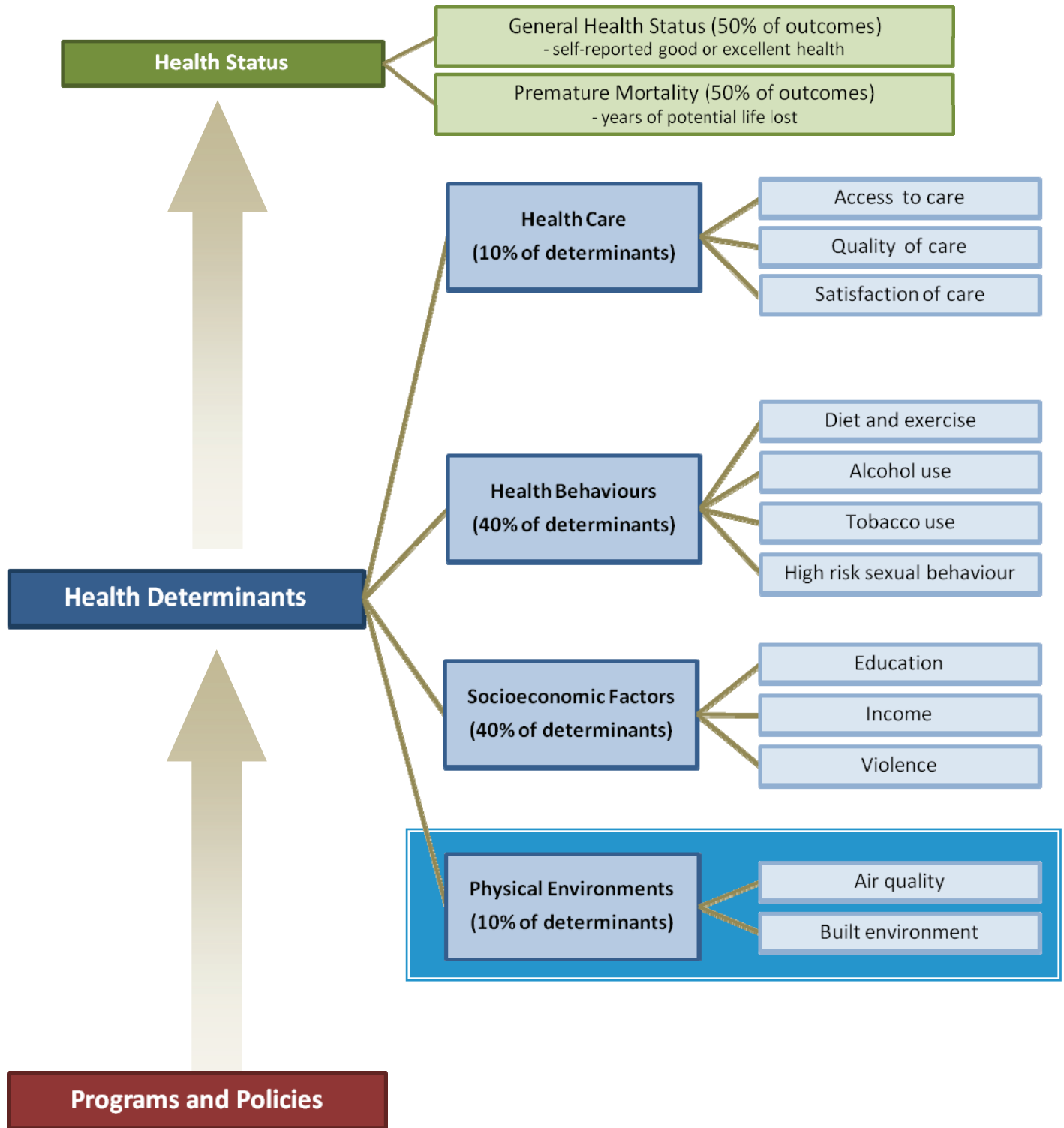


Section 5 — Health Determinants

**Physical Environment:
accounts for 10% of the health status**

Exposure to harmful factors in the environment is an important contributor to ill health, but major gaps remain in understanding their full impact.





Actual indicator: Exposure to second-hand smoke at home

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501 .

Definition:

Non-smoking population aged 12 and over who reported that at least one person smoked inside their home every day or almost every day. Smoking includes cigarettes, cigars and pipes.

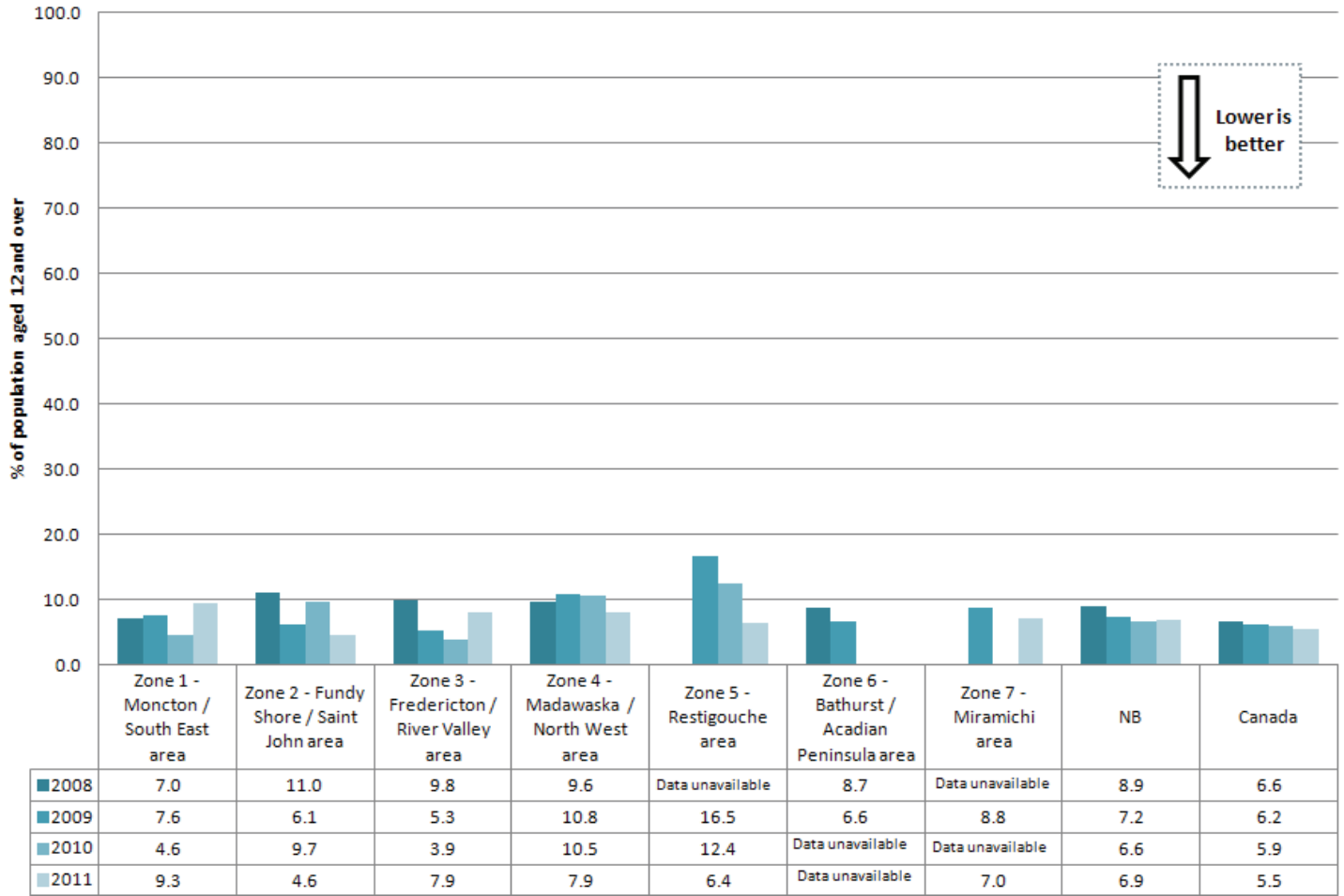
Why is this indicator important?

Second-hand smoke causes sore eyes and throat, nasal irritation, headaches, coughing and wheezing, nausea and dizziness. You are also more likely to get colds. Breathing in second-hand smoke can also trigger asthma attacks and increase your chances of getting bronchitis and pneumonia.

If you have been exposed to second-hand smoke for a long time, you are more likely to develop and die from heart problems, breathing problems or lung cancer.



Coming in contact with second-hand smoke (Exposure to second-hand smoke at home)



Actual indicator: Exposure to second-hand smoke in the past month, in vehicles and/or public places

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

Non-smoking population aged 12 and over who reported being exposed to second-hand smoke in private vehicles and/or public places on every day or almost every day in the past month.

Smoking includes cigarettes, cigars and pipes.

Why is this indicator important?

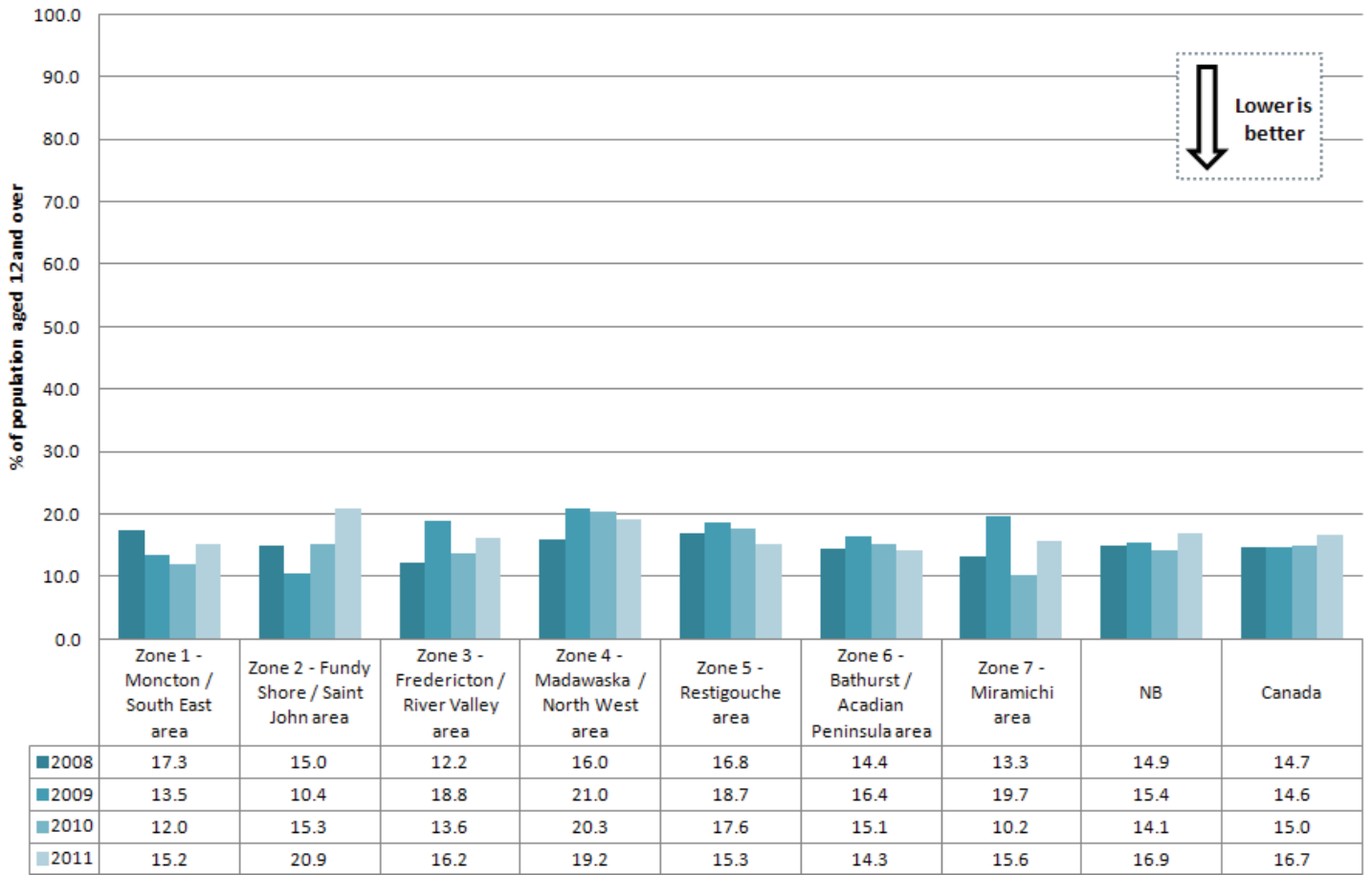
Second-hand smoke causes sore eyes and throat, nasal irritation, headaches, coughing and wheezing, nausea and dizziness. You are also more likely to get colds. Breathing in second-hand smoke can also trigger asthma attacks and increase your chances of getting bronchitis and pneumonia.

If you have been exposed to second-hand smoke for a long time, you are more likely to develop and/or die from heart problems, breathing problems or lung cancer.



Coming in contact with second-hand smoke in the past month, in vehicles and/or in public places

(Exposure to second-hand smoke in the past month, in vehicles and/or public places)



Actual indicator: % of dwellings rated as having excellent, very good or good indoor air quality

Source: Statistics Canada, Environment Accounts and Statistics Division, Households and the Environment Survey, 2009 (survey number 3881).

Definition:

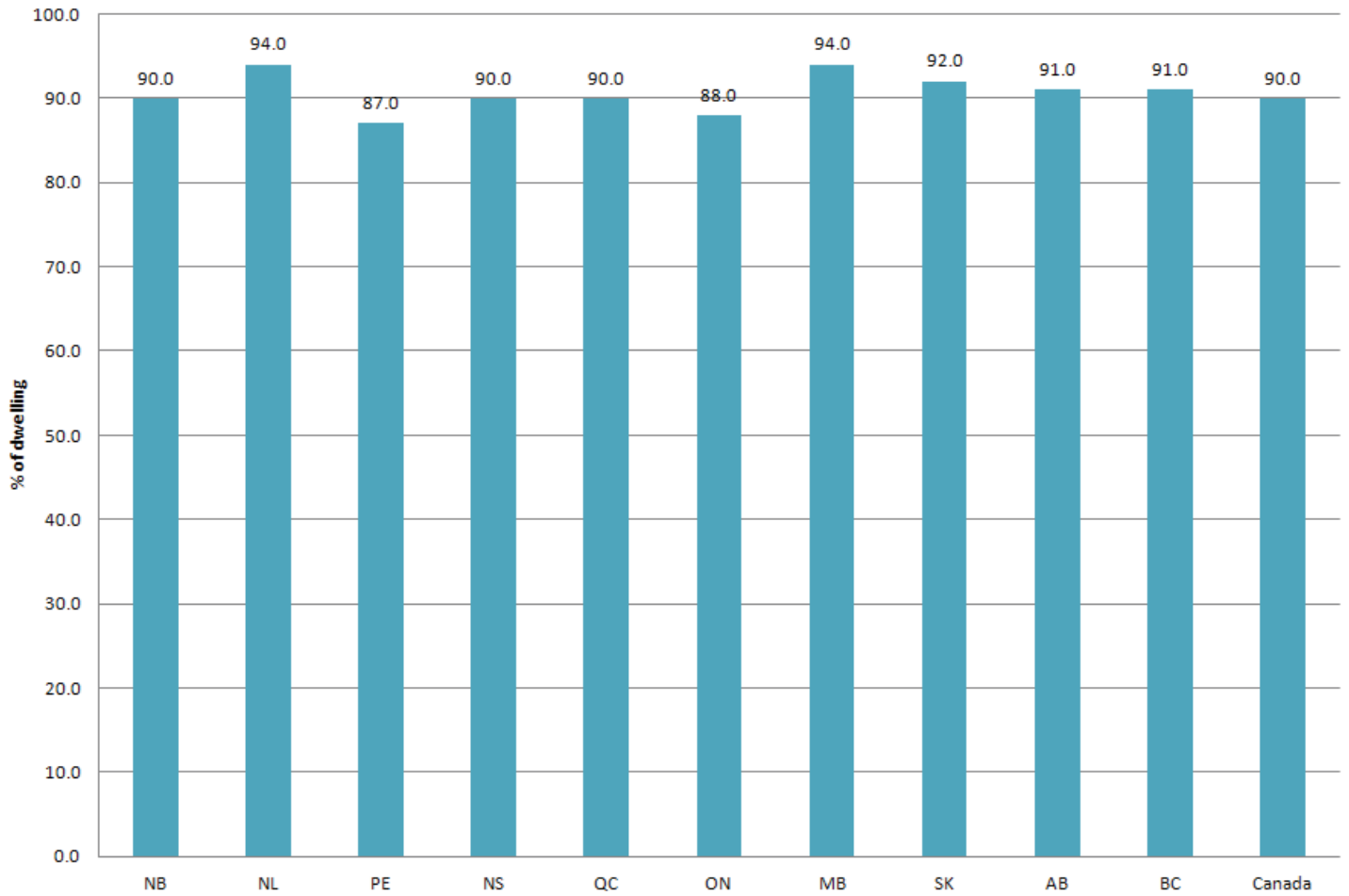
Households that rated the quality of the air in their home during the previous year as excellent, very good or good .

Why is this indicator important?

Good air quality is achieved when there are very low levels of contaminants present. Contaminants such as dust, mould, volatile organic compounds (VOCs), carbon monoxide, and radon can affect indoor air quality in the home and can thus have a negative impact on the people living there .

Special Note: This new indicator was only added for the provincial snapshot to compare New Brunswick with other provinces on indoor air quality

Rating of indoor air quality - 2009
(% of dwellings rated as having excellent, very good or good indoor air quality)



Actual indicator: Sense of community belonging

Source: Statistics Canada, Canadian Community Health Survey.
CANSIM table no.: 105-0501

Definition:

Population aged 12 and over who reported their sense of belonging to their local community as being very strong or somewhat strong.

Why is this indicator important?

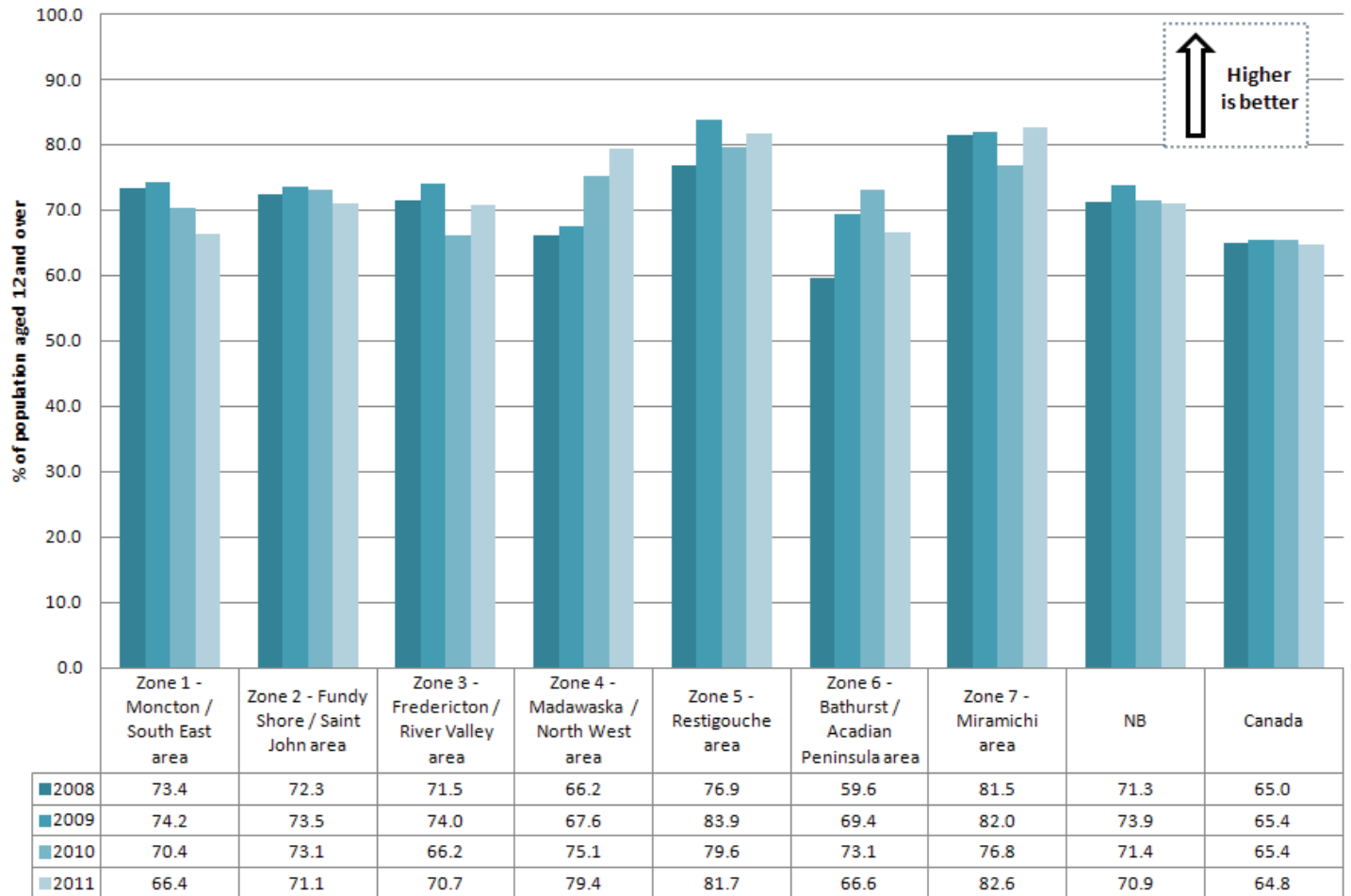
Research shows a high correlation of sense of community belonging with physical and mental health.

Social support and connectedness refers to people, networks and social resources to which individuals have access in times of need and that provide a foundation for a sense of belonging in one's community.

Individuals who feel isolated and alienated from their communities, or who lack supportive friends and family, often experience poorer health status than those individuals who have a robust social networking.



Sense of belonging to your community, somewhat strong or very strong
(Sense of community belonging)





Appendix

- A—Provincial snapshot
- B—Zone snapshots
- C—Description of zones
- D—The sources



New Brunswick "Population Health Snapshot - 2012"

	NB Male	NB Female	NB Average	Canadian Average	Rank (NB to Canada)	Trend compared to last NB snapshot
--	---------	-----------	------------	------------------	---------------------	------------------------------------

POPULATION HEALTH STATUS

See their health as being very good or excellent	(%, 2011)	53.5	54.3	53.9	59.9	◆ 10/10	▲
See their mental health as being very good or excellent	(%, 2011)	68.4	67.7	68.0	72.6	◆ 9/10	▼
Pain or soreness that prevents activities (physical or emotional)	(%, 2011)	13.3	18.4	15.9	14.5	● 6/10	▼
Life satisfaction, satisfied or very satisfied	(%, 2011)	93.7	93.3	93.5	92.3	● 2/10*	▲
Expected years of life	(age, 2007/2009)	77.5	82.8	80.2	81.1	● 5/10*	=
Infant with less than average birth weight ^(New source)	(%, 2008/10)	5.18	5.86	5.52	--	--	--
Infant deaths ^(New source)	(rate per 1,000 live birth, 2008/10)	4.48	2.69	3.60	--	--	--
Premature deaths from heart and stroke	(years of life lost, rate per 10,000 2006/10)	136.24	53.83	94.93	--	--	▲
Premature deaths from cancer	(years of life lost, rate per 10,000 2006/10)	179.81	163.80	171.78	--	--	▲
Premature deaths from breathing diseases	(years of life lost, rate per 10,000 2006/10)	26.82	16.70	21.75	--	--	▲
Premature deaths from injuries	(years of life lost, rate per 10,000 2006/10)	114.39	40.54	77.37	--	--	▲
Premature deaths due to suicides/self-inflicted injuries	(years of life lost, rate per 10,000 2006/10)	63.25	16.70	39.92	--	--	▲

HEALTH DETERMINANTS

Health Care - accounts for 10% of the health status

Has a regular medical doctor	(%, 2011)	90.5	94.4	92.5	84.7	● 2/10	▲
Medical doctor visit within the last year	(%, 2010)	72.9	88.0	80.7	80.6	● 8/10	--
Dental professional visit within the last year	(%, 2009/2010)	58.9	62.7	60.8	66.3	● 7/10	--
People being hospitalized for unnecessary conditions	(aged-standardized rate per 100,000, 2010/11)	519	430	474	299	◆ 8/10	▲
Adults 65 years and up who have received the flu shot in the last year	(%, 2011)	67.0	67.1	67.0	64.4	● 4/10	▲
Females (18 to 69 years old) who had a pap test within the last 3 years	(%, 2007/2008)	--	80.9	80.9	84.9	◆ 4/4	--
Females (50 to 69 years old) who had a mammogram in the last 2 years	(%, 2010)	--	76.7	76.7	70.4	● 2/5	--
Overall hospital rating	(%, 2010)	78.3	74.0	75.9	--	--	--
Satisfaction/experience rating for healthcare	(%, 2011)	63.0	60.2	61.5	--	--	--

Health Behaviours - account for 40% of the health status

Physical activity during free-time, moderately active or active	(%, 2011)	56.0	46.4	51.0	53.8	● 7/10	▼
Eat 5 or more fruits or vegetables a day	(%, 2011)	28.2	42.9	35.9	40.4	● 6/10	▼
Adults with unhealthy weight (obese)	(%, 2011)	25.0	24.8	24.9	18.3	◆ 9/10	▲
5 or more drinks at one time, at least once a month in the past year (heavy drinking)	(%, 2011)	31.4	12.6	21.7	19.0	● 7/10*	▼
Seeing your stress as being a lot	(%, 2011)	18.0	19.8	18.9	23.6	● 3/10	▲
Current smoker, daily or occasional	(%, 2011)	20.4	23.0	21.7	19.9	● 7/10*	▲
Number of sexually transmitted infections (genital Chlamydia)	(crude rate per 10,000 pop, 2011)	16.8	34.1	25.6	--	--	▼
Teens who gave birth (teen pregnancy unavailable annually)	(rate per 1,000 females, 2011)	--	21.1	21.1	--	--	▲
Always wears a bicycle helmet while on a bike	(%, 2010)	50.5	57.3	53.1	37.3	● 4/10	--

Socioeconomic Factors - account for 40% of the health status

No high school diploma (25 years and older)	(%, 2006)	23.1	19.0	21.0	15.4	◆ 9/10	--
Unemployment	(%, 2011)	--	--	9.5	7.5	◆ 8/10	▼
Divorced	(%, 2011)	4.6	5.7	5.2	6.0	● 2/10*	▲
Single parent family	(%, 2011)	--	--	16.1	16.3	● 4/10*	▲
Low income	(%, 2010)	--	--	11.9	10.6	● 7/10	▲
Violent crime	(rate per 100,000 population, 2011)	--	--	1,460	1,231	● 5/7	▲
Property crime	(rate per 100,000 population, 2011)	--	--	3,033	3,520	● 3/6	▲
Charged for driving under the influence (drugs or alcohol)	(rate per 100,000 population, 2011)	--	--	296	262	● 3/6	▲

Physical Environment - accounts for 10% of the health status

Coming in contact with second-hand smoke at home	(%, 2011)	8.4	5.5	6.9	5.5	◆ 8/10	▼
Coming in contact with second-hand smoke in the past month in vehicles &/or in public place	(%, 2011)	18.2	15.7	16.9	16.7	● 6/10	▼
Dwellings rated as having excellent, very good or good indoor air quality	(%, 2009)	--	--	90.0	90.0	● 6/10	--
Sense of belonging to your community, somewhat strong or very strong	(%, 2011)	70.1	71.7	70.9	64.8	● 5/10	▼

Provincial rank in Canada
 ● Doing well (ranked 1, 2, 3)
 ● Caution
 ◆ Lagging (last 3 places)

Trend comparison with the last NB Population Health Snapshot
 ▲ New Brunswick Provincial indicator value has improved
 ▼ New Brunswick Provincial indicator value has gotten worse
 = New Brunswick Provincial indicator value has stayed the same
 -- Trending is not available

Rating by best (1) to worst (10). Includes all provinces (10 in total). (F = Use data with caution, sample size too small, * = another province has the same ranking, F or -- = data unavailable). **Bold**: Updated indicator

2012 New Brunswick Population Health snapshot

Top 10 most frequent hospital admissions for New Brunswick (2011-12)

Hospital admissions	# of cases	Rate per 10,000
1- Vaginal Delivery	4,187	55.7
2- Newborn	3,638	48.4
3- COPD (Chronic Obstructive Lung Disease)	2,955	39.3
4- Enteritis (Inflammation of Small Intestine)	1,718	22.9
5- Viral/Unspecified Pneumonia	1,708	22.7
6- Heart Failure without Cardiac Catheter	1,595	21.2
7- Arrhythmia (Abnormal Heartbeat)	1,503	20.0
8- Palliative Care (end of life)	1,487	19.8
9- Heart Attack	1,428	19.0
10- Angina /Chest Pain	1,417	18.9

Top 10 most common chronic health conditions in New Brunswick (2011)

Top 10 chronic health conditions	Prevalence (%)
1- High Blood Pressure	25.7
2- Arthritis	18.0
3- GERD (Acid Reflux Disease)	16.1
4- Chronic Pain	15.0
5- Depression	12.7
6- Asthma	10.3
7- Diabetes	9.2
8- Heart Disease	8.3
9- Cancer	7.0
10- Emphysema or COPD	2.7

SPECIFICS ABOUT NB

Age distribution of the population

0- 19 years old = **21.2%**

20-39 years old = **23.7%**

40-64 years old = **38.6%**

65 ++ years old = **16.5%**

Total population = 751,170

Median age = 43.7

Language spoken at home:

French = **27.9%**

English = **68.2%**

(source: 2011 Census, Statistics Canada)

Immigrant population = 3.7%

Aboriginal population = 2.5%

(source: 2006 Census, Statistics Canada)



New Brunswick Health Council | Conseil de la santé du Nouveau-Brunswick

Engage, Evaluate, Inform, Recommend.
Engager, Évaluer, Informer, Recommander.

What is a wellness network?

Wellness networks are a formal or informal group of people who come together from various backgrounds within a community or region to address an area of concern around wellness. They may be working toward improved healthy eating, increased physical activity, or another wellness goal. Through a combination of federal and provincial government support the Healthy Eating and Physical Activity Coalition (HEPAC) is leading an initiative to strengthen wellness networks around the province of NB. www.hepac.ca

What is a Community Inclusion Network?

All citizens, community organizations, local business, government agencies, and communities are encouraged to participate in their local Community Inclusion Networks. The networks will develop local poverty reduction plans and work together to deliver programming tailored to local needs. For more information: Telephone: 1-888-295-4545 <http://www.gnb.ca/poverty> esic-sies@gnb.ca



Pavillon J-Raymond-Frenette
100 rue des Aboiteaux Street, bureau/suite 2200
Moncton NB E1A 7R1

Telephone / Téléphone 506.869.6870
Fax / Télécopieur 506.869.6282
Toll-free / Sans frais 1.877.225.2521

www.nbhc.ca / www.csnb.ca

Executive Summary

- Population Health Snapshot per zone, New Brunswick and Canada – 2012

Indicator	Desired direction	Zone 1: Moncton/ South-East Area	Zone 2: Fundy Shore / Saint John Area	Zone 3: Fredericton / River Valley Area	Zone 4: Madawaska / North West Area	Zone 5: Restigouche Area	Zone 6: Bathurst / Acadian Peninsula Area	Zone 7: Miramichi area	New Brunswick	Canada
Population Health Status										
See their health as being very good or excellent (% , 2011)	▲ Better	◆ 49.2	● 58.4	● 57.3	50.7	◆ 43.9	55.1	52.8	53.9	59.9
See their mental health as being very good or excellent (% , 2011)	▲ Better	◆ 65.2	69.9	68.0	67.5	◆ 59.8	● 72.3	● 71.5	68.0	72.6
Pain or soreness that prevents activities (physical or emotional) (% , 2011)	▼ Better	● 12.9	16.6	◆ 18.7	17.7	◆ 17.9	16.5	● 12.9	15.9	14.5
Life satisfaction, satisfied or very satisfied (% , 2011)	▲ Better	93.5	93.6	92.8	◆ 91.3	◆ 90.5	● 94.9	● 96.3	93.5	92.3
Expected years of life (age, 2007-09)	▲ Better	● 81.4	79.5	79.6	◆ 79.3	◆ 78.6	● 81.3	79.7	80.2	81.1
Infant with less than average birth weight (% , 2008/10) ^(New source)	▼ Better	◆ 5.98	● 5.30	● 5.15	5.82	5.66	● 5.31	5.80	5.52	--
Infant deaths (rate per 1,000 live birth, 2008/10) ^(New source)	▼ Better	● 3.32	4.20	3.36				◆ 6.34	3.60	--
Premature deaths from heart and stroke (years of life lost, 2006/2010)	▼ Better	● 78.11	◆ 111.53	102.22	89.42	◆ 129.04	● 80.02	89.05	94.93	--
Premature deaths from cancer (years of life lost, 2006/2010)	▼ Better	● 162.56	179.53	● 155.41	◆ 209.52	183.94	166.47	◆ 205.20	171.78	--
Premature deaths from breathing diseases (years of life lost, 2006/2010)	▼ Better	● 17.34	◆ 23.62	◆ 26.09	● 19.43	22.42	20.83	21.16	21.75	--
Premature deaths from injuries (years of life lost, 2006/2010)	▼ Better	76.35	● 69.37	● 76.25	81.63	◆ 102.79	78.41	◆ 95.32	77.37	--
Premature deaths due to suicides/self-inflicted injuries (years of life lost, 2006/2010)	▼ Better	43.98	● 31.64	40.28	◆ 63.28	◆ 56.42	● 31.17	32.07	39.92	
Health Determinants										
Health Care – accounts for 10 % of the health status										
Has a regular medical doctor (% , 2011)	▲ Better	91.8	◆ 90.9	93.4	◆ 90.6	● 96.3	94.0	● 96.2	92.5	84.7
Medical doctor visit within the last year (% , 2010)	▲ Better	81.3	◆ 78.6	◆ 79.4	79.8	● 85.0	82.4	● 85.7	80.7	80.6
Dental professional visit within the last year (% , 2009/2010)	▲ Better	62.2	● 63.0	● 62.9	57.4	56.9	◆ 54.1	◆ 56.4	60.8	66.3
People being hospitalized for unnecessary conditions (aged-standardized rate per 100,000, 2010-11)	▼ Better	● 381	● 430	520	535	◆ 774	511	◆ 556	474	299
Adults 65 years and up who have received the flu shot in the last year (% , 2011)	▲ Better	68.1	65.9	66.8	◆ 65.2	● 76.8	● 68.8	◆ 60.7	67.0	64.4
Females (18 to 69 years old) who had a pap test within the last 3 years (% , 2007/2008)	▲ Better	80.5	82.5	● 87.0	◆ 70.7	76.4	◆ 71.9	● 83.4	80.9	84.9
Females (50 to 69 years old) who had a mammogram in the last 2 years (% , 2010)	▲ Better	● 83.6	◆ 71.1	74.2	● 79.9	75.8	78.0	◆ 70.6	76.7	70.4
Overall Hospital rating (% , 2010)	▲ Better	● 77.2	76.1	74.9	● 82.0	◆ 74.8	◆ 70.1	76.5	75.9	--
Overall health care services rating (% , 2011)	▲ Better	61.6	59.9	59.9	● 66.1	◆ 59.8	64.1	● 64.6	61.5	--

- Doing well (ranked 1 or 2 out of 7)
- ◆ Lagging (ranked 6 or 7 out of 7)

Executive Summary

- Population Health Snapshot per zone, New Brunswick and Canada – 2012

Indicator	Desired direction	Zone 1: Moncton/ South-East Area	Zone 2: Fundy Shore / Saint John Area	Zone 3: Fredericton / River Valley Area	Zone 4: Madawaska / North West Area	Zone 5: Restigouche Area	Zone 6: Bathurst / Acadian Peninsula Area	Zone 7: Miramichi area	New Brunswick	Canada
Health Behaviours – account for 40% of the health status										
Physical activity during free-time, moderately active or active (% , 2011)	▲ Better	● 54.5	52.7	47.8	◆ 43.5	51.7	47.8	● 53.6	51.0	53.8
Eat 5 or more fruits or vegetables a day (% , 2011)	▲ Better	34.7	◆ 32.8	◆ 34.3	37.6	36.7	● 47.0	● 37.7	35.9	40.4
Adults with unhealthy weight (obese) (% , 2011)	▼ Better	● 22.0	24.6	26.3	◆ 27.4	● 22.6	◆ 28.8	26.6	24.9	18.3
5 or more drinks at one time, at least once a month in the past year (heavy drinking) (% , 2011)	▼ Better	◆ 28.6	19.1	19.0	● 18.1	◆ 24.1	● 18.2	18.7	21.7	19.0
Seeing your stress as being a lot (% , 2011)	▼ Better	● 17.4	17.5	19.5	◆ 28.5	◆ 25.6	● 14.0	23.1	18.9	23.6
Current smoker, daily or occasional (% , 2011)	▼ Better	● 20.3	◆ 24.5	22.4	◆ 25.5	24.4	● 15.0	● 20.3	21.7	19.9
Number of sexually transmitted illnesses (genital Chlamydia) (rate per 10,000, 2011)	▼ Better	◆ 35.3	19.2	◆ 34.1	● 9.6	● 11.8	14.0	19.5	25.6	--
Teens who gave birth (teen pregnancy unavailable annually) (rate per 1,000 females, 2011)	▼ Better	● 17.6	◆ 24.3	21.3	● 15.3	20.8	19.5	◆ 23.8	21.1	--
Always wears a bicycle helmet while on a bike(% , 2010)	▲ Better	54.3	● 59.1	● 63.3	◆ 36.2	◆ 35.7 ^F	38	38.9	53.1	37.3
Socioeconomic Factors – account for 40% of the health status										
No high school diploma (25 years and older) (% , 2006)	▼ Better	23.4	● 16.3	● 16.5	27.2	◆ 29.0	◆ 32.9	27.3	21.0	15.4
Unemployment (% , 2011)	▼ Better	● 8.6	● 7.3	8.8	10.1	◆ 13.4	◆ 13.4	◆ 19.6	9.5	7.5
Divorced (% , 2006)	▼ Better	◆ 7.0	◆ 7.2	6.9	6.1	6.6	● 5.8	● 5.4	6.7 (5.2, 2011)	8.0 (6.0, 2011)
Single parent family (% , 2006)	▼ Better	15.4	17.7	● 14.3	● 11.3	◆ 19.7	◆ 18.9	18.0	16.3 (16.1, 2011)	15.9 (16.3, 2011)
Low income (% , 2006)	▼ Better	● 12.6	14.6	● 12.4	◆ 15.6	◆ 15.6	15.3	12.7	13.5 (11.9, 2010)	15.3 (10.6, 2010)
Violent crime (rate per 100,000 population, 2011)	▼ Better	--	--	--	--	--	--	--	1,460	1,231
Property crime (rate per 100,000 population, 2011)	▼ Better	--	--	--	--	--	--	--	3,033	3,520
Charged for driving under the influence (drugs or alcohol) (rate per 100,000 population, 2011)	▼ Better	--	--	--	--	--	--	--	296	262
Physical Environment – accounts for 10% of the health status										
Coming in contact with second-hand smoke at home (% , 2011)	▼ Better	◆ 9.3	● 4.6	7.9	7.9	● 6.4	F	7.0	6.9	5.5
Coming in contact with second-hand smoke in the past month, in vehicles and/or in public place (% , 2011)	▼ Better	● 15.2	◆ 20.9	16.2	◆ 19.2	15.3	● 14.3	15.6	16.9	16.7
Dwellings rated as having excellent, very good or good indoor air quality (% , 2009)	▲ Better	--	--	--	--	--	--	--	90.0	90.0
Sense of belonging to your community, somewhat strong or very strong (% , 2011)	▲ Better	◆ 66.4	71.1	70.7	79.4	● 81.7	◆ 66.6	● 82.6	70.9	64.8

- Doing well (ranked 1 or 2 out of 7)
- ◆ Lagging (ranked 6 or 7 out of 7)



Zone 1: Moncton/South-East Area "Population Health Snapshot 2012"

Zone 1
Male

Zone 1
Female

Zone 1
Average

NB
Average

Rank (Zone
1 vs. other
zones)

Trend
compared
to last zone
1 snapshot

POPULATION HEALTH STATUS

	(%)	Zone 1 Male	Zone 1 Female	Zone 1 Average	NB Average	Rank (Zone 1 vs. other zones)	Trend compared to last zone 1 snapshot
See their health as being very good or excellent	(%, 2011)	49.0	49.4	49.2	53.9	◆ 6/7	▼
See their mental health as being very good or excellent	(%, 2011)	65.4	65.0	65.2	68.0	◆ 6/7	▼
Pain or soreness that prevents activities (physical or emotional)	(%, 2011)	13.0	12.7	12.9	15.9	● 1/7*	▲
Life satisfaction, satisfied or very satisfied	(%, 2011)	94.4	92.7	93.5	93.5	● 4/7	▲
Expected years of life	(age, 2007/2009)	78.7	83.9	81.4	80.2	● 1/7	▲
Infant with less than average birth weight ^(New source)	(%, 2008/2010)	5.43	6.54	5.98	5.52	◆ 7/7	--
Infant deaths ^(New source)	(rate per 1,000 live birth, 2008/10)	4.97	1.66	3.32	3.60	● 1/4	--
Premature deaths from heart and stroke	(years of life lost, rate per 10,000 2006/10)	111.99	44.23	78.11	94.93	● 1/7	▲
Premature deaths from cancer	(years of life lost, rate per 10,000 2006/10)	172.33	152.77	162.56	171.78	● 2/7	▲
Premature deaths from breathing diseases	(years of life lost, rate per 10,000 2006/10)	21.84	12.83	17.34	21.75	● 1/7	▲
Premature deaths from injuries	(years of life lost, rate per 10,000 2006/10)	110.45	42.24	76.35	77.37	● 3/7	▲
Premature deaths due to suicides/self-inflicted injuries	(years of life lost, rate per 10,000 2006/10)	69.48	18.47	43.98	39.92	● 5/7	▼

HEALTH DETERMINANTS

Health Care - accounts for 10% of the health status

	(%)	Zone 1 Male	Zone 1 Female	Zone 1 Average	NB Average	Rank (Zone 1 vs. other zones)	Trend compared to last zone 1 snapshot
Has a regular medical doctor	(%, 2011)	88.8	94.6	91.8	92.5	● 5/7	▼
Medical doctor visit within the last year	(%, 2010)	73.4	88.9	81.3	80.7	● 4/7	--
Dental professional visit within the last year	(%, 2009/2010)	60.9	63.4	62.2	60.8	● 3/7	--
People being hospitalized for unnecessary conditions	(aged-standardized rate per 100,000, 2010/11)	419	345	381	474	● 1/7	▼
Adults 65 years and up who have received the flu shot in the last year	(%, 2011)	80.7	58.4	68.1	67.0	● 3/7	▲
Females (18 to 69 years old) who had a pap test within the last 3 years	(%, 2007/2008)	--	80.5	80.5	80.9	● 4/7	--
Females (50 to 69 years old) who had a mammogram in the last 2 years	(%, 2010)	--	83.6	83.6	76.7	● 1/7	--
Overall hospital rating	(%, 2010)	80.2	74.8	77.2	75.9	● 2/7	--
Satisfaction/experience rating for healthcare	(%, 2011)	63.3	60.0	61.6	61.5	● 4/7	--

Health Behaviours – account for 40% of the health status

	(%)	Zone 1 Male	Zone 1 Female	Zone 1 Average	NB Average	Rank (Zone 1 vs. other zones)	Trend compared to last zone 1 snapshot
Physical activity during free-time, moderately active or active	(%, 2011)	58.8	50.4	54.5	51.0	● 1/7*	▲
Eat 5 or more fruits or vegetables a day	(%, 2011)	25.4	43.5	34.7	35.9	● 5/7	▼
Adults with unhealthy weight (obese)	(%, 2011)	19.7	24.3	22.0	24.9	● 1/7	▲
5 or more drinks at one time, at least once a month in the past year (heavy drinking)	(%, 2011)	38.1	19.4	28.6	21.7	◆ 7/7	▼
Seeing your stress as being a lot	(%, 2011)	15.2	19.5	17.4	18.9	● 2/7	▲
Current smoker, daily or occasional	(%, 2011)	18.2	22.2	20.3	21.7	● 2/7*	▲
Number of sexually transmitted infections (genital Chlamydia)	(crude rate per 10,000 pop, 2011)	24.2	46.1	35.3	25.6	◆ 7/7	▼
Teens who gave birth (teen pregnancy unavailable annually)	(rate per 1,000 females, 2011)	--	17.6	17.6	21.1	● 2/7	▲
Always wears a bicycle helmet while on a bike	(%, 2010)	52.5	58.0	54.3	53.1	● 3/7	--

Socioeconomic Factors – account for 40% of the health status

	(%)	Zone 1 Male	Zone 1 Female	Zone 1 Average	NB Average	Rank (Zone 1 vs. other zones)	Trend compared to last zone 1 snapshot
No high school diploma (25 years and older)	(%, 2006)	26.4	20.4	23.4	21.0	● 3/7	--
Unemployment	(%, 2011)	F	F	8.6	9.5	● 2/7	▼
Divorced	(%, 2006)	6.3	7.6	7.0	6.7	◆ 6/7	--
Single parent family	(%, 2006)	2.5	12.9	15.4	16.3	● 3/7	--
Low income	(%, 2006)	11.4	13.7	12.6	13.5	● 2/7	--
Violent crime	(rate per 100,000 population, 2011)	--	--	--	1,460	--	--
Property crime	(rate per 100,000 population, 2011)	--	--	--	3,033	--	--
Charged for driving under the influence (drugs or alcohol)	(rate per 100,000 population, 2011)	--	--	--	296	--	--

Physical Environment – accounts for 10% of the health status

	(%)	Zone 1 Male	Zone 1 Female	Zone 1 Average	NB Average	Rank (Zone 1 vs. other zones)	Trend compared to last zone 1 snapshot
Coming in contact with second-hand smoke at home	(%, 2011)	13.6	F	9.3	6.9	◆ 6/6	▼
Coming in contact with second-hand smoke in the past month in vehicles &/or in public place	(%, 2011)	16.2	14.1	15.2	16.9	● 2/7	▼
Sense of belonging to your community, somewhat strong or very strong	(%, 2011)	67.2	65.7	66.4	70.9	◆ 7/7	▼

Zone rank in New Brunswick

- Doing well (ranked 1, 2)
- Caution (ranked 3, 4, 5)
- ◆ Lagging (ranked 6, 7)

Trend comparison with the last zone 1 population Health Snapshot

- ▲ Zone indicator value has improved
- ▼ Zone indicator value has gotten worse
- = Zone indicator value has stayed the same
- Trending is not available

Rating by best (1) to worst (7). Includes all health zones (7 in total). (E = Use data with caution, sample size too small, * = another zone has the same ranking, F or -- = data unavailable). **Bold** : Updated indicator

Zone 1: Moncton / South East Area

2012 Population Health Snapshot

Top 10 most frequent hospital admissions for the Moncton / South East area (2011-12)

Hospital admissions	# of cases	Rate per 10,000
1- Vaginal Delivery	1,218	58.8
2- Newborn	904	43.7
3- Angina /Chest Pain	576	27.8
4- Breathing Disease	558	27.0
5- Enteritis (inflammation of small intestines)	483	23.3
6- Newborn/Neonate 2500+ grams, Other Minor Problem	453	21.9
7- Arrhythmia (Abnormal Heartbeat)	418	20.2
8- Heart attack	413	20.0
9- Heart Failure without Cardiac Catheter	399	19.3
9- Primary Caesarean Section	373	18.0

Top 10 most common chronic health conditions for the Moncton / South East area (2011)

Chronic health conditions	Prevalence (%)
1- High blood pressure	24.6
2- Arthritis	16.2
3- GERD	16.1
4- Chronic Pain	13.9
5- Depression	13.3
6- Asthma	9.6
7- Diabetes	8.8
8- Heart Disease	7.6
9- Cancer	7.0
10- Emphysema or COPD	2.2

SPECIFICS ABOUT ZONE 1

Age distribution of the population

0- 19 years old = 22%
 20-39 years old = 26%
 40-64 years old = 37%
 65 + years old = 15%

Total population = 191,860

Median age = 41.2

Language spoken at home:

French = 37%
 English = 61%

Immigrant population = 3.4%

Aboriginal population = 2.4%

(source: 2006 Census, Statistics Canada)

What is a wellness network?

Wellness networks are a formal or informal group of people who come together from various backgrounds within a community or region to address an area of concern around wellness. They may be working toward improved healthy eating, increased physical activity, or another wellness goal. Through a combination of federal and provincial government support the Healthy Eating and Physical Activity Coalition (HEPAC) is leading an initiative to strengthen wellness networks around the province of NB.

For more information on the wellness networks in Zone 1 visit:

www.hepac.ca

What is a Community Inclusion Network?

All citizens, community organizations, local business, government agencies, and communities are encouraged to participate in their local Community Inclusion Networks. The networks will develop local poverty reduction plans and work together to deliver programming tailored to local needs.

For more information:

Telephone: 1-888-295-4545

<http://www.gnb.ca/poverty>

esic-sies@gnb.ca



Pavillon J.-Raymond-Frenette
 100 rue des Aboiteaux Street, bureau/suite 2200
 Moncton NB E1A 7R1

Telephone / Téléphone 506.869.6870

Fax / Télécopieur 506.869.6282

Toll-free / Sans frais 1.877.225.2521

www.nbhcc.ca / www.csnb.ca



Zone 2: Fundy Shore/Saint John Area "Population Health Snapshot 2012"

Zone 2
Male

Zone 2
Female

Zone 2
Average

NB
Average

Rank (Zone
2 vs. other
zones)

Trend
compared
to last zone
2 snapshot

POPULATION HEALTH STATUS

See their health as being very good or excellent	(%, 2011)	59.2	57.7	58.4	53.9	● 1/7	▼
See their mental health as being very good or excellent	(%, 2011)	70.2	69.7	69.9	68.0	● 3/7	▲
Pain or soreness that prevents activities (physical or emotional)	(%, 2011)	12.1	20.7	16.6	15.9	● 4/7	▼
Life satisfaction, satisfied or very satisfied	(%, 2011)	95.2	92.2	93.6	93.5	● 3/7	▲
Expected years of life	(age, 2007/2009)	76.8	82.1	79.5	80.2	● 5/7	▼
Infant with less than average birth weight ^(New source)	(%, 2008/10)	5.21	5.40	5.30	5.52	● 2/7*	--
Infant deaths ^(New source)	(rate per 1,000 live birth, 2008/10)	4.58	3.80	4.20	3.60	● 3/4	--
Premature deaths from heart and stroke	(years of life lost, rate per 10,000 2006/10)	155.94	68.01	111.53	94.93	◆ 6/7	▲
Premature deaths from cancer	(years of life lost, rate per 10,000 2006/10)	200.20	159.28	179.53	171.78	● 4/7	▲
Premature deaths from breathing diseases	(years of life lost, rate per 10,000 2006/10)	29.39	17.98	23.62	21.75	◆ 6/7	▲
Premature deaths from injuries	(years of life lost, rate per 10,000 2006/10)	105.61	33.86	69.37	77.37	● 1/7	▼
Premature deaths due to suicides/self-inflicted injuries	(years of life lost, rate per 10,000 2006/10)	48.04	15.58	31.64	39.92	● 1/7	▲

HEALTH DETERMINANTS

Health Care - accounts for 10% of the health status

Has a regular medical doctor	(%, 2011)	90.4	91.3	90.9	92.5	◆ 6/7	▼
Medical doctor visit within the last year	(%, 2010)	71.8	85.0	78.6	80.7	◆ 7/7	--
Dental professional visit within the last year	(%, 2009/2010)	60.1	65.7	63.0	60.8	● 1/7	--
People being hospitalized for unnecessary conditions	(aged-standardized rate per 100,000, 2010/11)	478	384	430	474	● 2/7	▼
Adults 65 years and up who have received the flu shot in the last year	(%, 2011)	61.6	69.1	65.9	67.0	● 5/7	▼
Females (18 to 69 years old) who had a pap test within the last 3 years	(%, 2007/2008)	--	82.5	82.5	80.9	● 3/7	--
Females (50 to 69 years old) who had a mammogram in the last 2 years	(%, 2010)	--	71.1	71.1	76.7	◆ 6/7	--
Overall hospital rating	(%, 2010)	78.8	73.5	76.1	75.9	● 4/7	--
Satisfaction/experience rating for healthcare	(%, 2011)	61.7	58.3	59.9	61.5	● 5/7*	--

Health Behaviours - account for 40% of the health status

Physical activity during free-time, moderately active or active	(%, 2011)	58.2	47.5	52.7	51.0	● 3/7	▼
Eat 5 or more fruits or vegetables a day	(%, 2011)	24.5	40.5	32.8	35.9	◆ 7/7	▼
Adults with unhealthy weight (obese)	(%, 2011)	21.5	27.8	24.6	24.9	● 3/7	▼
5 or more drinks at one time, at least once a month in the past year (heavy drinking)	(%, 2011)	30.0	9.0	19.1	21.7	● 5/7	▼
Seeing your stress as being a lot	(%, 2011)	19.2	15.9	17.5	18.9	● 3/7	▲
Current smoker, daily or occasional	(%, 2011)	21.5	27.4	24.5	21.7	◆ 6/7	▼
Number of sexually transmitted infections (genital Chlamydia)	(crude rate per 10,000 pop, 2011)	11.1	26.7	19.2	25.6	● 4/7	▼
Teens who gave birth (Teen pregnancy unavailable annually)	(rate per 1,000 females, 2011)	--	24.3	24.3	21.1	◆ 7/7	▲
Always wears a bicycle helmet while on a bike	(%, 2010)	48.4	74.7	59.1	53.1	● 2/7	--

Socioeconomic Factors - account for 40% of the health status

No high school diploma (25 years and older)	(%, 2006)	16.9	15.7	16.3	21.0	● 1/7	--
Unemployment	(%, 2011)	F	F	7.3	9.5	● 1/7	▲
Divorced	(%, 2006)	6.6	7.8	7.2	6.7	◆ 7/7	--
Single parent family	(%, 2006)	3.1	14.6	17.7	16.3	● 4/7	--
Low income	(%, 2006)	16.9	15.7	16.3	13.5	● 1/7	--
Violent crime	(rate per 100,000 population, 2011)	--	--	--	1,460	--	--
Property crime	(rate per 100,000 population, 2011)	--	--	--	3,033	--	--
Charged for driving under the influence (drugs or alcohol)	(rate per 100,000 population, 2011)	--	--	--	296	--	--

Physical Environment - accounts for 10% of the health status

Coming in contact with second-hand smoke at home	(%, 2011)	F	F	4.6	6.9	● 1/6	▲
Coming in contact with second-hand smoke in the past month in vehicles &/or in public place	(%, 2011)	17.9	24.0	20.9	16.9	◆ 7/7	▼
Sense of belonging to your community, somewhat strong or very strong	(%, 2011)	69.7	72.5	71.1	70.9	● 4/7	▼

Zone rank in New Brunswick

- Doing well (ranked 1, 2)
- Caution (ranked 3, 4, 5)
- ◆ Lagging (ranked 6, 7)

Trend comparison with the last zone 2 Population Health Snapshot

- ▲ Zone indicator value has improved
- ▼ Zone indicator value has gotten worse
- = Zone indicator value has stayed the same
- Trending is not available

Rating by best (1) to worst (7). Includes all health zones (7 in total). (E = Use data with caution, sample size too small, * = another zone has the same ranking, F or -- = data unavailable). **Bold:** Updated indicator

Zone 2: Fundy Shore / Saint John Area

2012 Population Health Snapshot

Top 10 most frequent hospital admissions for the Fundy Shore / Saint John area (2011-12)

Hospital admissions	# of cases	Rate per 10,000
1- Vaginal Delivery	1,147	65.1
2- Newborn	920	52.2
3- COPD (Chronic Obstructive Lung disease)	591	33.5
4- Viral/Unspecified Pneumonia	427	24.2
5- Heart Failure without Cardiac Catheter	419	23.8
6- Newborn/Neonate 2500+ grams, Other Minor Problem	362	20.5
7- Knee Replacement	334	19.0
8- Palliative Care (end of life)	310	17.6
9- Hysterectomy with no cancer	289	16.4
10- Enteritis (Inflammation of Small Intestine)	284	16.1

Top 10 most common chronic health conditions for the Fundy Shore / Saint John area (2011)

Chronic health conditions	Prevalence (%)
1- High Blood Pressure	25.6
2- Arthritis	21.2
3- Chronic Pain	15.6
4- GERD (Acid Reflux Disease)	15.1
5- Depression	11.8
6- Asthma	10.6
7- Diabetes	9.3
8- Heart Disease	8.4
9- Cancer	7.8
10- Emphysema or COPD	3.2

SPECIFICS ABOUT ZONE 2

Age distribution of the population

0- 19 years old = 24%

20-39 years old = 24%

40-64 years old = 37%

65 + years old = 15%

Total population = 169,765

Median age = 41.0

Language spoken at home:

French = 1%

English = 97%

Immigrant population = 4.5%

Aboriginal population = 1.1%

(source: 2006 Census, Statistics Canada)

What is a wellness network?

Wellness networks are a formal or informal group of people who come together from various backgrounds within a community or region to address an area of concern around wellness. They may be working toward improved healthy eating, increased physical activity, or another wellness goal. Through a combination of federal and provincial government support the Healthy Eating and Physical Activity Coalition (HEPAC) is leading an initiative to strengthen wellness networks around the province of NB.

For more information on the wellness networks in Zone 2 visit:

www.hepac.ca

What is a Community Inclusion Network?

All citizens, community organizations, local business, government agencies, and communities are encouraged to participate in their local Community Inclusion Networks. The networks will develop local poverty reduction plans and work together to deliver programming tailored to local needs.

For more information:

Telephone: 1-888-295-4545

<http://www.gnb.ca/poverty>

esic-sies@gnb.ca



Pavillon J.-Raymond-Frenette
100 rue des Aboiteaux Street, bureau/suite 2200
Moncton NB E1A 7R1

Telephone / Téléphone 506.869.6870

Fax / Télécopieur 506.869.6282

Toll-free / Sans frais 1.877.225.2521

www.nbhc.ca / www.csnb.ca



Zone 3: Fredericton / River Valley area

“Population Health Snapshot 2012”

Zone 3
Male

Zone 3
Female

Zone 3
Average

NB
Average

Rank (Zone
3 vs. other
zones)

Trend
compared
to last zone
3 snapshot

POPULATION HEALTH STATUS

See their health as being very good or excellent	(%, 2011)	56.8	57.8	57.3	53.9	● 2/7	▲
See their mental health as being very good or excellent	(%, 2011)	66.6	69.4	68.0	68.0	● 4/7	▼
Pain or soreness that prevents activities (physical or emotional)	(%, 2011)	14.1	23.1	18.7	15.9	◆ 7/7	▼
Life satisfaction, satisfied or very satisfied	(%, 2011)	89.8	95.6	92.8	93.5	● 5/7	▼
Expected years of life	(age, 2007/2009)	77.2	82.0	79.6	80.2	● 4/7	▲
Infant with less than average birth weight ^(New source)	(%, 2008/10)	4.82	5.48	5.15	5.52	● 1/7	--
Infant deaths ^(New source)	(rate per 1,000 live birth, 2008/10)	3.49	3.22	3.36	3.60	● 2/4	--
Premature deaths from heart and stroke	(years of life lost, rate per 10,000 2006/10)	141.88	62.44	102.22	94.93	● 5/7	▼
Premature deaths from cancer	(years of life lost, rate per 10,000 2006/10)	152.05	158.79	155.41	171.78	● 1/7	▲
Premature deaths from breathing diseases	(years of life lost, rate per 10,000 2006/10)	32.53	19.63	26.09	21.75	◆ 7/7	▼
Premature deaths from injuries	(years of life lost, rate per 10,000 2006/10)	112.14	40.24	76.25	77.37	● 2/7	▲
Premature deaths due to suicides/self-inflicted injuries	(years of life lost, rate per 10,000 2006/10)	62.19	18.30	40.28	39.92	● 4/7	▼

HEALTH DETERMINANTS

Health Care - accounts for 10% of the health status

Has a regular medical doctor	(%, 2011)	92.3	94.4	93.4	92.5	● 4/7	▲
Medical doctor visit within the last year	(%, 2010)	69.6	88.4	79.4	80.7	◆ 6/7	--
Dental professional visit within the last year	(%, 2009/2010)	58.7	66.8	62.9	60.8	● 2/7	--
People being hospitalized for unnecessary conditions	(aged-standardized rate per 100,000, 2010/11)	549	492	520	474	● 4/7	▲
Adults 65 years and up who have received the flu shot in the last year	(%, 2011)	60.5	71.6	66.8	67	● 4/7	▼
Females (18 to 69 years old) who had a pap test within the last 3 years	(%, 2007/2008)	--	87.0	87.0	80.9	● 1/7	--
Females (50 to 69 years old) who had a mammogram in the last 2 years	(%, 2010)	--	74.2	74.2	76.7	● 5/7	--
Overall hospital rating	(%, 2010)	77.7	72.6	74.9	75.9	● 5/7	--
Satisfaction/experience rating for healthcare	(%, 2011)	61.7	58.3	59.9	61.5	● 5/7*	--

Health Behaviours – account for 40% of the health status

Physical activity during free-time, moderately active or active	(%, 2011)	53.7	42.2	47.8	51.0	● 5/7*	▼
Eat 5 or more fruits or vegetables a day	(%, 2011)	27.7	40.6	34.3	35.9	◆ 6/7	▼
Adults with unhealthy weight (obese)	(%, 2011)	29.1	23.7	26.3	24.9	● 4/7	▲
5 or more drinks at one time, at least once a month in the past year (heavy drinking)	(%, 2011)	28.0	10.4	19.0	21.7	● 4/7	▼
Seeing your stress as being a lot	(%, 2011)	16.2	22.5	19.5	18.9	● 4/7	▼
Current smoker, daily or occasional	(%, 2011)	23.7	21.1	22.4	21.7	● 4/7	▲
Number of sexually transmitted infections (genital Chlamydia)	(crude rate per 10,000 pop, 2011)	23.7	44.3	34.1	25.6	◆ 6/7	▼
Teens who gave birth (Teen pregnancy unavailable annually)	(rate per 1,000 females, 2011)	--	21.3	21.3	21.1	● 5/7	▲
Always wears a bicycle helmet while on a bike	(%, 2010)	70.3	53.7 ^F	63.3	53.1	● 1/7	--

Socioeconomic Factors – account for 40% of the health status

No high school diploma (25 years and older)	(%, 2006)	18.7	14.4	16.5	21.0	● 2/7	--
Unemployment	(%, 2011)	F	F	8.8	9.5	● 3/7	▼
Divorced	(%, 2006)	6.3	7.5	6.9	6.7	● 5/7	--
Single parent family	(%, 2006)	2.5	11.8	14.3	16.3	● 2/7	--
Low income	(%, 2006)	11.1	13.6	12.4	13.5	● 1/7	--
Violent crime	(rate per 100,000 population, 2011)	--	--	--	1,460	--	--
Property crime	(rate per 100,000 population, 2011)	--	--	--	3,033	--	--
Charged for driving under the influence (drugs or alcohol)	(rate per 100,000 population, 2011)	--	--	--	296	--	--

Physical Environment – accounts for 10% of the health status

Coming in contact with second-hand smoke at home	(%, 2011)	F	F	7.9	6.9	● 4/6*	▼
Coming in contact with second-hand smoke in the past month in vehicles &/or in public place	(%, 2011)	22.5	10.4	16.2	16.9	● 5/7	▼
Sense of belonging to your community, somewhat strong or very strong	(%, 2011)	72.2	69.3	70.7	70.9	● 5/7	▼

Zone rank in New Brunswick

- Doing well (ranked 1, 2)
- Caution (ranked 3, 4, 5)
- ◆ Lagging (ranked 6, 7)

Trend comparison with the last zone 3 Population Health Snapshot

- ▲ Zone indicator value has improved
- ▼ Zone indicator value has gotten worse
- = Zone indicator value has stayed the same
- Trending is not available

Rating by best (1) to worst (7). Includes all health zones (7 in total). (E = Use data with caution, sample size too small, * = another zone has the same ranking, F or -- data unavailable). **Bold:** Updated indicator

Zone 3: Fredericton / River Valley Area

Population Health Snapshot – 2012

Top 10 most frequent hospital admissions for the Fredericton / River Valley area (2011-12)

Hospital admissions	# of cases	Rate per 10,000
1- Newborn	1,084	61.9
2- Vaginal Delivery	1,027	58.7
3- COPD (Chronic Obstructive Lung Disease)	640	36.6
4- Angina /Chest Pain	431	24.6
5- Normal Newborn Multiple/Caesarean Delivery	418	23.9
6- Heart Attack	382	21.8
7- Palliative Care (end of life)	373	21.3
8- Symptom/Sign of Digestive System	364	20.8
9- Viral/Unspecified Pneumonia	351	20.1
10- Enteritis (inflammation of small intestines)	338	19.3

Top 10 most common chronic health conditions for the Fredericton / River Valley area (2011)

Chronic health conditions	Prevalence (%)
1- High Blood Pressure	24.4
2- Arthritis	18.4
3- GERD (Acid Reflux Disease)	17.0
4- Chronic Pain	15.7
5- Depression	12.9
6- Asthma	11.2
7- Diabetes	9.3
8- Heart Disease	7.9
9- Cancer	6.6
10- Emphysema or COPD	2.6

SPECIFICS ABOUT ZONE 3

Age distribution of the population

0- 19 years old = 23%
 20-39 years old = 27%
 40-64 years old = 36%
 65 + years old = 14%

Total population = 165,725

Median age = 39.6

Language spoken at home:

French = 3%
 English = 94%

Immigrant population = 5.3%

Aboriginal population = 3.1%

(source: 2006 Census, Statistics Canada)

What is a wellness network?

Wellness networks are a formal or informal group of people who come together from various backgrounds within a community or region to address an area of concern around wellness. They may be working toward improved healthy eating, increased physical activity, or another wellness goal. Through a combination of federal and provincial government support the Healthy Eating and Physical Activity Coalition (HEPAC) is leading an initiative to strengthen wellness networks around the province of NB.

For more information on the wellness networks in Zone 3 visit:
www.hepac.ca

What is a Community Inclusion Network?

All citizens, community organizations, local business, government agencies, and communities are encouraged to participate in their local Community Inclusion Networks. The networks will develop local poverty reduction plans and work together to deliver programming tailored to local needs.

For more information:
 Telephone: 1-888-295-4545
<http://www.gnb.ca/poverty>
esic-sies@gnb.ca



Pavillon J.-Raymond-Frenette
 100 rue des Aboiteaux Street, bureau/suite 2200
 Moncton NB E1A 7R1

Telephone / Téléphone 506.869.6870
 Fax / Télécopieur 506.869.6282
 Toll-free / Sans frais 1.877.225.2521

www.nbhc.ca / www.csnb.ca



Zone 4: Madawaska / North West Area "Population Health Snapshot 2012"

Zone 4
Male

Zone 4
Female

Zone 4
Average

NB
Average

Rank (Zone
4 vs. other
zones)

Trend
compared
to last zone
4 snapshot

POPULATION HEALTH STATUS

See their health as being very good or excellent	(%, 2011)	58.2	43.8	50.7	53.9	● 5/7	▲
See their mental health as being very good or excellent	(%, 2011)	77.5	58.3	67.5	68.0	● 5/7	▲
Pain or soreness that prevents activities (physical or emotional)	(%, 2011)	10.5	24.2	17.7	15.9	● 5/7	▼
Life satisfaction, satisfied or very satisfied	(%, 2011)	93.3	89.5	91.3	93.5	● 6/7	▲
Expected years of life	(age, 2007/2009)	76.8	81.6	79.3	80.2	◆ 6/7	▲
Infant with less than average birth weight ^(New source)	(%, 2008/10)	4.39	7.21	5.82	5.52	● 5/7	--
Infant deaths ^(New source)	(rate per 1,000 live birth, 2008/10)	--	--	--	3.60	--	--
Premature deaths from heart and stroke	(years of life lost, rate per 10,000 2006/10)	144.97	34.32	89.42	94.93	● 4/7	▼
Premature deaths from cancer	(years of life lost, rate per 10,000 2006/10)	188.65	230.22	209.52	171.78	◆ 7/7	▲
Premature deaths from breathing diseases	(years of life lost, rate per 10,000 2006/10)	22.75	16.13	19.43	21.75	● 2/7	▲
Premature deaths from injuries	(years of life lost, rate per 10,000 2006/10)	110.46	53.03	81.63	77.37	● 5/7	▲
Premature deaths due to suicides/self-inflicted injuries	(years of life lost, rate per 10,000 2006/10)	106.91	19.99	63.28	39.92	◆ 7/7	▲

HEALTH DETERMINANTS

Health Care - accounts for 10% of the health status

Has a regular medical doctor	(%, 2011)	81.3	99.0	90.6	92.5	◆ 7/7	▼
Medical doctor visit within the last year	(%, 2010)	72.3	86.8	79.8	80.7	● 5/7	--
Dental professional visit within the last year	(%, 2009/2010)	55.1	59.6	57.4	60.8	● 4/7	--
People being hospitalized for unnecessary conditions	(aged-standardized rate per 100,000, 2010/11)	601	472	535	474	● 5/7	▲
Adults 65 years and up who have received the flu shot in the last year	(%, 2011)	58.4	71.0	65.2	67.0	◆ 6/7	▲
Females (18 to 69 years old) who had a pap test within the last 3 years	(%, 2007/2008)	--	70.7	70.7	80.9	◆ 7/7	--
Females (50 to 69 years old) who had a mammogram in the last 2 years	(%, 2010)	--	79.9	79.9	76.7	● 2/7	--
Overall hospital rating	(%, 2010)	83.6	80.5	82.0	75.9	● 1/7	--
Satisfaction/experience rating for healthcare	(%, 2011)	65.1	67.0	66.1	61.5	● 1/7	--

Health Behaviours – account for 40% of the health status

Physical activity during free-time, moderately active or active	(%, 2011)	48.4	39.1	43.5	51	◆ 7/7	▼
Eat 5 or more fruits or vegetables a day	(%, 2011)	24.0	49.9	37.6	35.9	● 3/7	▼
Adults with unhealthy weight (obese)	(%, 2011)	22.5	31.9	27.4	24.9	◆ 6/7	▼
5 or more drinks at one time, at least once a month in the past year (heavy drinking)	(%, 2011)	26.3	10.8	18.1	21.7	● 1/7	▲
Seeing your stress as being a lot	(%, 2011)	30.1	27.0	28.5	18.9	◆ 7/7	▲
Current smoker, daily or occasional	(%, 2011)	25.6	25.4	25.5	21.7	◆ 7/7	▲
Number of sexually transmitted infections (genital Chlamydia)	(crude rate per 10,000 pop, 2011)	6.5	12.6	9.6	25.6	● 1/7	▼
Teens who gave birth (Teen pregnancy unavailable annually)	(rate per 1,000 females, 2011)	--	15.3	15.3	21.1	● 1/7	▼
Always wears a bicycle helmet while on a bike	(%, 2010)	31.6 ^E	41.9 ^E	36.2^E	53.1	◆ 6/7	--

Socioeconomic Factors – account for 40% of the health status

No high school diploma (25 years and older)	(%, 2006)	29.0	25.0	27.2	21.0	● 4/7	--
Unemployment	(%, 2011)	F	F	10.1	9.5	● 4/7	▼
Divorced	(%, 2006)	6.2	6.1	6.1	6.7	● 3/7	--
Single parent family	(%, 2006)	3.3	11.3	11.3	16.3	● 1/7	--
Low income	(%, 2006)	11.4	15.6	15.6	13.5	◆ 6/7*	--
Violent crime	(rate per 100,000 population, 2011)	--	--	--	1,460	--	--
Property crime	(rate per 100,000 population, 2011)	--	--	--	3,033	--	--
Charged for driving under the influence (drugs or alcohol)	(rate per 100,000 population, 2011)	--	--	--	296	--	--

Physical Environment – accounts for 10% of the health status

Coming in contact with second-hand smoke at home	(%, 2011)	F	F	7.9	6.9	● 4/6*	▲
Coming in contact with second-hand smoke in the past month in vehicles &/or in public place	(%, 2011)	18.7	19.7	19.2	16.9	◆ 6/7	▲
Sense of belonging to your community, somewhat strong or very strong	(%, 2011)	85.8	73.7	79.4	70.9	● 3/7	▲

Zone rank in New Brunswick

- Doing well (ranked 1, 2)
- Caution (ranked 3, 4, 5)
- ◆ Lagging (ranked 6, 7)

Trend comparison with the last zone 4 Population Health Snapshot

- ▲ Zone indicator value has improved
- ▼ Zone indicator value has gotten worse
- = Zone indicator value has stayed the same
- Trending is not available

Rating by best (1) to worst (7). Includes all health zones (7 in total). (E = Use data with caution, sample size too small, * = another zone has the same ranking, F or -- = data unavailable). **Bold:** Updated indicator

Zone 4: Madawaska / North West Area Population Health Snapshot – 2012

Top 10 most frequent hospital admissions for the Madawaska / North West area (2011-12)

Hospital admissions	# of cases	Rate per 10,000
1- COPD (Chronic Obstructive Lung Disease)	265	54.3
2- Newborn	228	46.7
3- Vaginal Delivery	224	45.9
4- Arrhythmia (Abnormal Heartbeat)	177	35.3
5- Stress Reaction/Adjustment Disorder	168	34.4
6- Depressive Episode without ECT	154	31.6
7- Heart attack	144	29.5
8- Enteritis (Inflammation of Small Intestine)	137	28.1
9- Unstable Angina/Atherosclerotic Heart Disease without Cardiac Cath	130	26.6
10- Viral/Unspecified Pneumonia	129	26.4

Top 10 most common chronic health conditions for the Madawaska / North West area (2011)

Chronic health conditions	Prevalence (%)
1- High Blood Pressure	25.6
2- Chronic Pain	16.7
3- Arthritis	15.8
4- GERD (Acid Reflux Disease)	15.4
5- Depression	11.5
6- Heart Disease	11.1
7- Diabetes	9.0
8- Asthma	7.8
9- Cancer	5.6
10- Emphysema or COPD	3.9

SPECIFICS ABOUT ZONE 4

Age distribution of the population

0- 19 years old = 22%

20-39 years old = 23%

40-64 years old = 41%

65 + years old = 14%

Total population = 50,095

Median age = 43.0

Language spoken at home:

French = 91%

English = 7.6%

Immigrant population = 3.0%

Aboriginal population = 2.2%

(source: 2006 Census, Statistics Canada)

What is a wellness network?

Wellness networks are a formal or informal group of people who come together from various backgrounds within a community or region to address an area of concern around wellness. They may be working toward improved healthy eating, increased physical activity, or another wellness goal. Through a combination of federal and provincial government support the Healthy Eating and Physical Activity Coalition (HEPAC) is leading an initiative to strengthen wellness networks around the province of NB.

For more information on the wellness networks in Zone 4 visit: www.hepac.ca

What is a Community Inclusion Network?

All citizens, community organizations, local business, government agencies, and communities are encouraged to participate in their local Community Inclusion Networks. The networks will develop local poverty reduction plans and work together to deliver programming tailored to local needs.

For more information:
Telephone: 1-888-295-4545
<http://www.gnb.ca/poverty/esic-sies@gnb.ca>



Pavillon J.-Raymond-Frenette
100 rue des Aboiteaux Street, bureau/suite 2200
Moncton NB E1A 7R1

Telephone / Téléphone 506.869.6870
Fax / Télécopieur 506.869.6282
Toll-free / Sans frais 1.877.225.2521

www.nbhc.ca / www.csnb.ca



Zone 5: Restigouche Area "Population Health Snapshot 2012"

Zone 5
Male

Zone 5
Female

Zone 5
Average

NB
Average

Rank (Zone
5 vs. other
zones)

Trend
compared
to last zone
5 snapshot

POPULATION HEALTH STATUS

See their health as being very good or excellent	(%, 2011)	36.2	50.4	43.9	53.9	◆ 7/7	▼
See their mental health as being very good or excellent	(%, 2011)	58.5	60.8	59.8	68.0	◆ 7/7	▼
Pain or soreness that prevents activities (physical or emotional)	(%, 2011)	19.6	16.5	17.9	15.9	◆ 6/7	▲
Life satisfaction, satisfied or very satisfied	(%, 2011)	87.9	92.6	90.5	93.5	◆ 7/7	▼
Expected years of life	(age, 2007/2009)	74.7	82.2	78.6	80.2	◆ 7/7	▼
Infant with less than average birth weight ^(New source)	(%, 2008/10)	5.07	6.32	5.66	5.52	● 4/7	--
Infant deaths ^(New source)	(rate per 1,000 live birth, 2008/10)	--	--	--	3.60	--	--
Premature deaths from heart and stroke	(years of life lost, rate per 10,000 2006/10)	176.76	81.96	129.04	94.93	◆ 7/7	▼
Premature deaths from cancer	(years of life lost, rate per 10,000 2006/10)	212.60	155.68	183.94	171.78	● 5/7	▲
Premature deaths from breathing diseases	(years of life lost, rate per 10,000 2006/10)	37.60	7.45	22.42	21.75	● 5/7	▲
Premature deaths from injuries	(years of life lost, rate per 10,000 2006/10)	167.28	39.16	102.79	77.37	◆ 7/7	▼
Premature deaths due to suicides/self-inflicted injuries	(years of life lost, rate per 10,000 2006/10)	89.35	23.94	56.42	39.92	◆ 6/7	=

HEALTH DETERMINANTS

Health Care - accounts for 10% of the health status

Has a regular medical doctor	(%, 2011)	94.6	97.8	96.3	92.5	● 1/7	▲
Medical doctor visit within the last year	(%, 2010)	80.8	89.2	85.0	80.7	● 2/7	--
Dental professional visit within the last year	(%, 2009/2010)	52.9	60.8	56.9	60.8	● 5/7	--
People being hospitalized for unnecessary conditions	(aged-standardized rate per 100,000, 2010/11)	780	771	774	474	◆ 7/7	▼
Adults 65 years and up who have received the flu shot in the last year	(%, 2011)	F	78.0	76.8	67.0	● 1/7	▲
Females (18 to 69 years old) who had a pap test within the last 3 years	(%, 2007/2008)	--	76.4	76.4	80.9	● 5/7	--
Females (50 to 69 years old) who had a mammogram in the last 2 years	(%, 2010)	--	75.8	75.8	76.7	● 4/7	--
Overall hospital rating	(%, 2010)	75.6	74.3	74.8	75.9	◆ 6/7	--
Satisfaction/experience rating for healthcare	(%, 2011)	64.1	56.0	59.8	61.5	◆ 7/7	--

Health Behaviours – account for 40% of the health status

Physical activity during free-time, moderately active or active	(%, 2011)	51.4	51.9	51.7	51.0	● 4/7	▲
Eat 5 or more fruits or vegetables a day	(%, 2011)	25.3	45.8	36.7	35.9	● 4/7	▼
Adults with unhealthy weight (obese)	(%, 2011)	30.8	16.4	22.6	24.9	● 2/7	▲
5 or more drinks at one time, at least once a month in the past year (heavy drinking)	(%, 2011)	37.1	F	24.1	21.7	◆ 6/7	▼
Seeing your stress as being a lot	(%, 2011)	23.2	27.5	25.6	18.9	◆ 6/7	▼
Current smoker, daily or occasional	(%, 2011)	15.1	32.4	24.4	21.7	● 5/7	▼
Number of sexually transmitted infections (genital Chlamydia)	(crude rate per 10,000 pop, 2011)	8.5	14.8	11.8	25.6	● 2/7	▼
Teens who gave birth (Teen pregnancy unavailable annually)	(rate per 1,000 females, 2011)	--	20.8	20.8	21.3	● 4/7	▼
Always wears a bicycle helmet while on a bike	(%, 2010)	F	F	35.7^E	53.1	◆ 7/7	--

Socioeconomic Factors – account for 40% of the health status

No high school diploma (25 years and older)	(%, 2006)	27.2	31.0	29.0	21.0	◆ 6/7	--
Unemployment	(%, 2011)	F	F	13.4	9.5	● 5/7*	▼
Divorced	(%, 2006)	6.6	6.6	6.6	6.7	● 4/7	--
Single parent family	(%, 2006)	3.7	16.0	19.7	16.3	◆ 7/7	--
Low income	(%, 2006)	12.9	18.1	15.6	13.5	◆ 6/7*	--
Violent crime	(rate per 100,000 population, 2011)	--	--	--	1,460	--	--
Property crime	(rate per 100,000 population, 2011)	--	--	--	3,033	--	--
Charged for driving under the influence (drugs or alcohol)	(rate per 100,000 population, 2011)	--	--	--	296	--	--

Physical Environment – accounts for 10% of the health status

Coming in contact with second-hand smoke at home	(%, 2011)	F	F	6.4	6.9	● 2/6	▲
Coming in contact with second-hand smoke in the past month in vehicles &/or in public place	(%, 2011)	21.6	F	15.3	16.9	● 3/7	▲
Sense of belonging to your community, somewhat strong or very strong	(%, 2011)	80.6	82.5	81.7	70.9	● 2/7	▲

Zone rank in New Brunswick

- Doing well (ranked 1, 2)
- Caution (ranked 3, 4, 5)
- ◆ Lagging (ranked 6, 7)

Trend comparison with the last zone 4 Population Health Snapshot

- ▲ Zone indicator value has improved
- ▼ Zone indicator value has gotten worse
- = Zone indicator value has stayed the same
- Trending is not available

Rating by best (1) to worst (7). Includes all health zones (7 in total). (E = Use data with caution, sample size too small, * = another zone has the same ranking, F or -- = data unavailable). **Bold:** Updated indicator

Zone 5: Restigouche Area

Population Health Snapshot – 2012

Top 10 most frequent hospital admissions for the Restigouche area (2011-12)

Hospital admissions	# of cases	Rate per 10,000
1- COPD (Chronic Obstructive Lung disease)	234	89.6
2 – Heart Attack	113	43.3
2- Enteritis (Inflammation of Small Intestine)	113	43.3
4- Heart Failure without Cardiac Catheter	100	38.3
5- Viral/Unspecified Pneumonia	96	36.8
6- Recovering from Illness or Disease	93	35.6
7- Arrhythmia (Abnormal Heartbeat)	85	32.5
8- Vaginal Delivery	82	31.4
9- Stress Reaction/Adjustment Disorder	77	29.5
10- Angina /Chest Pain	75	28.7

Top 10 most common chronic health conditions for the Restigouche area (2011)

Chronic health conditions	Prevalence (%)
1- High Blood Pressure	32.0
2- Arthritis	20.9
3- GERD (Acid Reflux Disease)	18.6
4- Chronic Pain	17.0
5- Depression	14.0
6- Diabetes	10.3
7- Asthma	9.6
8- Heart Disease	8.7
9- Cancer	7.5
10- Mood Disorder other than Depression	4.0

SPECIFICS ABOUT ZONE 5

Age distribution of the population

0- 19 years old = 21%

20-39 years old = 20%

40-64 years old = 41%

65 + years old = 18%

Total population = 27,755

Median age = 45.3

Language spoken at home:

French = 51%

English = 46.5%

Immigrant population = 1.4%

Aboriginal population = 3.6%

(source: 2006 Census, Statistics Canada)



New Brunswick Health Council | Conseil de la santé du Nouveau-Brunswick

Engage, Évalue, Inform, Recommand.
Engager, Évaluer, Informer, Recommander.

What is a wellness network?

Wellness networks are a formal or informal group of people who come together from various backgrounds within a community or region to address an area of concern around wellness. They may be working toward improved healthy eating, increased physical activity, or another wellness goal. Through a combination of federal and provincial government support the Healthy Eating and Physical Activity Coalition (HEPAC) is leading an initiative to strengthen wellness networks around the province of NB.

For more information on the wellness networks in Zone 5 visit: www.hepac.ca

What is a Community Inclusion Network?

All citizens, community organizations, local business, government agencies, and communities are encouraged to participate in their local Community Inclusion Networks. The networks will develop local poverty reduction plans and work together to deliver programming tailored to local needs. For more information: Telephone: 1-888-295-4545 <http://www.gnb.ca/poverty> esic-sies@gnb.ca



Pavillon J.-Raymond-Frenette
100 rue des Aboiteaux Street, bureau/suite 2200
Moncton NB E1A 7R1

Telephone / Téléphone 506.869.6870
Fax / Télécopieur 506.869.6282
Toll-free / Sans frais 1.877.225.2521

www.nbhc.ca / www.csnb.ca



Zone 6: Bathurst / Acadian Peninsula Area

“Population Health Snapshot 2012”

Zone 6
Male

Zone 6
Female

Zone 6
Average

NB
Average

Rank (Zone
6 vs. other
zones)

Trend
compared
to last zone
6 snapshot

POPULATION HEALTH STATUS

See their health as being very good or excellent	(%, 2011)	49.3	60.8	55.1	53.9	● 3/7	▲
See their mental health as being very good or excellent	(%, 2011)	72.6	72.1	72.3	68.0	● 1/7	▲
Pain or soreness that prevents activities (physical or emotional)	(%, 2011)	17.3	15.6	16.5	15.9	● 3/7	▲
Life satisfaction, satisfied or very satisfied	(%, 2011)	95.7	94.3	94.9	93.5	● 2/7	▲
Expected years of life	(age, 2007/2009)	78.9	83.8	81.3	80.2	● 2/7	▼
Infant with less than average birth weight ^(New source)	(%, 2008/10)	5.21	5.42	5.31	5.52	● 2/7*	--
Infant deaths ^(New source)	(rate per 1,000 live birth, 2008/10)	--	--	--	3.60	--	--
Premature deaths from heart and stroke	(years of life lost, rate per 10,000 2006/10)	121.06	39.10	80.02	94.93	● 2/7	▼
Premature deaths from cancer	(years of life lost, rate per 10,000 2006/10)	177.68	155.29	166.47	171.78	● 3/7	▲
Premature deaths from breathing diseases	(years of life lost, rate per 10,000 2006/10)	22.01	19.66	20.83	21.75	● 3/7	▲
Premature deaths from injuries	(years of life lost, rate per 10,000 2006/10)	119.53	37.40	78.41	77.37	● 4/7	▲
Premature deaths due to suicides/self-inflicted injuries	(years of life lost, rate per 10,000 2006/10)	50.27	12.12	31.71	39.92	● 1/7	▲

HEALTH DETERMINANTS

Health Care - accounts for 10% of the health status

Has a regular medical doctor	(%, 2011)	91.1	96.8	94.0	92.5	● 3/7	▲
Medical doctor visit within the last year	(%, 2010)	73.6	90.4	82.4	80.7	● 3/7	--
Dental professional visit within the last year	(%, 2009/2010)	55.6	52.6	54.1	60.8	◆ 7/7	--
People being hospitalized for unnecessary conditions	(aged-standardized rate per 100,000, 2010/11)	607	416	511	474	● 3/7	▲
Adults 65 years and up who have received the flu shot in the last year	(%, 2011)	64.0	72.8	68.8	67.0	● 2/7	▲
Females (18 to 69 years old) who had a pap test within the last 3 years	(%, 2007/2008)	--	71.9	71.9	80.9	◆ 6/7	--
Females (50 to 69 years old) who had a mammogram in the last 2 years	(%, 2010)	--	78.0	78.0	76.7	● 3/7	--
Overall hospital rating	(%, 2010)	70.5	69.9	70.1	75.9	◆ 7/7	--
Satisfaction/experience rating for healthcare	(%, 2011)	65.2	63.1	64.1	61.5	● 3/7	--

Health Behaviours – account for 40% of the health status

Physical activity during free-time, moderately active or active	(%, 2011)	56.5	39.7	47.8	51.0	● 5/7*	▲
Eat 5 or more fruits or vegetables a day	(%, 2011)	48.6	45.5	47.0	35.9	● 1/7	▼
Adults with unhealthy weight (obese)	(%, 2011)	34.4	23.2	28.8	24.9	◆ 7/7	▼
5 or more drinks at one time, at least once a month in the past year (heavy drinking)	(%, 2011)	26.7	10.1	18.2	21.7	● 2/7	▲
Seeing your stress as being a lot	(%, 2011)	12.7	15.2	14.0	18.9	● 1/7	▲
Current smoker, daily or occasional	(%, 2011)	14.3	15.7	15.0	21.7	● 1/7	▲
Number of sexually transmitted infections (genital Chlamydia)	(crude rate per 10,000 pop, 2011)	6.0	21.9	14.0	25.6	● 3/7	▼
Teens who gave birth (Teen pregnancy unavailable annually)	(rate per 1,000 females, 2011)	--	19.5	19.5	21.1	● 3/7	▼
Always wears a bicycle helmet while on a bike	(%, 2010)	28.0 ^E	50.0 ^E	38.0	53.1	● 5/7	--

Socioeconomic Factors – account for 40% of the health status

No high school diploma (25 years and older)	(%, 2006)	35.7	29.7	32.9	21.0	◆ 7/7	--
Unemployment	(%, 2011)	F	F	13.4	9.5	● 5/7*	▲
Divorced	(%, 2006)	5.9	5.6	5.8	6.7	● 2/7	--
Single parent family	(%, 2006)	4.2	14.7	18.9	16.3	◆ 6/7	--
Low income	(%, 2006)	13.5	17.2	15.3	13.5	● 5/7	--
Violent crime	(rate per 100,000 population, 2011)	--	--	--	1,460	--	--
Property crime	(rate per 100,000 population, 2011)	--	--	--	3,033	--	--
Charged for driving under the influence (drugs or alcohol)	(rate per 100,000 population, 2011)	--	--	--	296	--	--

Physical Environment – accounts for 10% of the health status

Coming in contact with second-hand smoke at home	(%, 2011)	F	F	F	6.9	--	--
Coming in contact with second-hand smoke in the past month in vehicles &/or in public place	(%, 2011)	F	F	14.3	16.9	● 1/7	▲
Sense of belonging to your community, somewhat strong or very strong	(%, 2011)	58.4	74.3	66.6	70.9	◆ 6/7	▼

Zone rank in New Brunswick

- Doing well (ranked 1, 2)
- Caution (ranked 3, 4, 5)
- ◆ Lagging (ranked 6, 7)

Trend comparison with the last zone 6 Population Health Snapshot

- ▲ Zone indicator value has improved
- ▼ Zone indicator value has gotten worse
- = Zone indicator value has stayed the same
- Trending is not available

Zone 6: Bathurst / Acadian Peninsula Area 2012 Population Health Snapshot

Top 10 most frequent hospital admissions for the Bathurst / Acadian Peninsula area (2011-12)

Hospital admissions	# of cases	Rate per 10,000
1- COPD (Chronic Obstructive Lung Disease)	359	46.5
2- Vaginal Delivery	325	42.1
3- Newborn	273	35.4
4- Viral/Unspecified Pneumonia	237	30.7
5- Palliative Care (end of life)	210	27.2
6- Unstable Angina/Atherosclerotic Heart Disease without Cardiac Catheter	199	25.8
7- Enteritis (Inflammation of Small Intestine)	191	24.7
8- Awaiting placement	187	24.2
9- Arrhythmia (Abnormal Heartbeat)	179	23.2
10- Heart Attack	175	22.7

Top 10 most common chronic health conditions for the Bathurst / Acadian Peninsula area (2011)

Chronic health conditions	Prevalence (%)
1- High Blood Pressure	28.1
2- Arthritis	16.3
3- GERD (Acid Reflux Disease)	15.3
4- Chronic Pain	13.7
5- Depression	13.1
6- Asthma	12.0
7- Diabetes	9.7
8- Heart Disease	8.7
9- Cancer	7.0
10- Mood Disorder other than Depression	2.6

SPECIFICS ABOUT ZONE 6

Age distribution of the population

0- 19 years old = 20%

20-39 years old = 23%

40-64 years old = 42%

65 + years old = 15%

Total population = 78,950

Median age = 44.2

Language spoken at home:

French = 82.4%

English = 16.3%

Immigrant population = 1.1%

Aboriginal population = 1.7%

(source: 2006 Census, Statistics Canada)

What is a wellness network?

Wellness networks are a formal or informal group of people who come together from various backgrounds within a community or region to address an area of concern around wellness. They may be working toward improved healthy eating, increased physical activity, or another wellness goal. Through a combination of federal and provincial government support the Healthy Eating and Physical Activity Coalition (HEPAC) is leading an initiative to strengthen wellness networks around the province of NB.

For more information on the wellness networks in Zone 6 visit:

www.hepac.ca

What is a Community Inclusion Network?

All citizens, community organizations, local business, government agencies, and communities are encouraged to participate in their local Community Inclusion Networks. The networks will develop local poverty reduction plans and work together to deliver programming tailored to local needs.

For more information:

Telephone: 1-888-295-4545

<http://www.gnb.ca/poverty>

esic-sies@gnb.ca





Zone 7 : Miramichi Area "Population Health Snapshot 2012"

Zone 7
Male

Zone 7
Female

Zone 7
Average

NB
Average

Rank (Zone
7 vs. other
zones)

Trend
compared
to last zone
7 snapshot

POPULATION HEALTH STATUS

See their health as being very good or excellent	(%, 2011)	51.8	53.7	52.8	53.9	● 4/7	▲
See their mental health as being very good or excellent	(%, 2011)	69.7	73.1	71.5	68.0	● 2/7	▲
Pain or soreness that prevents activities (physical or emotional)	(%, 2011)	F	16.8	12.9	15.9	● 1/7*	▼
Life satisfaction, satisfied or very satisfied	(%, 2011)	98.7	94.2	96.3	93.5	● 1/7	▲
Expected years of life	(age, 2007/2009)	76.9	82.6	79.7	80.2	● 3/7	▼
Infant with less than average birth weight ^(New source)	(%, 2008/10)	6.49	5.10	5.80	5.52	● 5/7*	--
Infant deaths ^(New source)	(rate per 1,000 live birth, 2008/10)	--	--	6.34	3.60	◆ 4/4	--
Premature deaths from heart and stroke	(years of life lost, rate per 10,000 2006/10)	139.25	38.55	89.05	94.93	● 3/7	▲
Premature deaths from cancer	(years of life lost, rate per 10,000 2006/10)	215.31	195.03	205.20	171.78	◆ 6/7	▼
Premature deaths from breathing diseases	(years of life lost, rate per 10,000 2006/10)	23.65	18.66	21.16	21.75	● 4/7	▼
Premature deaths from injuries	(years of life lost, rate per 10,000 2006/10)	137.74	52.64	95.32	77.37	◆ 6/7	▼
Premature deaths due to suicides/self-inflicted injuries	(years of life lost, rate per 10,000 2006/10)	56.95	7.04	32.07	39.92	● 3/7	▲

HEALTH DETERMINANTS

Health Care - accounts for 10% of the health status

Has a regular medical doctor	(%, 2011)	98.2	94.4	96.2	92.5	● 2/7	▲
Medical doctor visit within the last year	(%, 2010)	80.8	91.1	85.7	80.7	● 1/7	--
Dental professional visit within the last year	(%, 2009/2010)	59.3	53.7	56.4	60.8	◆ 6/7	--
People being hospitalized for unnecessary conditions	(aged-standardized rate per 100,000, 2010/11)	592	515	556	474	◆ 6/7	▲
Adults 65 years and up who have received the flu shot in the last year	(%, 2011)	63.1	59.0	60.7	67.0	◆ 7/7	▼
Females (18 to 69 years old) who had a pap test within the last 3 years	(%, 2007/2008)	--	83.4	83.4	80.9	● 2/7	--
Females (50 to 69 years old) who had a mammogram in the last 2 years	(%, 2010)	--	70.6	70.6	76.7	◆ 7/7	--
Overall hospital rating	(%, 2010)	77.5	75.7	76.5	75.9	● 3/7	--
Satisfaction/experience rating for healthcare	(%, 2011)	64.3	64.9	64.6	61.5	● 2/7	--

Health Behaviours – account for 40% of the health status

Physical activity during free-time, moderately active or active	(%, 2011)	52.1	54.8	53.6	51.0	● 2/7	▲
Eat 5 or more fruits or vegetables a day	(%, 2011)	30.9	43.8	37.7	35.9	● 2/7	▲
Adults with unhealthy weight (obese)	(%, 2011)	31.9	21.1	26.6	24.9	● 5/7	▲
5 or more drinks at one time, at least once a month in the past year (heavy drinking)	(%, 2011)	28.5	F	18.7	21.7	● 3/7	▼
Seeing your stress as being a lot	(%, 2011)	25.8	20.4	23.1	18.9	● 5/7	▼
Current smoker, daily or occasional	(%, 2011)	21.6	19.2	20.3	21.7	● 2/7*	▲
Number of sexually transmitted infections (genital Chlamydia)	(crude rate per 10,000 pop, 2011)	12.5	26.3	19.5	25.6	● 5/7	▼
Teens who gave birth (Teen pregnancy unavailable annually)	(rate per 1,000 females, 2011)	--	23.8	23.8	21.1	◆ 6/7	▲
Always wears a bicycle helmet while on a bike	(%, 2010)	41.0 ^E	F	38.9^E	53.1	● 4/7	--

Socioeconomic Factors – account for 40% of the health status

No high school diploma (25 years and older)	(%, 2006)	29.7	25.0	27.3	21.0	● 5/7	--
Unemployment	(%, 2011)	F	F	19.6	9.5	◆ 7/7	--
Divorced	(%, 2006)	5.2	5.6	5.4	6.7	● 1/7	--
Single parent family	(%, 2006)	3.0	15.0	18.0	16.3	● 5/7	--
Low income	(%, 2006)	10.9	14.6	12.7	13.5	● 3/7	--
Violent crime	(rate per 100,000 population, 2011)	--	--	--	1,460	--	--
Property crime	(rate per 100,000 population, 2011)	--	--	--	3,033	--	--
Charged for driving under the influence (drugs or alcohol)	(rate per 100,000 population, 2011)	--	--	--	296	--	--

Physical Environment – accounts for 10% of the health status

Coming in contact with second-hand smoke at home	(%, 2011)	F	F	7.0	6.9	● 3/6	--
Coming in contact with second-hand smoke in the past month in vehicles &/or in public place	(%, 2011)	F	16.8	15.6	16.9	● 4/7	▼
Sense of belonging to your community, somewhat strong or very strong	(%, 2011)	73.6	90.3	82.6	70.9	● 1/7	▼

Zone rank in New Brunswick

- Doing well (ranked 1, 2)
- Caution (ranked 3, 4, 5)
- ◆ Lagging (ranked 6, 7)

Trend comparison with the last zone 7 Population Health Snapshot

- ▲ Zone indicator value has improved
- ▼ Zone indicator value has gotten worse
- = Zone indicator value has stayed the same
- Trending is not available

Rating by best (1) to worst (7). Includes all health zones (7 in total). (E = Use data with caution, sample size too small, * = another zone has the same ranking, F or -- = data unavailable). **Bold:** Updated indicator

Zone 7: Miramichi Area

Population Health Snapshot – 2012

Top 10 most frequent hospital admissions for the Miramichi area (2011-12)

Hospital admissions	# of cases	Rate per 10,000
1- COPD (Chronic Obstructive Lung Disease)	308	68.3
2- Enteritis (Inflammation of Small Intestine)	172	38.2
3- Newborn	167	37.1
4- Vaginal Delivery	164	36.4
5- Arrhythmia (Abnormal Heartbeat)	139	30.8
6- Heart Attack	121	26.8
6- Symptom/Sign of Digestive System	121	26.8
8- Recovering from Illness or Disease	120	26.6
9- Viral/Unspecified Pneumonia	117	26.0
10- Hysterectomy with no cancer	109	24.2

Top 10 most common chronic health conditions for the Miramichi area (2011)

Chronic health conditions	Prevalence (%)
1- High Blood Pressure	27.8
2- GERD (Acid Reflux Disease)	17.6
3- Arthritis	16.1
4- Chronic Pain	13.8
5- Depression	12.1
6- Asthma	9.6
7- Diabetes	9.5
8- Heart Disease	8.4
9- Cancer	6.7
10- Mood Disorder other than Depression	2.7

SPECIFICS ABOUT ZONE 7

Age distribution of the population

0- 19 years old = 23%

20-39 years old = 24%

40-64 years old = 38%

65 + years old = 15%

Total population = 45,850

Median age = 42.2

Language spoken at home:

French = 24.3%

English = 73.3%

Immigrant population = 2.0%

Aboriginal population = 6.2%

(source: 2006 Census, Statistics Canada)

What is a wellness network?

Wellness networks are a formal or informal group of people who come together from various backgrounds within a community or region to address an area of concern around wellness. They may be working toward improved healthy eating, increased physical activity, or another wellness goal. Through a combination of federal and provincial government support the Healthy Eating and Physical Activity Coalition (HEPAC) is leading an initiative to strengthen wellness networks around the province of NB.

For more information on the wellness networks in Zone 7:

www.hepac.ca

What is a Community Inclusion Network?

All citizens, community organizations, local business, government agencies, and communities are encouraged to participate in their local Community Inclusion Networks. The networks will develop local poverty reduction plans and work together to deliver programming tailored to local needs. For more information:

Telephone: 1-888-295-4545

<http://www.gnb.ca/poverty/esic-sies@gnb.ca>



Zone 1: Moncton / South-East area

Acadieville, Alma, Beaubassin East/ Beaubassin-est, Bouctouche, Buctouche, Botsford, Cap-Pelé, Carleton, Coverdale, Dieppe, Dundas, Dorchester, Elgin, Elsipogtog, Fort Folly, Hartcourt, Harvey, Hillsborough, Hopewell, Huskisson, Indian Island, Memramcook, Moncton, Petitcodiac, Port Elgin, Rexton, Richibucto, Riverside-Albert, Riverview, Sackville, Saint-Antoine, Saint-Charles, Saint-Louis, Saint-Louis de Kent, Saint Mary, Saint-Paul, Salisbury, Shediac, Weldford, Wellington, Westmorland

Zone 2: Fundy Shore / Saint John area

Blacks Harbour, Brunswick, Campobello, Cardwell, Clarendon, Dufferin, Dumbarton, Hammond, , Hampstead, Hampton , Havelock, Grand Bay-Westfield, Grand Manan, Greenwich, Johnston, Kars, Kingston, Lepreau, Musquash, Norton, Pennfield, Petersville, Quispamsis, Rothesay, Saint Andrews, Saint Croix, Saint George, Saint James, Saint John, Saint Martin's, Saint Patrick, Saint Stephen Simonds, Springfield, Sussex Corner, Sussex, Studholm, Upham, Waterford, Westfield, West Isles, Wickham

Zone 3: Fredericton / River Valley area

Aberdeen, Andover, Aroostook, Bath, Blissfield, Blissville, Bright, Brighton, Bristol, Burton, Cambridge, Cambridge-Narrows, Canning, Canterbury, Centreville, Chipman, Denmark, Devon, Doaktown, Douglas Dumfries, Florenceville, Fredericton, Fredericton Junction, Gagetown, Gladstone, Gordon, Hartland, Harvey, Kent, Kingsclear, Lincoln, Lorne, Ludlow, Manners Sutton, Maugerville, McAdam, Medictic, Millville, Minto, Nackawic, New Maryland, Northampton, Northfield, North Lake, Oromocto, Peel, Prince William, Perth, Plaster Rock, Queensbury, Richmond, Saint Mary's, Sheffield, Simonds, Southampton, Stanley, Tobique, Tracy, Wakefield, Waterborough, Wicklow, Wilmot, Woodstock

Zone 4: Madawaska / North West area

Baker Brook, Clair, Drummond, Edmundston, Grand Falls/Grand-Sault, Grimmer, Kedgwick, Lac Baker, Madawaska, Notre-Dame-de-Lourdes, Rivière-Verte, Saint-André, Sainte-Anne, Saint-Anne-de-Madawaska, Saint-Basile, Saint-François, Saint-François de Madawaska, Saint-Hilaire, Saint-Jacques, Saint-Joseph, Saint-Léonard, Saint-Quentin

Zone 5: Restigouche area

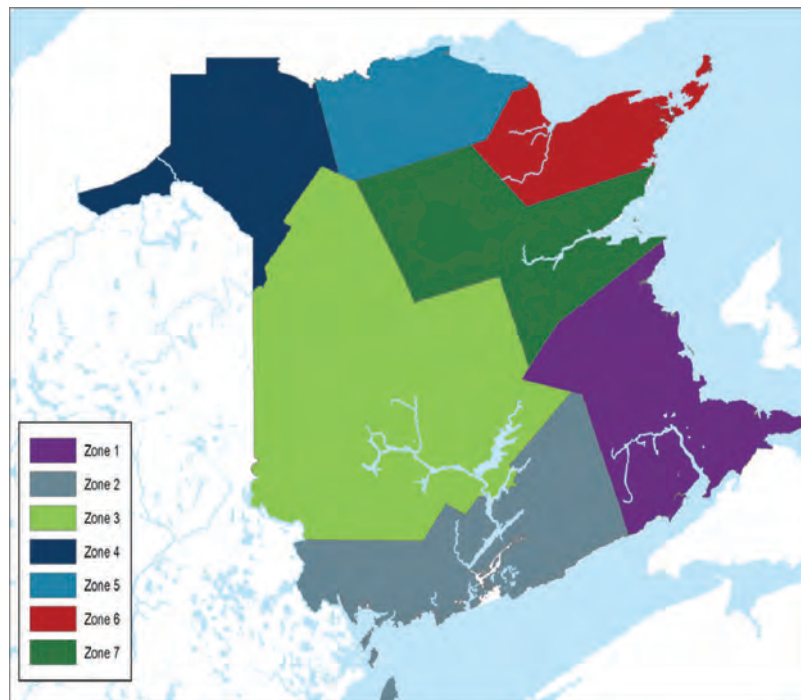
Addington, Atholville, Balmoral, Belledune, Campbellton, Charlo, Colborne, Dalhousie, Durham, Eel River, Eel River Bar, Eel River Crossing, Eldon, Indian Ranch, Tide Head

Zone 6 : Bathurst / Acadian Peninsula area

Allardville, Bas-Caraquet, Bathurst, Beresford, Bertrand, Caraquet, Grande-Anse, Inkerman, Lamèque, Le Goulet, Maissonette, New Brandon, Nigadoo, Pabineau, Paquetville, Petit Rocher, Pointe-Verte, Sainte-Marie-Saint-Raphaël, Saint-Isidore, Saint-Léolin, Saumarez, Shippagan, Tracadie-Sheila

Zone 7: Miramichi area

Alnwick, Baie-Sainte-Anne, Big Hole, Blackville, Burnt Church, Chatham, Derby, Eel Ground, Hardwicke, Glenelg, Metepenagiag, Miramichi, Neguac, Nelson, Newcastle, Northesk, Red Bank, Rogersville, Southesk, Tabusintac




D—The sources

1. T J Ballard, P Romito, L Lauria, V Vigiliano, M Caldora, C Mazzanti, and A Verdecchia (2006), *Self perceived health and mental health among women flight attendants*.
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2078041>
(Information retrieved on Sept 29, 2010)
2. World Health Organization. Bulletin World Health Organ vol.78 no.4 Genebra (2000), *Setting the WHO agenda for mental health*.
http://www.scielosp.org/scielo.php?pid=S0042-96862000000400012&script=sci_arttext
(Information retrieved on Sept 29, 2010)
3. Province of Manitoba (2004), *Manitoba's Comparable Health Indicator Report*.
<http://www.gov.mb.ca/health/documents/pirc2004.pdf>)
(Information retrieved on Sept 29, 2010)
4. F.Blyth, L.March, A.Brnbabic, M.Cousins (2004), *Chronic pain and frequent use of health care Pain*, Volume 111, Issue 1.
<http://linkinghub.elsevier.com/retrieve/pii/S030439590400274X>
(Information retrieved on Sept 29, 2010)
5. Southwestern Medical Center Health Library
http://www.utsouthwestern.edupatientcarehealthlibraryvery_low_birthweight/0,,P02424,00.html
(Information retrieved on Sept 29, 2010)
6. Leeds, Grenville & Lanark District Health Unit (2004), *Health Status 2004 Update*.
http://www.healthunit.org/chsr/measure/ld_cause/ld_cause.htm
(Information retrieved on Sept 29, 2010)
7. Canadian Dental Association
http://www.cda-adc.ca/en/cda/news_events/health_month/index.asp?intPrintable=1
(Information retrieved on Sept 29, 2010)
8. Centers for Disease Control and Prevention
<http://www.cdc.gov/H1N1FLU/65ANDOLDER.HTM>
(Information retrieved on Sept 29, 2010)
9. The federal Government Source for Women`s Health Information (US)
<http://www.womenshealth.gov/faq/pap-test.cfm>
(Information retrieved on Sept 29, 2010)
10. The Source, Women's Health Data Directory
http://www.womenshealthdata.ca/default_en.aspx
(Information retrieved on Sept 29, 2010)

11. N Wohlgemuth, BTB Chan, T Koru-Sengul. (2005) *Improving the Acute Care Hospital experience: A survey of Saskatchewan In-Patients*. Saskatoon: Health Quality Council.
12. World Health Organization (2005) *The European health report 2005: public health action for healthier children and population*.
<http://www.euro.who.int/ehr2005>
(Information retrieved on Sept 29, 2010)
13. The Conference Board of Canada (2008) *Healthy People, Healthy Performance, Healthy Profits: The case for business Action on the Socio-Economic Determinants of Health*.
http://www.conferenceboard.ca/Libraries/NETWORK_PUBLIC/dec2008_report_healthypeople.sflb
(Information retrieved on Sept 29, 2010)
14. Health Canada – Mental Health – Coping with Stress
<http://www.hc-sc.gc.ca/hl-vs/iyh-vsv/life-vie/stress-eng.php>
(Information retrieved on Sept 29, 2010)
15. Learn-About-Alcoholism.com
<http://www.learn-about-alcoholism.com/consequences-of-drunk-driving.html>
(Information retrieved on Sept 29, 2010)
16. Canadian Cancer Society
http://www.cancer.ca/canada-wide/prevention/quit%20smoking/second-hand%20smoke.aspx?sc_lang=en
(Information retrieved on Sept 29, 2010)
17. Single Parent Center
<http://www.singleparentcenter.net/single-parenting/effects-on-your-childs-emotional-health.html>
(Information retrieved on Sept 29, 2010)
18. Public Health Agency of Canada (2001), *The Population Health Template Working Tool*.
http://www.phac-aspc.gc.ca/ph-sp/pdf/template_tool-eng.pdf
(Information retrieved on Sept 29, 2010)
19. University of Wisconsin Population Health Institute (2008), *Wisconsin County Health Rankings*.
<http://uwphi.pophealth.wisc.edu/pha/wchr.htm>
(Information retrieved on Sept 29, 2010)
20. Institut national de santé publique du Québec (2006), *Portrait de santé du Québec et de ses régions*.
http://www.inspq.qc.ca/pdf/publications/portrait_de_sante.asp
(Information retrieved on Sept 29, 2010)

21. Ontario Ministry of Health and Long-Term care, *Population Health Profile*.
http://www.health.gov.on.ca/transformation/providers/information/resources/profiles/im_profiles.html
(Information retrieved on Sept 29, 2010)
22. Saskatoon Health Region (2008), *Health Status Report*
http://www.saskatoonhealthregion.ca/your_health/documents/PHO/shr_health_status_report_2008_full.pdf
(Information retrieved on Sept 29, 2010)
23. Centre for Health Information, (2004) *Summary Report-Health Scope 2004 - Reporting to Newfoundlanders and Labradorians on Comparable Health Indicators*.
http://www.health.gov.nl.ca/health/publications/pdffiles/healthscope_report_2004.pdf
(Information retrieved on Sept 29, 2010)
24. J. Michael McGinnis, Pamela Williams-Russo and James R. Knickman (2002), *The Case For More Active Policy Attention To Health Promotion*.
<http://content.healthaffairs.org/cgi/content/abstract/21/2/78>
(Information retrieved on Sept 29, 2010)
25. The Conference Board of Canada, (2009), *How Canada Performs*.
<http://www.conferenceboard.ca/hcp/details/health.aspx>
(Information retrieved on Sept 29, 2010)
26. Locker, D. and Matear, D. Community Health Services Research Unit, Faculty of Dentistry, University of Toronto. *Oral disorders, systemic health, well-being and the quality of life: A summary of recent research evidence*.
<http://www.caphd-acsdp.org/PDF/oh-summa.pdf>
(Information retrieved on Sept 29, 2010)
27. Victorian Government Health Information epidemiology and surveillance,
<http://www.health.vic.gov.au/ideas/bluebook/appendix2>
(Information retrieved on Sept 29, 2010)
28. Canadian Family Physician • Le Médecin de famille canadien Vol 54: january • janvier 2008 (2008), Complete health checkup for adults - Update on the Preventive Care Checklist Form©
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2329902/>
(Information retrieved on Sept 29, 2010)
29. Statistics Canada, Standard Geographical Classification, Reference Maps
http://geodepot.statcan.gc.ca/2006/13011619/1907032006_05-eng.jsp?province=CD-CSD&Go=Next&fileName
(Information retrieved on Sept 29, 2010)



30. New Brunswick Department of Health (2008/2009), *2008/2009 Annual Report of the Department of Health*

<http://www.gnb.ca/0051/pub/pdf/6698ef.pdf>

(Information retrieved on Sept 29, 2010)

31. Public Health Agency of Canada (2008), *Report on Sexually Transmitted Infections in Canada: 2008*

<http://198.103.98.78/std-mts/report/sti-its2008/03-eng.php>

(Information retrieved on Sept 29, 2010)





**New Brunswick
Health Council**

Engage. Evaluate. Inform. Recommend.