

# Population Health Profile 2022



Zone 4

Madawaska and North-West Area

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New Brunswick  
Health Council

Conseil de la santé  
du Nouveau-Brunswick



## About the New Brunswick Health Council

The New Brunswick Health Council (NBHC) has a two-part mandate: engaging citizens in ongoing dialogue about the improvement of health service quality in the province, and measuring, monitoring and publicly reporting on health service quality and population health. Together, these two streams of activity contribute to greater accountability, improved health system performance, population health outcomes and promotion of a more citizen-centered health care system.

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## What is a Population Health Profile?

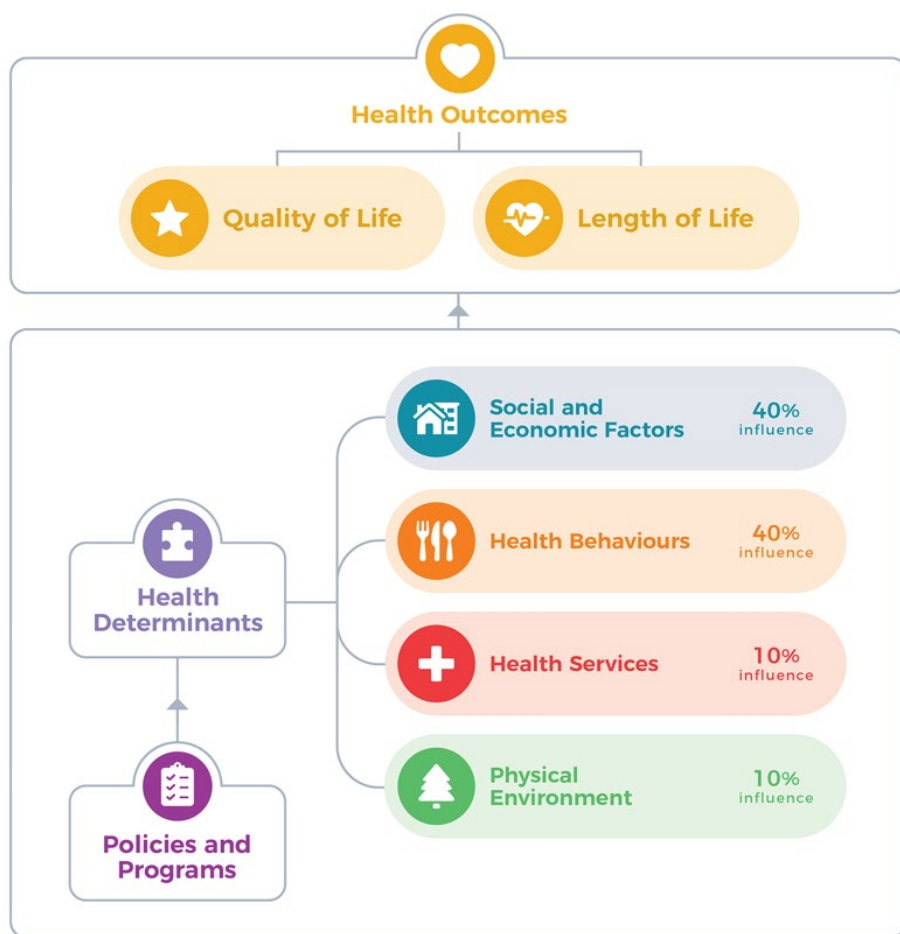
The New Brunswick Health Council's (NBHC) *Population Health Profile* provides an overview of the health and well-being of people who live, learn, work and take part in activities in each community of our province. This tool is designed to help citizens and decision-makers develop a shared understanding of the unique realities lived in each community and can be used to foster collaboration toward a common vision of informed, engaged, and healthier New Brunswickers.

Each profile was created by analyzing information from more than 400 population health indicators, available in the *Population Health Data Tables* on the [NBHC website](#). The information included helps us understand how healthy the citizens in our communities are today (health outcomes) and what factors influences their health and well-being (health determinants).

## The Population Health Model

The *Population Health Profile* is based on a *Population Health Model*. This model groups the determinants of health into four categories: health behaviours, health services, social and economic factors, and the physical environment. Each category can be influenced by our individual decisions about our health and well-being, external factors that influence the health of the population, and government programs and policies.

Together, these determinants impact New Brunswickers' health outcomes: our quality and length of life.





## About the Data and Geography

Indicators from a variety of sources are collected, organized, and analyzed by the NBHC. Each has various levels of reliability and limitations as detailed in the specific indicator web page on the [NBHC website](#). The complete list of indicators used in this profile can be found at the end of the document.

*Population Health Profiles* are available for each of the 7 Health Zones and 33 NBHC Communities. The boundaries of the seven health zones were established by provincial legislation, while the 33 communities were created by the NBHC in 2009 (by further dividing up the seven established health zones). The community boundaries were determined on the basis of the catchment areas of health care centres, community health centres and hospitals. No community has fewer than 5,000 people to ensure data availability, stability, and anonymity.

To learn more about the 33 NBHC Communities, click [here](#).





## Key observations for the Zone 4 - Madawaska and North-West Area

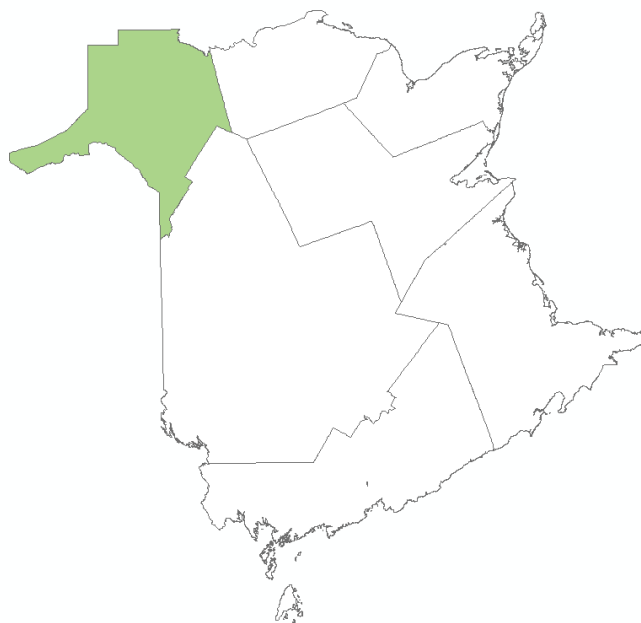
- This zone has the highest proportion of bilingual residents.
- Youth stand out in terms of quality of life, health behaviours, social and family supports, and sense of connection with their school and community.
- Adults and seniors have less favourable physical activity and heavy drinking habits.
- This zone has the lowest uptake of mental health services.



# Health of the Zone

## Demographic Context

- Area: 7803 km<sup>2</sup>
- Population density: 6 persons per km<sup>2</sup>



The Madawaska and North-West Area experienced a population increase of 0.5% between 2016 and 2020, which is well below the provincial average for that time period. The birth rate (seven per 1,000 population) is lower than the provincial average, while the death rate (ten per 1,000 population) is higher. The median age is 49 years, three years older than the median age in New Brunswick.

Immigrants and residents who identify as Indigenous account for roughly the same percentage of the population (3.2% and 3.3% respectively). In addition, about one in eight youth identify as a member of a sexual minority. This zone has the smallest percentage of youth who have been diagnosed with having special education needs (20%). The Madawaska and North-West Area also has the highest percentage of married or common-law couples (61%) and the lowest percentage of single-parent families (14%).

French is the primary language used in this zone: it is most often spoken at home (90%) and at work (81%). In addition, the majority of Madawaska residents (80%) choose French when accessing services. Residents who request health services in French receive them in their language of choice 81% of the time, the highest percentage of the seven New Brunswick health zones. Residents who request health services in English receive them only 72% of the time, the lowest percentage of the province's seven zones. Sixty percent of residents reported knowing both English and French, and 69% of youth are bilingual; both figures are the highest in the province.



## Health Outcomes

The Madawaska and North-West Area has the smallest percentage of newborns with an above average birth weight (1%). It also stands out from the rest of the province in terms of the quality of life of its youth (see Table 1).

Table 1. Quality of Life of Madawaska and North West Area Youth		
	Zone 4 (%)	NB (%)
Moderate to high level of mental fitness (having a positive sense of how they feel, think and act)	87	78
See their health as being very good or excellent	74	60
Resilience, high or moderate level	77	71
Life satisfaction	89	81
Pro-social behaviours (being helpful, respectful, thoughtful, etc.)	89	85
Oppositional behaviours (being defiant, disrespectful, rude, etc.)	14	15
Symptoms of depression	26	38
Symptoms of anxiety	31	38
Have been injured and had to be treated by a doctor or nurse	26	30

The Madawaska and North-West Area has the smallest percentage of seniors who perceive their health as very good or excellent (22%). It also has the smallest percentages of residents who perceive their mental health as very good or excellent (46%) and who are satisfied or very satisfied with life (87%). It is also home to the highest percentage of seniors who have been injured and required medical or nursing care within the previous twelve months (22%). In terms of quality of life, the majority of adults (53%) perceive their mental health as very good or excellent, which is the highest percentage of the seven New Brunswick health zones.

Adults and seniors in the Madawaska and North-West Area both rank last in the province when it comes to managing chronic health conditions (see Table 2).



**Table 2. Perception of Seniors and Adults in the Madawaska and North West Area Regarding Their Management of Chronic Health Conditions**

	Zone 4 (%)		NB (%)	
Very confident in managing their health condition	30	34	40	44
Strongly agree that they know how to prevent further problems with their health condition	29	25	38	31
Strongly agree that their health largely depends on how well they take care of themselves	53	37	62	51

In terms of premature deaths, the Madawaska and North-West Area has the highest rate of years of life lost due to injury among residents aged 19 and under (105 per 10,000 population). It also has the highest rate of years of life lost due to suicide and intentional injury (77 per 10,000 population).





## Determinants of Health

### Social and economic factors

Youth in the Madawaska and North-West Area have some of the best social and family supports in the province. In fact, the vast majority of youth feel that their mental fitness needs are highly satisfied by their family (87%) and friends (84%). In addition, two thirds of youth eat an evening meal with their loved ones. About three in five youth said their parents or guardians know them well (61%) and they feel that their family supports them through difficult times (58%). The relationship youth in the Madawaska and North-West Area have with their school and community is also the best, in almost all respects (see Table 3). Zone 4 also has the smallest percentage of youth who have experienced dating violence (13%) and have who been sexually assaulted (9%).

**Table 3. Perception of Youth in the Madawaska and North West Area Regarding Support at School, at Work, and in the Community**

	Zone 4 (%)	NB (%)
Participate in activities or groups organized by school	58	54
Feel teachers treat me fairly	89	83
Feel safe at school	91	84
Feel connected to my school	96	92
Mental fitness needs highly satisfied by school	69	57
Have opportunities to develop skills that will be useful later in life (like job skills and skills to care for others)	43	41
Volunteer outside school without being paid	79	72
Treated fairly in my community	40	37
Participate in activities or groups not organized by school	56	55
Know where to go in my community to get help	29	27
Sense of community belonging, somewhat strong or very strong	19	19



The Madawaska and North-West Area has the largest number approved childcare spaces for all age groups, but the lowest school readiness rate for kindergarten (70%). It also has one of the lowest percentages of residents with a post-secondary certificate, diploma or degree (51%).

About one third of adults and seniors feel a lack of companionship sometimes or often, one of the lowest proportions in the province. Some reasons for stress among adults, however, are reported more frequently than in all other areas: time pressures (53%) and physical health problems or conditions (31%). In addition, only 77% of seniors have access to the internet at home.

## Physical environment

The Madawaska and North-West Area had the largest number of extreme cold days during the period under consideration (12) but did not experience any extreme heat events. It also has highest proportion of households that use electricity as a source of energy for home heating (63%). And 84% of households have a municipal drinking water supply, the highest percentage of the four zones for which this data is available.

The Madawaska and North-West Area has the highest percentage of residents who are passengers in or drivers of a personal vehicle (95%). And 87% of residents live near a park, the highest percentage in New Brunswick.

## Health Behaviours

Youth in the Madawaska and North-West Area have some of the best eating and sleep habits in the province, in several respects. About half of youth have breakfast every day and also eat at least five servings of fruits or vegetables daily. Only half of youth drink non-nutritious sugary beverages, and one third of youth reported they had eaten a meal while watching television at least three times in the previous seven





days. Both of those proportions are the lowest of the seven New Brunswick health zones. In addition, 44% of youth sleep eight or more hours each night.

Youth in the Madawaska and North-West Area, however, are the least likely to report they know when they are legally able to consent to sexual activity (67%). On the other hand, they have the lowest rate of chlamydia (54 cases per 10,000 population aged 15 to 19). Youth in this region are also less likely to use cannabis (13%) and drugs (22%) than the provincial average, and they are the least likely to become future smokers (24%).

Health behaviours of adults and seniors are generally less favourable. Only 44% of adults and seniors get the recommended amount of moderate to vigorous physical activity, the lowest proportion in the province. In addition, one third of adults drink heavily, the highest percentage of all the health zones



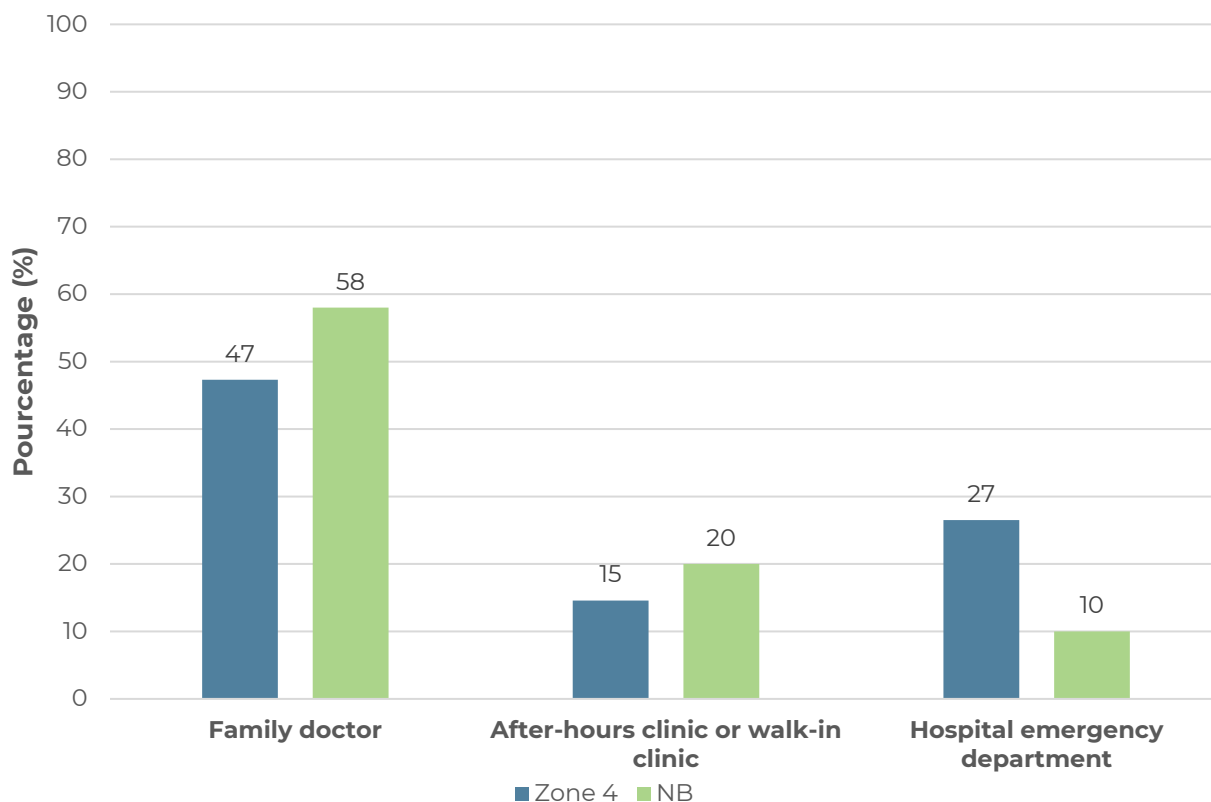
## Health Services

The Madawaska and North-West Area is one of the areas where access to family physicians is most difficult. Only 85% of residents reported they have a family doctor, the second-lowest percentage in the province. And only 45% of seniors reported being able to get an appointment with their family doctor within five days, which is also the second-lowest percentage in New Brunswick. Adults, on the other hand, are closer to the provincial average (50%); 48% reported being able to get an appointment with their family doctor within five days. In terms of wait times for emergency services, this zone is almost on par with the provincial average (71%).

When they are sick or need care services, residents of the Madawaska and North-West Area turn to their family doctor less often, and to emergency services more often than any other zone in New Brunswick (see Figure 2). In addition, this zone has the highest proportion of residents who waited less than a month for a first visit with a specialist (56%).



**Figure 1. Types of Services Most Often Used When Care Services are Needed in Zone 4: Madawaska and North-West Area**



In all age groups, hospitalization rates for injuries are the highest in the province. Hospitalization rates for mental health conditions are also the highest in the province overall but rank second in the youth and adult subgroups (see Table 4). The preventable hospitalization rate is higher than the provincial average and is the third highest of all seven health zones.



**Table 4. Hospitalizations in the Madawaska and North West Area**

	Zone 4 (rate)*	NB (rate)*
Hospitalization following an injury	124	74
Youth	61	29
Adults	74	42
Seniors	301	208
Hospitalization for mental health disorder	130	51
Youth	85	33
Adults	165	64
Seniors	68	28
Avoidable hospitalization	67	52

*\* Rate per 10,000 population*

Madawaska and North-West Area residents have the lowest level of uptake of mental health services. One in eight residents (over the age of 18) reported having felt the need to talk to a health professional about their mental health, emotional health or substance use. But only 12% of adults and 5% of seniors who reported having felt the same need reported they subsequently saw a health professional for the above-mentioned reasons. And only one in five youth reported they needed to see someone for an emotional or mental health conditions, which is, again, the lowest proportion in the province.

Only three in ten adults reported they feel very confident about their ability to manage their health, which is the lowest proportion of all the New Brunswick health zones. In addition, 39% reported being very familiar with the effects of each of their medications. Sixty-seven percent of adults and seniors reported that pharmacists are the most helpful in terms of helping them understand how to take their medications, 61% said they feel consulted in the decision-making process related to their health, and 66% reported that they always receive help from their family doctor in coordinating the care of other health care professionals; these percentages are the lowest of any provincial health zone. This





zone also has the smallest proportion of residents who feel that verbal information about their conditions or prescriptions is easy to understand.

When it comes to rating the health services received, the Madawaska and North-West Area is close to the provincial average. More specifically speaking, 66% of adults and 79% of seniors gave the health services they received a positive rating.



## Conclusion

Briefly put, the Madawaska and North-West Area has experienced below average population growth in recent years and its population is older than that of New Brunswick as a whole. Residents of this zone use primarily French at home, at work, and when receiving health care services. Zone 4 also has the highest proportion of bilingual residents.

Youth have one of the best quality of life ratings in the province. Social and family supports for youth are also very good overall, and their connection to their school and community is the best of any health zone in the province. However, seniors in this zone generally do not have a good perception of their health and the management of their chronic health conditions..

Youth have generally good health habits when it comes to sleeping, eating and substance use. However, this is not the case for adults and seniors, especially with respect to physical activity and heavy drinking.

Access to a family doctor is more difficult in this zone, in terms of having a family doctor and wait times for appointments. This zone has the lowest uptake of mental health services; it also has the highest injury and mental health hospitalization rates in the province.



## Source

Detailed information for each indicator used for these observations is available on the New Brunswick Health Council website. The list of indicators, their unique code and the year of dissemination are available (Table 5) to facilitate this research.

It is important to note that the indicators are continuously updated on the NBHC website.

[Health Zone 4 | New Brunswick Health Council \(nbhc.ca\)](https://nbhc.ca)

Indicator	Unique Code	Year
<b>Demographic context</b>		
Land area	STATC-CENCU-001	2016
Population density	STATC-CENCU-002	2016
Population change from 2016 to 2020	STATC-SCCEN-024	2016 to 2020
Indigenous	STATC-SCCEN-023	2016
Immigrant	STATC-SCCEN-009	2016
Median age of population	STATC-SCCEN-002	2016
Birth rate	SNB-VITST-002	2014 to 2018
Death rate	SNB-VITST-001	2014 to 2018
Married or living common-law	STATC-SCCEN-003	2016
Single parent families	STATC-SCCEN-006	2016
Language most spoken at home - French	STATC-SCCEN-012	2016
Language most spoken at work - French	STATC-SCCEN-020	2016
Knowledge of official language - French and English	STATC-SCCEN-018	2016
Youth bilingualism - English and French	STATC-SCCEN-001	2016
Always receive health care services in the official language of their choice - English	PH_LOS03_2	2020
Language chosen when accessing services - French	PH_LOS02_2	2020
Always receive health care services in the official language of their choice - French	PH_LOS03_3	2020
Youth diagnosed with special education needs	SH_SENAL_1	2018-2019
Youth - sexual minority	SH_SEO02_7	2018-2019
<b>Health outcomes</b>		
Infants - higher than average birth weight	SNB-VITST-004	2016 to 2018
Youth - Moderate to high level of mental fitness (having a positive sense of how they feel, think and act)	SH_MEFHM_1	2018-2019
Youth - See their health as being very good or excellent	SH_HEP01_1	2018-2019



Youth - Resilience, high or moderate level	SH_RESTS_1	2018-2019
Youth - Life satisfaction	SH_LIF01_7	2018-2019
Youth - Pro-social behaviours (being helpful, respectful, thoughtful, etc.)	SH_PROTS_1	2018-2019
Youth - Oppositional behaviours (being defiant, disrespectful, rude, etc.)	SH_OPPTS_1	2018-2019
Youth - Symptoms of depression	SH_DEP01_1	2018-2019
Youth - Symptoms of anxiety	SH_ANX01_1	2018-2019
Youth - Have been injured and had to be treated by a doctor or nurse	SH_INJ01_1	2018-2019
Adults - Perceived mental health, very good or excellent	PH_HEP02_1	2020
Seniors - Perceived mental health, very good or excellent	PH_HEP02_1	2020
Seniors - Perceived health, very good or excellent	PH_HEP01_1	2020
Seniors - Life satisfaction, very satisfied or satisfied	PH_LIF01_1	2020
Seniors - Have been injured and had to be treated by a doctor or nurse	PH_INJ01_1	2020
Adults - strongly agree that their health largely depends on how well they take care of themselves	PH_BELEDM_1	2020
Adults - know how to prevent further problems with their health condition, strongly agree	PH_MGT02_1	2020
Adults - very confident in managing their health condition	PH_MGT01_1	2020
Seniors - strongly agree that their health largely depends on how well they take care of themselves	PH_BELEDM_1	2020
Seniors - know how to prevent further problems with their health condition, strongly agree	PH_MGT02_1	2020
Seniors - very confident in managing their health condition	PH_MGT01_1	2020
0 to 19 years old - Injuries, years of life lost	SNB-VITST-013	2014 to 2018
Suicides and self-inflicted injuries, years of life lost	SNB-VITST-009	2014 to 2018
<b>Social and economic factors</b>		
Youth - eat an evening meal together with family, friends or guardians	SH_EATI1_1	2018-2019
Youth - my parent or caregiver knows a lot about me	SH_RES06_1	2018-2019
Youth - my family stands by me during difficult times	SH_RES07_1	2018-2019
Youth - with mental fitness needs highly satisfied by family	SH_MEFFA_1	2018-2019
Youth - with mental fitness needs highly satisfied by friends	SH_MEFFR_1	2018-2019
Adults and seniors - lack companionship some of the time or often	PH_SIL01_1	2020
Youth - participate in activities or groups organized by school	SH_INSAL_1	2018-2019
Youth - feel teachers treat me fairly	SH_SCC04_1	2018-2019
Youth - feel safe at school	SH_SCC05_1	2018-2019
Youth - feel connected to my school	SH_SCCTS_1	2018-2019
Youth - have opportunities to develop skills that will be useful later in life (like job skills and skills to care for others)	SH_RES09_1	2018-2019
Youth - volunteer outside school without being paid	SH_VOLAT_1	2018-2019
Youth - treated fairly in my community	SH_RES10_1	2018-2019
Youth - participate in activities or groups not organized by school	SH_OUSAL_1	2018-2019
Youth - know where to go in my community to get help	SH_RES02_1	2018-2019



Youth - sense of community belonging, somewhat strong or very strong	SH_SOCTS_1	2018-2019
Seniors - Have internet access at home	PH_INT02_1	2020
Youth - Victim of dating violence	SH_SEV02_1	2018-2019
Youth - Sexually violated	SH_SEV01_1	2018-2019
Time pressures or not having enough time	PH_STRTP_1	2020
Physical health problem or condition	PH_STRPH_1	2020
Approved child care spaces - infants (1 and under)	GNB-EESC-001	2019
Approved child care spaces - preschool (2-4 years)	GNB-EESC-002	2019
Approved child care spaces - school-age (5-12 years)	GNB-EESC-003	2019
Kindergarten school readiness	GNB-EESC-004	2018-2019
Highest level completed of education - postsecondary certificate, diploma or degree	STATC-SCCEN-039	2016
<b>Physical environment</b>		
Passenger or driver in a car, truck or van	STATC-SCCEN-035	2016
Have a park close to home	STATC-HENVS-005	2017
Extreme heat events	CCCS-DCLIM-001	2020
Extreme cold days	CCCS-DCLIM-002	2020
Municipal drinking water supply	STATC-HENVS-009	2017
Source of energy for household heating equipment - electricity	STATC-HENVS-003	2017
<b>Health behaviours</b>		
Youth - Eat breakfast daily	SH_EAT12_1	2018-2019
Youth - Eat 5 or more servings of vegetables or fruit daily	SH_EATFV_1	2018-2019
Youth - Ate meals while watching television 3 times or more in the last 7 days	SH_EAT14_2	2018-2019
Youth - Drink non-nutritious sugary beverages	SH_DRINN_1	2018-2019
Youth - Sleep 8 hours or more every night	SH_SLE01_1	2018-2019
Adults and seniors - Moderate or vigorous physical activity	PH_PHY01_1	2020
Youth - At risk of becoming a future smoker	SH_SMOSU_1	2018-2019
Youth - Cannabis use	SH_MAR02_2	2018-2019
Youth - Drug use	SH_DROAL_1	2018-2019
Adults - Heavy drinking	PH_ALC01_3	2020
Youth - report they know when they are legally able to consent to sexual activity	SH_SEV03_1	2018-2019
Youth - Sexually transmitted infections - chlamydia	GNB-OCMOHR-001	2019
<b>Health Services</b>		
Have a family doctor	PH_ACCFA_1	2020
Hospitalization following an injury	CIHI-DAD-014	2017-2018 to 2019-2020
Youth - hospitalization following an injury	CIHI-DAD-015	2017-2018 to 2019-2020
Adults - hospitalization following an injury	CIHI-DAD-016	2017-2018 to 2019-2020



Seniors - hospitalization following an injury	CIHI-DAD-017	2017-2018 to 2019-2020
Hospitalization for mental health disorder	CIHI-DAD-018	2017-2018 to 2019-2020
Youth - hospitalization for mental health disorder	CIHI-DAD-019	2017-2018 to 2019-2020
Adults - hospitalization for mental health disorder	CIHI-DAD-020	2017-2018 to 2019-2020
Seniors - hospitalization for mental health disorder	CIHI-DAD-021	2017-2018 to 2019-2020
Avoidable hospitalization	CIHI-DAD-003	2016-2017 to 2019-2020
Youth - needed to see or talk to someone for a mental or emotional problem	SH_MHI01_1	2018-2019
Adults - Family doctor - waited 5 days or less to have an appointment	PH_ACCFD_2	2020
Seniors - Family doctor - waited 5 days or less to have an appointment	PH_ACCFD_2	2020
Hospital emergency department - waited less than 4 hours	PH_ACCEA_1	2020
Specialist - waited less than 1 month for a first visit	PH_ACCSA_1	2020
Adults - very confident in managing their health condition	PH_MGT01_1	2020
Family doctor - always involves them in decisions about their health care	PH_APPFA_1	2020
Verbal information about condition/prescription is easy to understand, always or usually	PH_COMOA_1	2020
Know what their prescribed medications do, strongly agree	PH_MED02_1	2020
Pharmacists - help the most in understanding how to take their medications	PH_MED03_2	2020
Family doctor - always helps them coordinate the care from other providers	PH_CRDFB_1	2020
Adults - Citizens - provide a favourable rating for overall health care services received	PH_SATOA_1	2020
Seniors - Citizens - provide a favourable rating for overall health care services received	PH_SATOA_1	2020