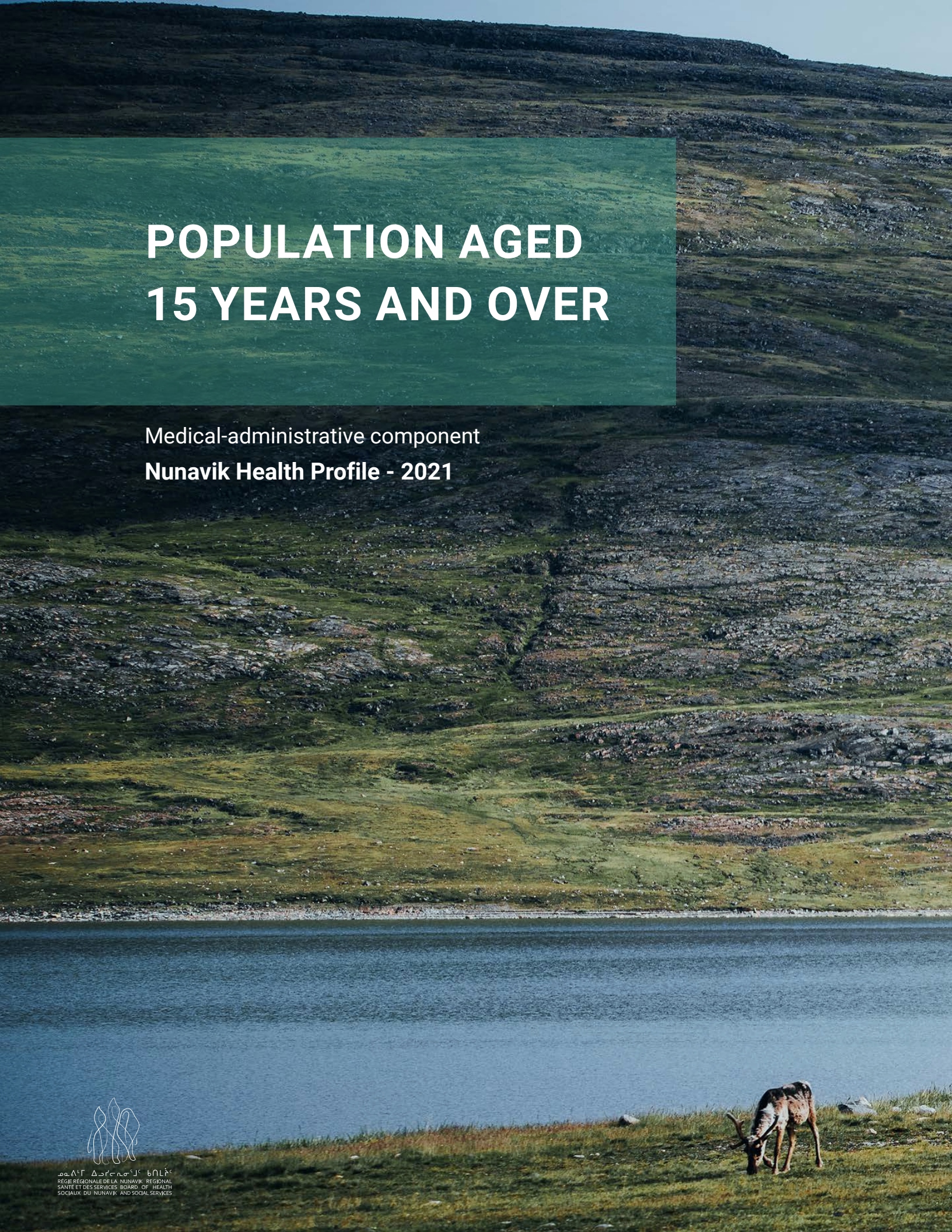
POPULATION AGED 15 YEARS AND OVER

Medical-administrative component

Nunavik Health Profile - 2021



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RÉGIE RÉGIONALE DE LA SANTÉ ET DES SERVICES SOCIAUX DU NUNAVIK
NUNAVIK REGIONAL BOARD OF HEALTH AND SOCIAL SERVICES

PRODUCTION

This updated version (2025) was prepared by the Surveillance, Planning and Research team of the Nunavik Regional Board of Health and Social Services (NRBHSS) Public Health Department. The 2018 version of this document was created by the Institut national de santé publique du Québec (INSPQ) as per an NRBHSS mandate.

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Nunavik Regional Board of Health and Social Services (2025). Nunavik health profile 2021, Population aged 15 years and over. Nunavik Regional Board of Health and Social Services.

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HIGHLIGHTS

MAJOR DIFFERENCES STILL PRESENT WITH REGARD TO GENERAL HEALTH IN NUNAVIK AND IN QUÉBEC AS A WHOLE

Between 2000 and 2019, the life expectancy of women in Nunavik remained steady at around 70 years, while that of men hovered between 61 and 66 years. The discrepancy between life expectancy in Nunavik and in Québec as a whole continues to grow for both women and men, averaging 15 years for the period from 2015 to 2019.

Regional and coastal hospitalization rates related to trauma grew significantly over the last decade, increasing the health gap between Québec as a whole and Nunavik. However, hospitalization rates for chronic and respiratory diseases have declined over the years, contributing to overall stability over time in hospitalization rates for all causes combined.

The primary causes of hospital morbidity and mortality vary according to age and are different in Nunavik than in Québec as a whole, especially for the younger age groups. Indeed, cases of suicide and unintentional trauma[1] are increasingly present among youth and adults (15 to 54 years), whereas the elderly (55 years or more) mostly suffer from chronic diseases such as cancer, respiratory diseases and circulatory diseases.

RISING TRAUMA HOSPITALIZATIONS AND PERSISTENT BURDEN OF SUICIDE

Whereas mortality rates due to unintentional trauma has remained relatively stable in Nunavik, the rates for the region are much higher than those for Québec as a whole. The top causes of unintentional trauma are usually motor vehicle incidents, incidents involving off-road or all-terrain vehicle (ATV) and falls. While the latter mainly concern the elderly population (55 years or more), incidents involving road and off-road vehicles mostly concern persons between the ages of 15 and 34. Hospitalization rates due to unintentional trauma grew during the period examined, with the most significant increase being in the 15–34 age group, particularly with regard to hospitalizations linked to off-road vehicle incidents.

As for intentional trauma, namely self-harm and assault, increases in hospitalization and mortality rates were also revealed when comparing the 2015-2019 period to the 2010-2014 period. The suicide death rate is particularly high among men, while the hospitalization rate related to self-harm is higher among women. Based on both hospitalization and mortality data, suicide and suicide attempts remain major and persistent public health issues in Nunavik, with complex and far-reaching consequences. This is especially evident when regional rates are compared to provincial rates.

THE HEALTH OF PEOPLE AGED 55 YEARS OR MORE

The primary chronic diseases observed among the elderly were cancers, respiratory diseases and circulatory diseases. The most prevalently encountered cancers in Nunavik are cancers of the digestive and respiratory systems, with the latter accounting for the most deaths compared to all other cancer types. The recent data indicate a slight decrease in hospitalization rates related to cancer in the last period examined, which contributed to a drop in the disparities between regional and provincial rates. However, mortality rates due to cancer have remained stable and continue to be higher in Nunavik than in Québec as a whole.

Hospitalization and mortality rates associated with respiratory and cardiovascular diseases appear to be decreasing, getting closer to the ones seen in Eeyou Istchee while remaining higher than those for Québec as a whole. Pneumonia and tuberculosis are the two main respiratory infections leading to hospitalizations. However, the onset of COVID-19 in 2020 contributed to a changed portrait for both the region and the province.

1 See section 3.3 for a definition of intentional trauma and unintentional trauma.

CONTEXT AND METHODOLOGICAL NOTE

OBJECTIVES AND BACKGROUND

This health profile, essentially an update of the Nunavik Health Profile – 2018, mostly focuses on the health of the population aged 15 years and over. It begins with an overview of trends in general health indicators as well as the rates and primary causes of deaths and hospitalizations. The most frequently encountered problems in certain age groups are then addressed, including intentional and unintentional trauma as well as chronic diseases. Lastly, the implications of the data presented in this profile on health programs and services offered the region's population are examined. This profile includes updated information provided by the INSPQ, with data up to 2019.

To further document the health portrait depicted in this profile, reports published subsequent to the Nunavik Inuit Health Survey *Qanuilirpitaa?*[2] 2017 are cited when relevant.

TARGETED POPULATION AND DATA SOURCES

This profile examines the health of the general population of Nunavik, **with a focus on Nunavimmiut aged 15 years or more.** The data are examined for periods of five years throughout the report, and data on mortality and hospitalizations are presented by calendar year. The demographic and socioeconomic data presented in this profile were extracted from several provincial medical-administrative databases, including registers of demographic events (births and deaths), the MED-ÉCHO databank on hospital stays and demographic projections. The primary and secondary sources are noted underneath each figure.

Warning regarding comparisons with previous versions
Whenever age groups are not specified in an analysis, rates are calculated for the population as a whole; in previous versions, the rates used were calculated for people aged 15 years or more.

Warning regarding the interpretation of projections
Projections should not be interpreted as forecasts of an expected future, but rather, of a possible future should trends continue. As with all statistical projections, calculations are based on assumptions for predicting population growth. Despite the scientific rigour of these assumptions, actual population growth can differ from what is predicted, particularly at a regional level. These data can also differ slightly from those obtained from other sources and should thus be interpreted with caution.

Warning regarding the interpretation of data on hospitalizations[3] in Nunavik
Hospitalization indicators (rates, numbers) are based on the home territory (e.g., a Québec sociosanitary region[4]) of patients rather than the place of hospitalization (hospital centre). This ensures that indicators reflect the hospitalization experience of a territory's residents (in this case, Nunavik), regardless of where (in what place) they are treated. The main diagnosis, i.e., the one used to record hospitalizations, is the primary trouble or illness presented by the patient during his hospital stay.

In 2012, a significant modification was brought to the criteria for reporting hospitalizations at the Ungava Tulattavik Health Centre (UTHC) in the provincial register of hospitalizations. The 24-hour criterion for hospitalizations was changed to 4 hours for the UTHC, while remaining at 24 hours for all other regional and provincial health centres. This generated a marked increase in hospitalizations for the Ungava coast population during the periods studied. While this report was being prepared, the UTHC changed their reporting criteria back to 12 hours, effective April 2024.

For this profile, it was difficult to determine whether the increase was solely due to this administrative artifact or if it reflected an actual increase in hospital morbidity. Furthermore, it was impossible to identify whether all types of hospitalizations were touched in the same manner. Likewise, this change in recording criteria complicated the task of comparing the populations of the region's two coasts, as well as those of Nunavik and Québec's other sociosanitary regions. Data is thus provided for general information purposes, and comparisons must be interpreted with caution.

Because this profile is primarily designed to support an improvement of the health services provided in Nunavik, the comparison population, used to calculate adjusted rates is that of Québec as a whole. Whenever possible and relevant, data regarding populations in other regions of Québec were presented; these other regions notably included region 10 (Nord-du-Québec) and region 18 (Terres-Cries-de-la-Baie-James; Eeyou Istchee). Drawing comparisons with populations that are in some ways similar to that in Nunavik allows for revealing startling differences in terms of the health of the Nunavik population.

Data are sometimes stratified according to sex (male/female), age groups of interest (i.e., 15-34 years, 35-54 years, and 55 years or more) and home coast (i.e., Ungava coast/Hudson coast). It is also important to note that the categories men/women are used when talking about sex, and this to facilitate understanding; **gender is not discussed in this report**.

Crude and adjusted measures are used in this report. Crude measures are used to illustrate the actual situation observed within the region. Adjusted measures, in turn, are used to compare Nunavik with other regions or with Québec as a whole by eliminating the demographic differences between the populations; adjusted rates are not useful outside of those comparisons (INSPQ, 2024; Infocentre de santé publique, 2015). The reference population used to calculate the adjusted rates is that of Québec in 2016.

2 QANUILIRPITAA? 2017 | Nunavik Regional Board of Health and Social Services

3 The data refer to hospitalizations and not to individuals. This is important, as any one individual could be hospitalized on more than one occasion over a given period (Institut national de santé publique du Québec, 2015c).

4 The sociosanitary region targeted in this profile is Nunavik (17), a region that includes the Ungava Tulattavik Health Centre and the Inuulitsivik Health Centre on the Hudson coast.

INTERPRETATION OF THE PRESENTED STATISTICS

Working with small samples is unavoidable and must be top-of-mind when interpreting statistics obtained with regard to Québec's Indigenous populations, including in Nunavik. To take into account the epidemiological and ethical issues raised, the following rules of good practice were adopted (Centre for Epidemiology and Evidence, 2015):

A. **To avoid any breach of confidentiality**, no statistics based on a numerator of less than 5 should be distributed, nor should certain categories of variables be aggregated to increase their size.

B. **With the goal of increasing the power** (and by extension, the stability) of the statistics presented, years are aggregated into 5-year periods.

C. **To decrease the risk of bias**, , an asterisk (*) is placed after all data with a coefficient of variation between 16.66% and 33.33% to indicate that this information must be interpreted with caution. Data with a coefficient of variation greater than 33.33% are followed by two asterisks (**). These values (**) are provided solely for information purposes and should not be considered trustworthy.

D. **Comparisons** that are temporal, territorial or that involve various subpopulations are only considered statistically significant when there is an absence of confidence interval overlap at 99%. When variances do not meet these criteria, they are clearly identified as "non-statistically significant trends" that should be interpreted with caution.

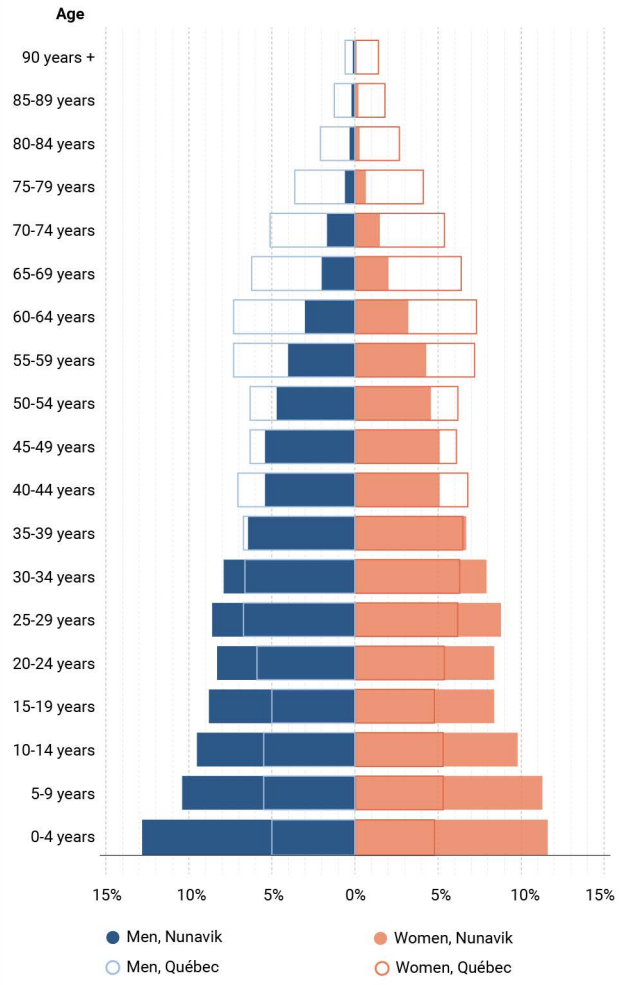
The various warnings explain why it is not always possible to display all the desired cross analyses (e.g., age, sex and administrative subregion) for all available indicators.

DATA ON THE POPULATION AGED 15 YEARS AND OLDER

NUNAVIK: A POPULATION UNDERGOING CHANGE

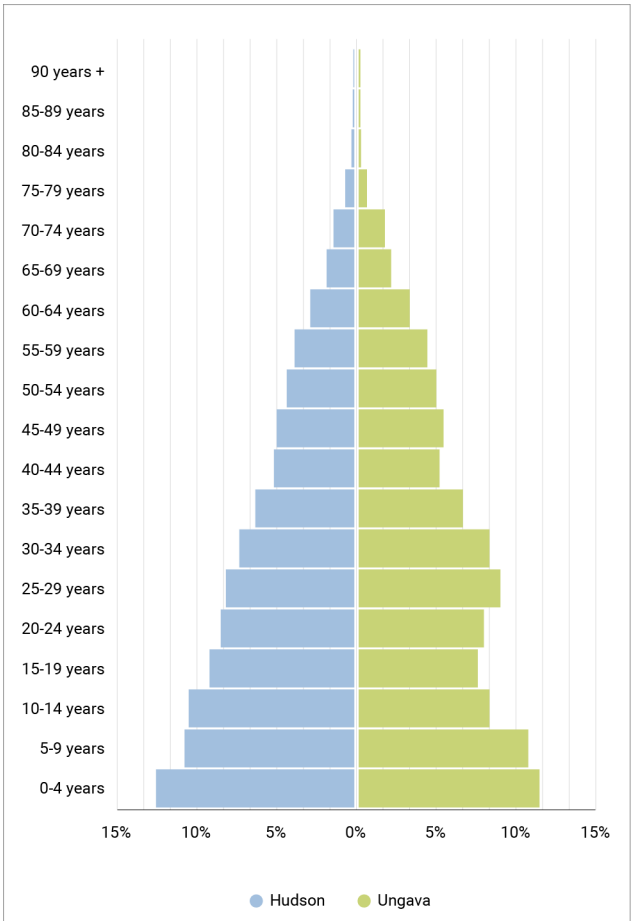
The elderly adult population is proportionally less significant in Nunavik than in Québec as a whole (Figure 1). In general, the wide-base pyramids seen on both coasts indicate high birth rates and increasing population growth. Indeed, both coasts exhibit a similar distribution of the population according to age, despite a slight decrease in the population for the 10-24 age group on the Ungava coast (Figure 2).

Figure 1. Population distribution according to age and sex, Québec and Nunavik, 2021



Source: Infocentre de santé publique du Québec. MSSS. Estimations and demographic projection, electronic version (1981-1995 : April 2012 version, 1996-2021: February 2022 version for estimations, 2022-2041 : July 2022 version for estimations).

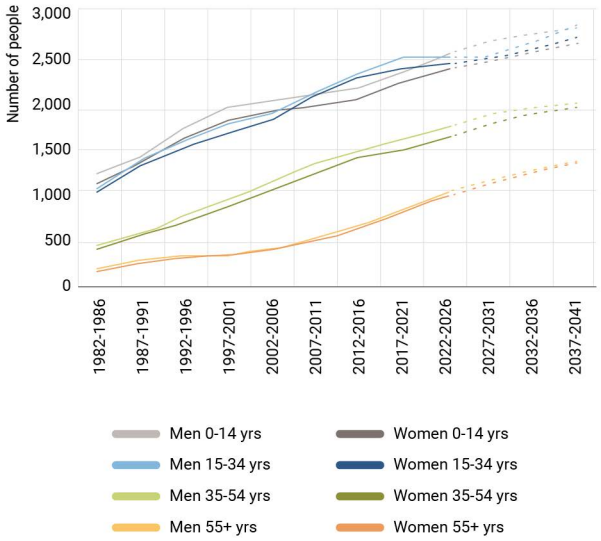
Figure 2. Population distribution according to coast, Nunavik, 2021.



Source: Infocentre de santé publique du Québec. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2021: February 2022 version; 2022-2041: July 2022 version).

As described in the Nunavik Health Profile 2021, Sociodemographic background, Nunavik is experiencing an increase in the proportion of people aged 55 years or more (NRBHSS, 2025). In both Nunavik and Québec as a whole, the population aged 55 years and over experienced increasing growth rates; the latter, however, are growing much faster in Nunavik than in Québec as a whole. Figure 3 illustrates projected increases in the number of people by age group, which are relatively similar for both sexes. The main differences are observed in the 0–14 and 15–34 age groups.

Figure 3. Population averages from 1984 to 2021 and population projections from 2022 to 2041, men and women, by age group, Nunavik.



NOTE: The data presented from 2022 onward are projections and should be interpreted with caution. Projections are calculated based on certain premises to predict a population's evolution. And although those premises are rigorous, the actual population change can differ from what was predicted, and projections can be fallible over the long term, especially on a regional scale.

Source: Infocentre de santé publique du Québec. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: April 2023 version).

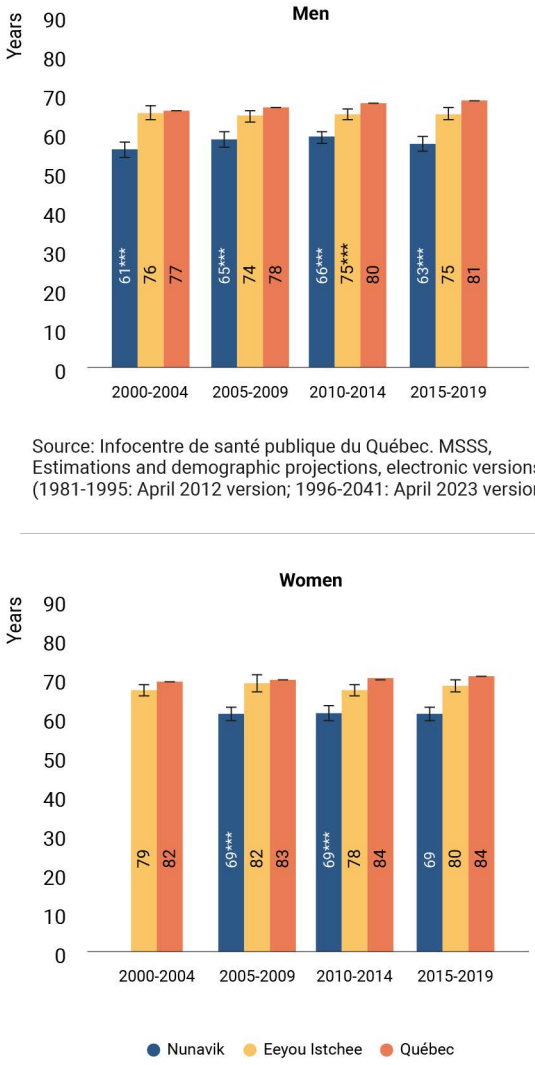
INDICATORS OF THE GENERAL HEALTH STATUS OF THE POPULATION

This section considers life expectancy, along with the rates and primary causes of mortality and hospitalization. It is worth noting that, in general, the number of death and hospitalizations tends to increase over time across all age groups, reflecting population growth. That is why mortality and hospitalization **rates**—which account for population size—are rather used to better understand trends over time. Again, crude rates allow to show the real situation in the population, while adjusted rates allow for fair comparisons between regions with different population age structure.

Life Expectancy

From 2000-2004 to 2010-2014, life expectancy for men in Nunavik rose by about 5 years, reaching 66 years. However, it declined in subsequent years, dropping to 63 years for the 2015-2019 period. Life expectancy of women, in turn, remained stable at 69 years throughout the period examined. Generally speaking, life expectancy continues to be significantly lower for the population of Nunavik than for that of Québec as a whole and that of Eeyou Istchee. Between 2015 and 2019, the average differences in life expectancy were 15 years for Québec as a whole and Nunavik and 13 years for Eeyou Istchee and Nunavik. No statistical differences were observed over time for either sex in Nunavik (Figure 4).

Figure 4. Life expectancy (years), men and women, Nunavik, Eeyou Istchee and Québec as a whole, 2000-2004, 2005-2009, 2010-2014 and 2015-2019.

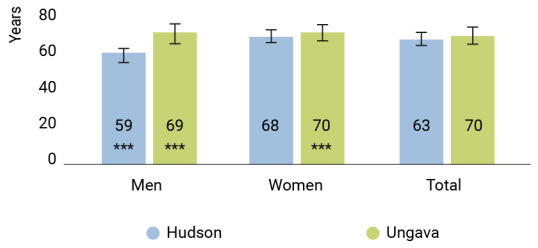


Source: Infocentre de santé publique du Québec. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: April 2023 version).

NOTE: The data presented from 2022 onward are projections and should be interpreted with caution. Projections are calculated based on certain premises to predict a population's evolution. And although those premises are rigorous, the actual population change can differ from what was predicted, and projections can be fallible over the long term, especially on a regional scale.

Figure 5 reveals that the life expectancy of residents of the Hudson coast is appears lower, by 7 years, than that of the population of the Ungava coast. An analysis by sex illustrates a difference in life expectancy between men living on the Hudson coast and men living on the Ungava coast.

Figure 5. Life expectancy (years), men, women and both sexes combined, Hudson and Ungava coasts, 2015-2019.



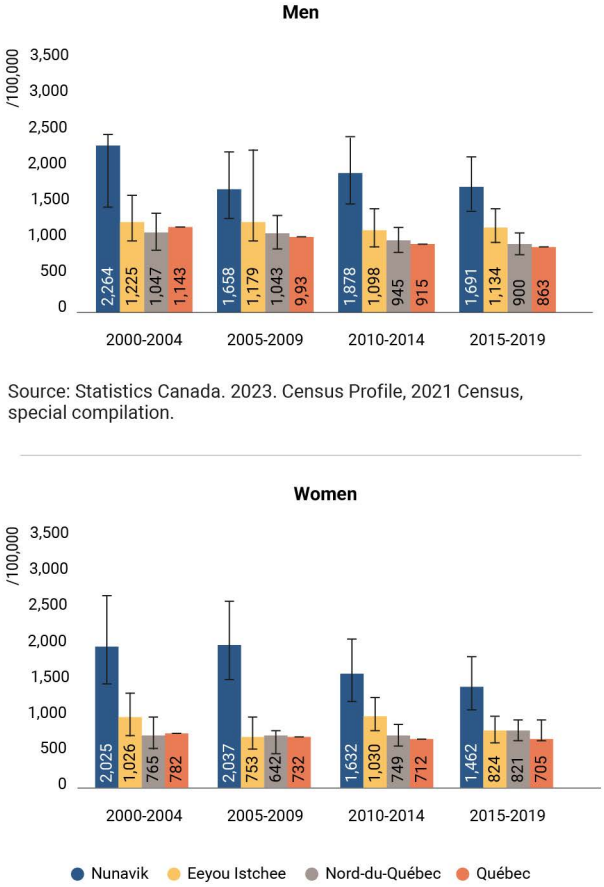
NOTE: ***Due to an insufficient number of observations regarding the 90+ age group in Nunavik, life expectancy calculations for people in this age group were imputed (i.e., assumed to be the same as those for people aged 90 years or more in Québec as a whole).

Source: Infocentre de santé publique du Québec. MSSS, Fichier des décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: April 2023 version). MSSS, Registre des naissance (register of births).

Rates and Primary Causes of Mortality in Nunavik

The mortality rates, all causes combined, for men and women in Nunavik remain around two times greater than those in other northern populations in the province, and the difference is even higher when compared to Québec as a whole (Figure 6). Figure 7, in turn, reveals that mortality rates for people aged 55 years or more significantly decreased from 2000-2004 to 2015-2019, while the 15-34 and 35-54 age groups show non-significant fluctuations in their mortality rates over the years.

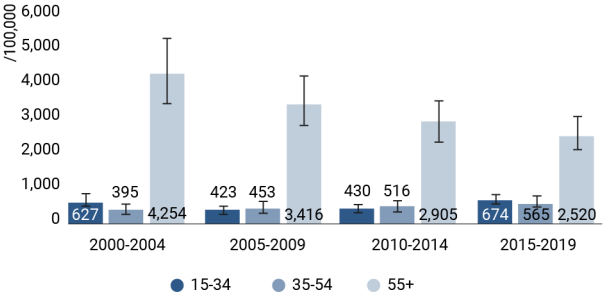
Figure 6. Adjusted mortality rates (/100,000) all causes combined, men and women, Nunavik, Eeyou Istchee, Nord-du-Québec and Québec as a whole, 2000-2004, 2005-2009, 2010-2014 and 2015-2019.



Source: Statistics Canada. 2023. Census Profile, 2021 Census, special compilation.

NOTE: Education data is based on a 25% sample from the Censuses. Combined with the nonresponse rate in the region, this increases the risk of bias; results should be interpreted with caution.

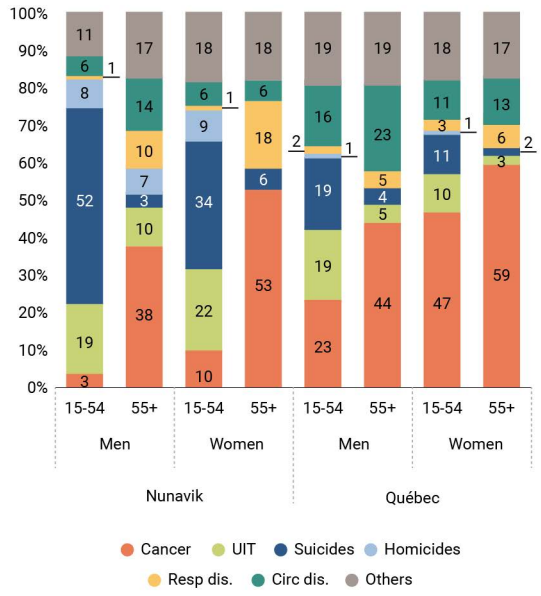
Figure 7. Crude mortality rates (/100,000), all causes combined, by age group, Nunavik, 2000-2004, 2005-2009, 2010-2014 and 2015-2019.



Source: Infocentre de santé publique. MSSS, Fichier des décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: April 2023 version).

As observed for Québec as a whole, causes of death in Nunavik differ depending on age. In Nunavik, intentional trauma (suicide and assault) and unintentional trauma are the primary causes of death among youth and adults aged 15 to 54. Among those aged 55 years or more, cancers, respiratory diseases and circulatory diseases are the most frequent causes of mortality, and this for both Nunavik and Québec as a whole. Moreover, the relative importance of these causes varies according to sex (Figure 8).

Figure 8. Breakdown (%) of the primary causes of death, men and women, 15 to 54 years and 55 years or more, Nunavik and Québec as a whole, 2015-2019.

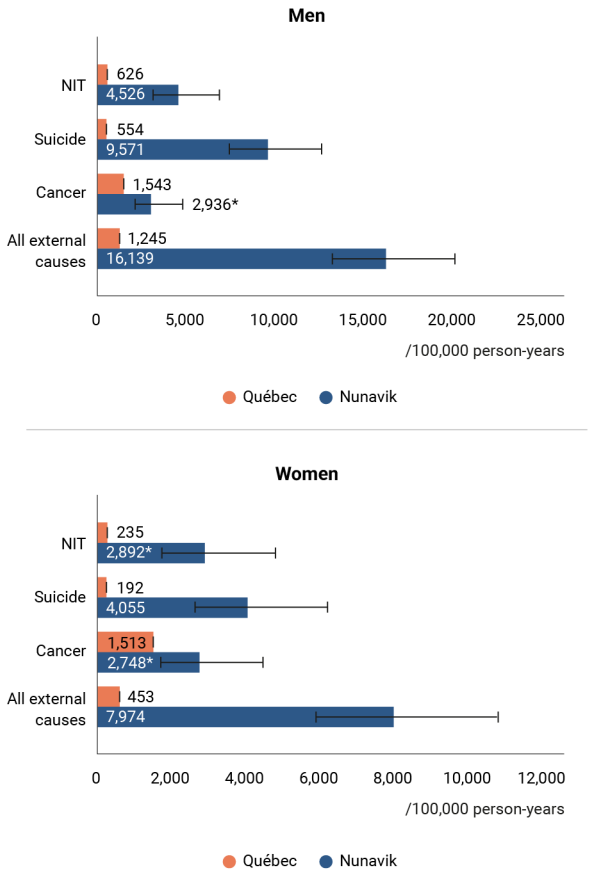


NOTE: Recorded causes of death include cancers of all types, unintentional trauma (UIT; e.g., injuries due to falls, fire, etc.), suicide, homicide, respiratory diseases, circulatory diseases and "others" (all other causes combined).

Source: Infocentre de santé publique. MSSS, Fichier des décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: April 2023 version).

Hence, as illustrated by the graphs in Figure 9, the category "All external causes" accounts for the majority of early deaths in Nunavik, and this for both men and women. Figure 9 shows the potential years of life lost (PYLL)[5] stratified by sex. The category «all external causes»[6] represent the majority of early deaths in Nunavik. The same applies when comparing the PYLL with regard to men and to women for both Nunavik and Québec as a whole. External causes, including suicide and unintentional trauma, which are more prevalent among adults aged 15 to 54, represent a greater loss of potential life years compared to cancers, which are more commonly diagnosed in individuals aged 55 years or more.

Figure 9. Adjusted rates for potential years of life lost (/100,000), men and women, 2015-2019.



NOTE: * Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution.

Source: Infocentre de santé publique. MSSS, Fichier de décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: April 2023 version).

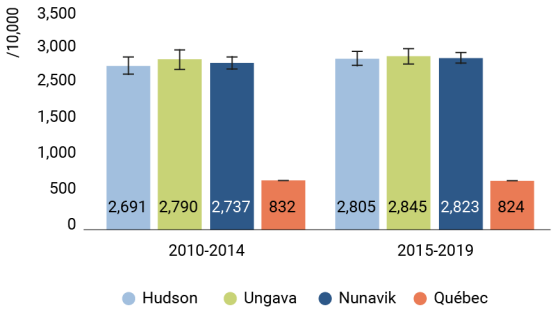
5 PYLL, a statistical indicator of early deaths, measures the number of years of life lost due to a death deemed to be "early", i.e., before a person has reached the age of 75. For example, a person who dies at 35 years of age is said to have lost 40 potential years of life (Bureau d'information et d'études en santé des populations [BIESP], Institut national de santé publique du Québec [INSPQ], 2020).

6 The term "external causes", in a context of death, refers to traumatic injuries resulting from external events, and includes all types of trauma (intentional and unintentional trauma).

Rates and Primary Causes of Hospitalization in Nunavik

Hospitalization rates among Nunavik residents are more than three times greater than they are for Québec as a whole (Figure 10). This is true for both coasts, and the discrepancies have remained stable over the last 5 years compared to the period between 2010 and 2014.

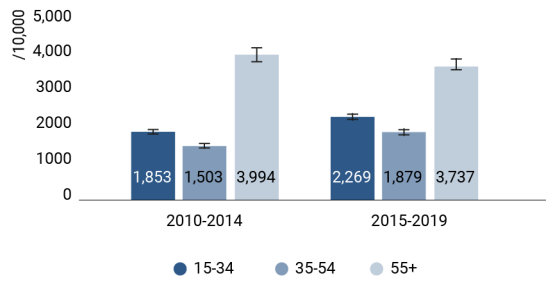
Figure 10. Adjusted hospitalization rates (/10,000), all causes combined, Nunavik, Hudson and Ungava coasts and Québec as a whole, 2010-2014 and 2015-2019.



Source: Infocentre de santé publique du Québec. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2051: January 2025 version).

From 2010-2014 to 2015-2019, the crude hospitalization rate decreased for the 55+ age group but increased for the 15-34 and 35-54 age groups (Figure 11).

Figure 11. Crude hospitalization rates (/10,000), all causes combined, by age group, Nunavik, 2010-2014 and 2015-2019.



Source: Infocentre de santé publique du Québec. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2051 January 2025 version).

Key Findings

1. The life expectancy of Nunavimmiut is 15 years less than that of persons in Québec as a whole and it remained relatively stable during the periods observed. As regards coast of residence, people living on the Ungava coast live about 7 years longer than people from the Hudson coast. Women, in turn, generally have a higher life expectancy than men.

2. Mortality in Nunavik remains higher than in Québec as a whole and in the province's other northern regions. The primary causes of mortality vary according to age, with trauma (intentional and unintentional) being the first cause of death among Nunavimmiut aged 15–54, and cancer heading the list for those aged 55 years or more.

3. Hospitalization rates rose from 2010–2014 to 2015–2019 for the 15–54 age group but declined for persons aged 55 years or more. Adjusted hospitalization rates in Nunavik remain around three times higher than those for Québec as a whole.

UNINTENTIONAL TRAUMA AND INTENTIONAL TRAUMA AMONG YOUTH AND ADULTS

A distinction is drawn between unintentional trauma and intentional trauma. Unintentional trauma refers to injuries resulting from accidents or involuntary actions (e.g., road incidents, falls, drowning). Intentional trauma results from deliberate actions and notably consists of suicide and interpersonal violence (e.g., homicide) (INSPQ, 2015b). While the distinction is clear on paper, it can be difficult to determine whether given events were the result of an intentional act or not. Moreover, both of these categories involve common risk factors, especially mental health issues and substance abuse (INSPQ, 2015a).

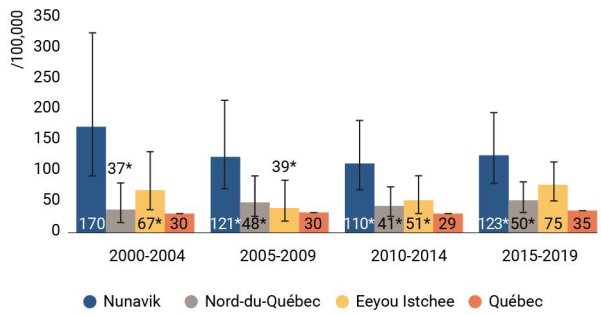
One of the reports in *Qanuilirpitaa?* 2017 considers unintentional trauma based on type of injuries, risk factors and medical care/treatment required (Beaulieu et al., 2020). Since the use of substances is an important risk factor in both intentional and unintentional trauma, another report (*Substance use*) is worth consulting (Bélanger et al., 2020).

Unintentional Trauma

Mortality

Mortality rates associated with unintentional trauma in Nunavik from 2015 to 2019 were over three times greater than those for Québec as a whole. Nunavik's mortality rates due to unintentional trauma also appear to be about two times higher than those for other northern populations in Québec, despite the differences not generally being statistically significant (Figure 12). Figure 13, in turn, reveals relatively stable mortality rates due to unintentional trauma for both sexes and **most impacted** age groups over the past years, but the high coefficients of variation make interpretation hazardous.

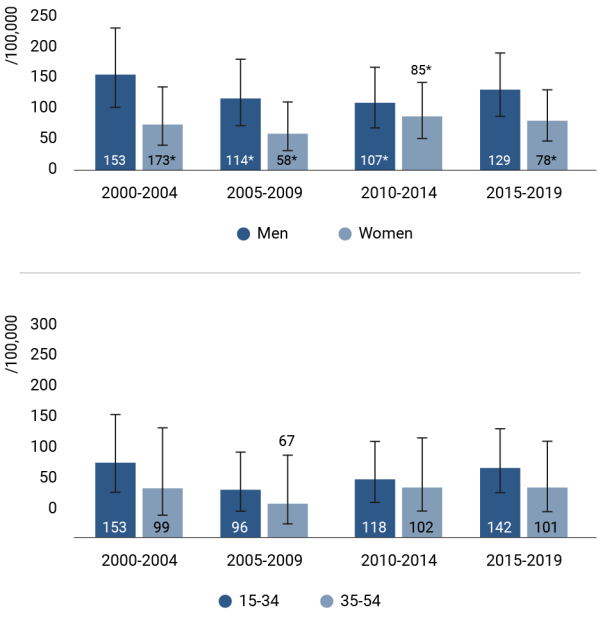
Figure 12. Adjusted mortality rates (/100,000) associated with unintentional trauma, Nunavik, Nord-du-Québec, Eeyou Istchee and Québec as a whole, 2000-2004, 2005-2009, 2010-2014 and 2015-2019 .



NOTE: *Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution.

Source: Infocentre de santé publique. MSSS, Registre de décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

Figure 13. Crude mortality rates (/100,000) associated with unintentional trauma, by sex and age group, Nunavik, 2000-2004, 2005-2009, 2010-2014 and 2015-2019.



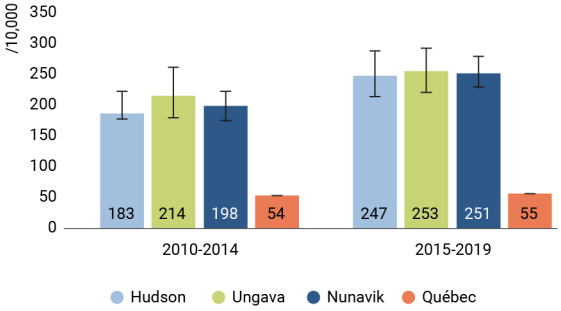
NOTE: The coefficients of variation for the available data on persons aged 55 years or more were too high to allow for their presentation.
* Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution.

Source: Infocentre de santé publique du Québec. MSSS, Registre des décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

Hospital Morbidity

Adjusted hospitalization rates associated with unintentional trauma grew significantly in Nunavik during the periods considered (Figure 14). Hospitalization rates due to unintentional trauma for both coasts as well as for Nunavik were three to four times higher than that for Québec as a whole, which has remained stable over the past 10 years.

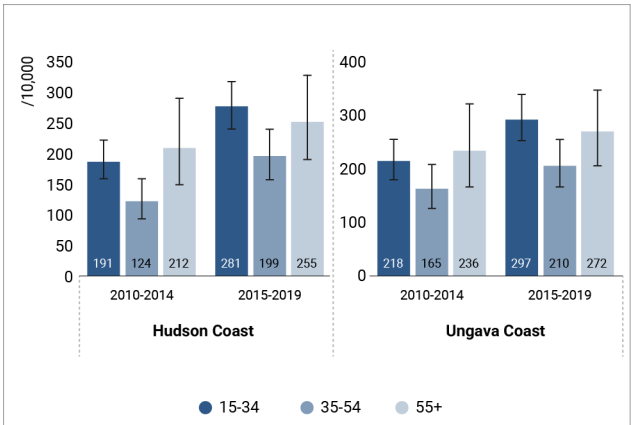
Figure 14. Adjusted hospitalization rates (/10,000) associated with unintentional trauma, Nunavik, Hudson and Ungava coasts and Québec as a whole, 2010-2014 and 2015-2019.



Source: Infocentre de santé publique du Québec. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

From 2010-2014 to 2015-2019, a significant increase in the crude hospitalization rates due to unintentional trauma was observed among people in the 15-34 age group, particularly on the Hudson coast (Figure 15).

Figure 15. Crude hospitalization rates (/10,000) associated with unintentional trauma, by age group, Hudson and Ungava coasts, 2010-2014 and 2015-2019

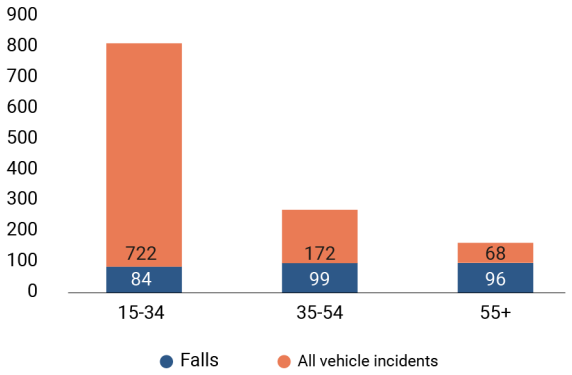


Source: Infocentre de santé publique du Québec. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2051: August 2024 version).

Two major causes of hospitalization associated with unintentional

trauma are injuries related to road and off-road vehicle incidents and injuries subsequent to falls. Injuries related to vehicle incidents include all injuries suffered by pedestrians, cyclists or drivers and passengers in a motor vehicle[7]. This category also includes injuries related to accidents on a public road or while using an off-road vehicle[8]. Injuries subsequent to falls refer to when a person falls involuntarily. As seen in Figure 16, hospitalizations related to both vehicle incidents and falls vary according to age. Accidents related to vehicle incidents are a frequent cause of hospitalization among younger adults (15-34 years) but diminish with age. As for falls, they proportionally become a more prevalent cause of hospitalization among persons aged 55 years or more, compared to vehicle incidents.

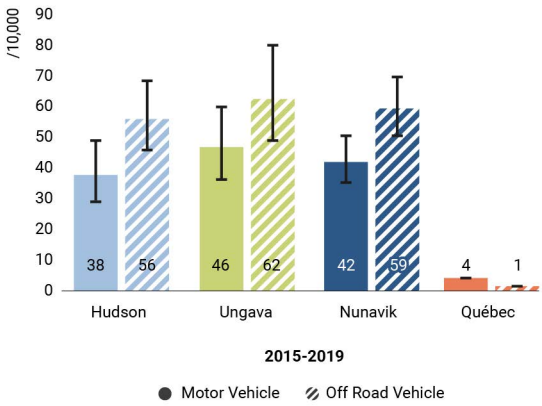
Figure 16. Total hospitalizations associated with unintentional trauma, by cause and age group, Nunavik, 2015-2019



Source: Infocentre de santé publique. MSSS, Banque de données MED-ÉCHO sur les séjours hospitaliers, version électronique. Institut canadien d'information sur la santé, Base de données sur les congés des patients, version électronique. MSSS, Estimations et projections démographiques, versions électroniques (1981-1995 : version d'avril 2012; 1996-2041 : version d'août 2023).

Injuries associated with motor vehicle or off-road vehicle incidents are one of the most frequent causes of hospitalization in Nunavik, for all age groups combined. Figure 17 illustrates the significantly greater hospitalization rates due to vehicle incidents in Nunavik than in Québec as a whole.

Figure 17. Adjusted hospitalization rates (/10,000) associated with unintentional trauma involving motor vehicle or off-road vehicle incidents, Nunavik, Hudson and Ungava coasts and Québec as a whole, 2015-2019



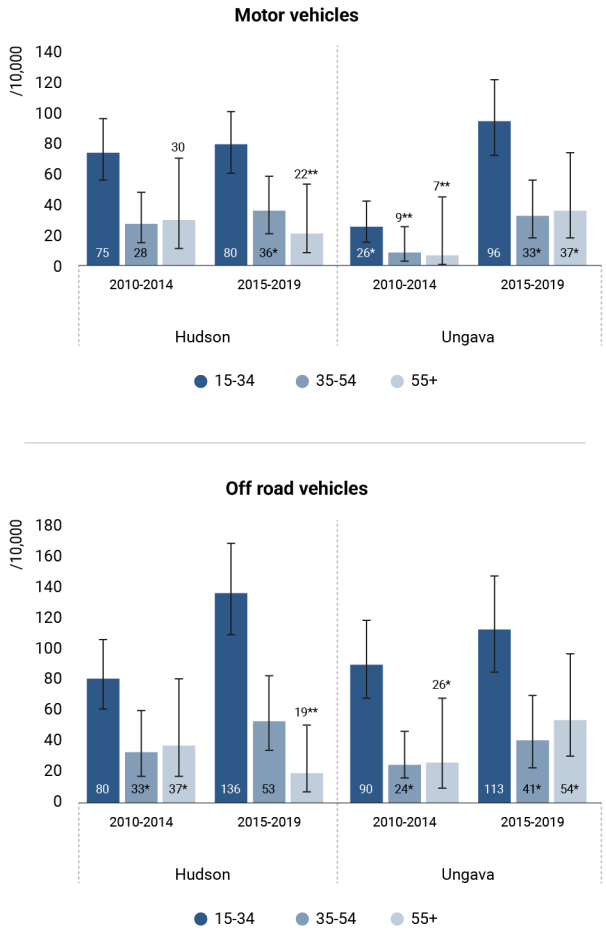
Source: Infocentre de santé publique MSSS. MED-ÉCHO databank on hospital stays, electronic version. Discharge Abstract Canadian Institute for Health Information, Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2051: January 2025 version).

A closer look at the age groups reveals that hospitalization rates due to injuries associated with motor vehicle and off-road vehicle incidents mainly concern young adults (15-34 years), and this irrespective of the type of vehicle and home coast (Figure 18). Figure 18 shows that hospitalization rates for injuries linked to motor vehicles have significantly increased from 2010-2014 to 2015-2019 among the 15-34 age group on the Ungava coast, and that hospitalization rates for injuries linked to off-road vehicles have increased for the same age group and period on the Hudson coast. When examining these data, it is important to consider that off-road vehicles are much more common in Nunavik than in most other regions of Québec, and in many instances, replace motor vehicles as a means of daily transportation.

7 Motor vehicles are motorized vehicles - such as a car - designed or outfitted to travel along roads and highways (Canada Revenue Agency, 2005)

8 Off-road vehicles are motor vehicles designed to be used off-road (i.e., not on designated roads or highways). This category of vehicles includes snowmobiles and all-terrain vehicles (ATV) such as four-wheelers (Canada Revenue Agency, 2005).

Figure 18. Crude hospitalization rates (/10,000) associated with unintentional trauma involving motor vehicles or off-road vehicles, by age group, Hudson and Ungava coasts, 2010-2014 and 2015-2019.

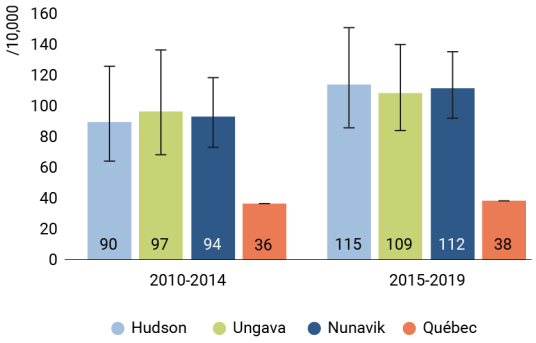


NOTE: * Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution. ** Coefficient of variation is greater than 33.33%. The data are provided solely for information purposes.

Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

Injuries linked to falls are also a frequent cause of hospitalization in Nunavik. The region notably has hospitalization rates nearly three times higher than those for Québec as a whole during 2015-2019 (Figure 19). The discrepancies between Nunavik and Québec as a whole increased from 2010-2014 to 2015-2019.

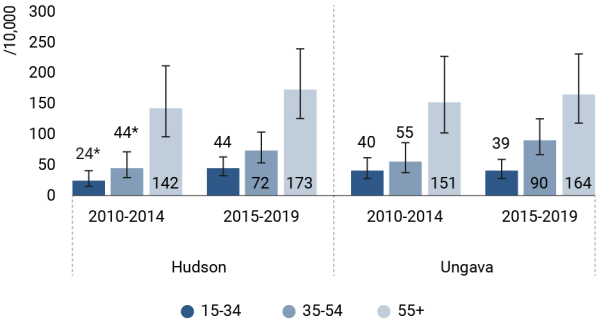
Figure 19. Adjusted hospitalization rates (/10,000) associated with unintentional trauma subsequent to a fall, Nunavik, Hudson and Ungava coasts and Québec as a whole, 2010-2014 and 2015-2019.



Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2051: January 2025 version).

Hospitalization rates vary according to age, with rates for persons aged 55 years or more significantly higher than those in lower age groups, and this for both coasts. Hospitalizations due to falls seem to show an upward trend over time but without constituting a significant difference.

Figure 20. Crude hospitalization rates (/10,000) associated with unintentional trauma subsequent to a fall, by age group, Hudson and Ungava coasts, 2010-2014 and 2015-2019.



NOTE: * Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution.

Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

Intentional Trauma

This section addresses sensitive topics (suicide and assault). Support resources are available for persons with suicidal thoughts and their loved ones; we urge anyone who feels the need to please reach out for help[9].

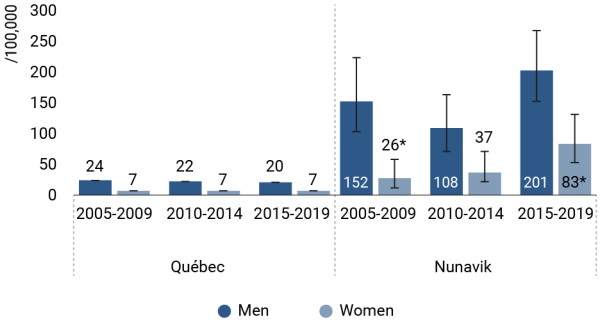
As previously mentioned, intentional trauma includes suicidal behaviour and interpersonal violence. This profile considers mortalities due to suicide[10] and homicide, as well as hospitalizations subsequent to suicide attempts and assault. *The Mental Health and Wellness* report in *Qanuilirpitaa? 2017* contains additional information on mental health in the region (Muckle et al., 2020). *The Interpersonal violence and community safety report* in *Qanuilirpitaa? 2017* notably provides data on physical violence experienced during childhood, as an adult and when elderly, according to age, sex and other sociodemographic indicators (Muckle et al., 2021).

Suicidal Behavior

Mortality rates by suicide in Nunavik are particularly concerning, especially given that they have been continuously higher than those for Québec as a whole for decades. In 2015-2019, the mortality rates by suicide for men and women were many times higher in Nunavik that in Québec as a whole (17 and 21 times respectively) (Figure 21). For both regions examined, men and younger adults have particularly high suicide-related mortality rates in comparison to women and the elderly. Between 2005 and 2014, Nunavik had an average of 13 deaths by suicide per year, with 11 of those being men and 2, women. The period between 2015 and 2019 saw an average of 25 such deaths per year, 18 of them men and 7 of them women (data not shown).

Mortality rates over time remained significantly higher for men compared to women, and this for Nunavik as well as Québec as a whole (Figure 21). Throughout the entire period observed, mortality rates varied greatly from one year to the next in Nunavik; this being said, no statistically significant variation is observed between those years.

Figure 21. Adjusted mortality rates (/100,000) by suicide, men and women, Nunavik and Québec as a whole, 2005-2009, 2010-2014 and 2015-2019.

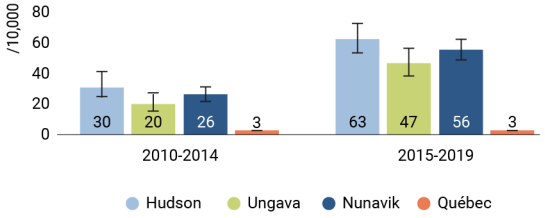


NOTE: *Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution.

Source: Infocentre de santé publique. MSSS, Fichier des décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2051: January 2025 version).

Hospitalization rates linked to suicide attempts have grown continuously over the past several years in Nunavik, such that discrepancies with the population of Québec as a whole have become even more significant (Figure 22). It appears that both coasts are impacted by this increase in hospitalizations.

Figure 22. Adjusted hospitalization rates (/10,000) associated with a suicide attempt, Nunavik, Hudson and Ungava coasts and Québec as a whole, 2010-2014 and 2015-2019.



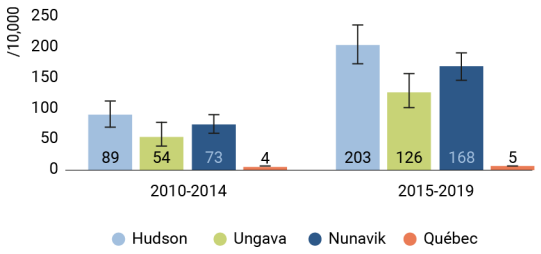
Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2051: January 2025 version).

Figure 23 reveals that hospitalization rates subsequent to a suicide attempt among adults under 35 years of age are particularly high, with the Hudson coast having higher rates than the Ungava coast. Between 2010-2014 and 2015-2019, rates on both coasts more than doubled.

9 Kamaqtsiaqtut Help Line (1 800 265-3333), First Nations and Inuit Hope for Wellness Help line (1 855 242-3310) and Kids Help Phone (1 800 668-6868 or text message 686868), www.kidshelpphone.ca.

10 Deaths by suicide are defined with specific codes established by the International Classification of Diseases (ICD) and confirmed by the Coroner's Office.

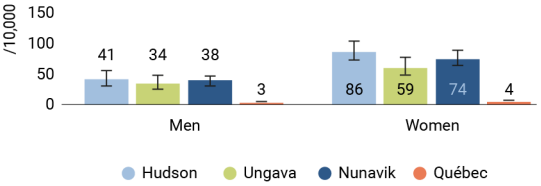
Figure 23. Crude hospitalization rates (/10,000) associated with a suicide attempt, 15 to 34 years of age, Nunavik, Hudson and Ungava coasts and Québec as a whole, 2010-2014 and 2015-2019.



Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

Also, despite higher mortality rates related to suicide among men, hospitalization rates associated with a suicide attempt are two times higher among women (Figure 24). Between 2015 and 2019, hospitalization rates related to a suicide attempt in Nunavik by men were 12 times greater than in Québec as a whole, and 18 times greater for women (Figure 24). Between 2015 and 2019, Nunavik had an average of 102 hospitalizations related to a suicide attempt per year, with an average of 31 of these involving men and 70 involving women (data not shown).

Figure 24. Adjusted hospitalization rates (/10,000) associated with a suicide attempt, men and women, Nunavik, Hudson and Ungava coasts and Québec as a whole, 2015-2019.

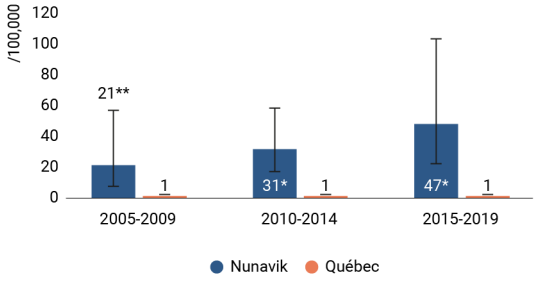


Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2051: January 2025 version).

Assault and Homicides

There has been an upward trend in mortality rates due to homicide in Nunavik since 2005. In Québec as a whole, these rates have remained stable over the same period and have been significantly lower than for Nunavik throughout the overall period observed (Figure 25).

Figure 25. Adjusted mortality rates (/100,000) due to homicide, Nunavik and Québec as a whole , 2005-2009, 2010-2014 and 2015-2019.

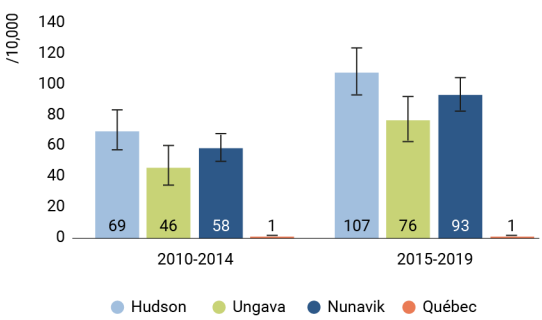


NOTE: *Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution. ** Coefficient of variation is greater than 33.33%. The data are provided solely for information purposes.

Source: Infocentre de santé publique. MSSS, Fichier des décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2051: January 2025 version)

As for hospitalization rates associated with assault, these increased significantly in Nunavik, compared to Québec as a whole, where they were much lower and remained stable (Figure 26).

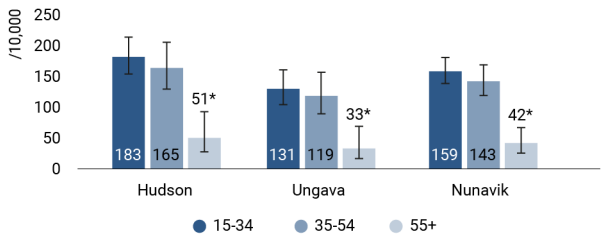
Figure 26. Adjusted hospitalization rates (/10,000) associated with assault, Nunavik, Hudson and Ungava coasts and Québec as a whole, 2010-2014 and 2015-2019.



Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2051: January 2025).

As illustrated in Figure 27, hospitalization rates associated with assault are significantly lower among adults aged 55 years or more compared to the other two age groups, which have similar hospitalization rates.

Figure 27. Crude hospitalization rates (/10,000) associated with assault, by age group, Nunavik, Hudson and Ungava coasts, 2015-2019.



NOTE: *Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution.

Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

Key Findings

Unintentional trauma

1. Mortality rates associated with unintentional trauma in Nunavik in 2015-2019 were over three times greater than in Québec as a whole, and about twice as high as in other northern regions of the province.

2. Hospitalization rates due to unintentional trauma in Nunavik were three to four times higher than for Québec as a whole, and increased significantly over time, especially among young adults aged 15-34, notably on the Hudson coast.

3. The two major causes of hospitalization related to unintentional trauma are vehicle incidents (both motor and off-road vehicles) predominantly involving young adults, and falls, more common among older adults.

Intentional Trauma

1. Mortality rates by suicide in Nunavik are 17 to 21 times higher than in Québec as a whole, for men and women, respectively. From 2015 to 2019, the mortality rate among men in Nunavik was more than twice that for women.

2. Hospitalization rates following suicide attempts have continuously increased over recent years in Nunavik, affecting both the Hudson and Ungava coasts.

3. Mortality and hospitalization rates linked to assault are significantly higher in Nunavik than in Québec as a whole.

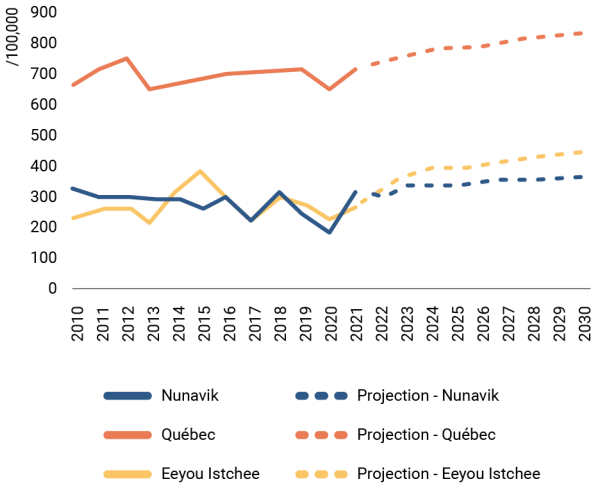
4. Hospitalization rates linked to assault are significantly lower among adults aged 55 years or more over compared to people in younger age groups.

HEALTH ISSUES AMONG AN AGING POPULATION

Cancer

The latest incidence data can help develop projections over time by providing information on the number of new cases of a specific condition within a defined period and in a defined population. Figure 28 reveals that cancer incidence rates in Nunavik remained roughly the same over the past 10 years but are projected to increase slightly in the near future. When looking at the adjusted incidence rates, Nunavik appears to have a slightly higher rate than the whole of Québec or Eeyou Istchee, with similar future trend (figure 29).

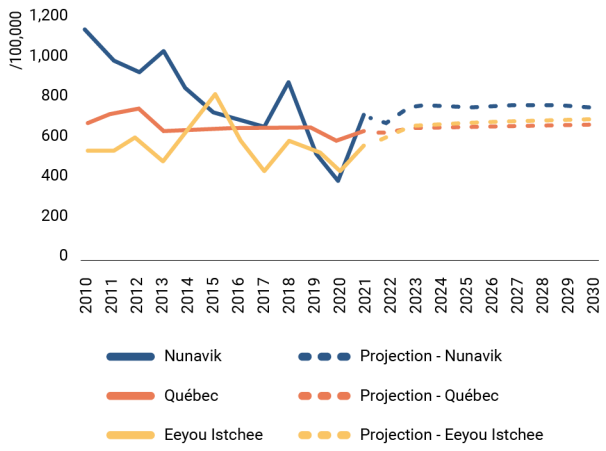
Figure 28. Crude cancer incidence rates and projections (/100,000), Nunavik, Eeyou Istchee and Québec as a whole, 2010 to 2030.



NOTE: 2011 and 2012 are considered transition years, i.e., periods during which information gleaned from pathology reports was added to the Québec cancer registry. This could plausibly cause an overestimation of the rates for the years in question.

Source: Infocentre de santé publique. MSSS, Québec cancer registry. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

Figure 29. Adjusted cancer incidence rates and projections (/100,000), Nunavik, Eeyou Istchee and Québec as a whole, 2010 to 2030.

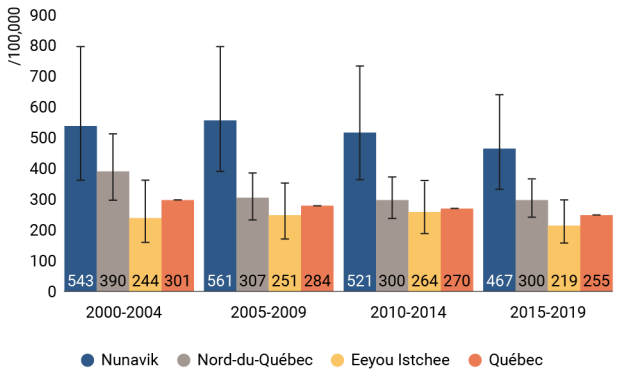


NOTE: 2011 and 2012 are considered transition years, i.e., periods during which information from pathology reports was added to the Québec cancer registry. This could plausibly cause an overestimation of the rates for the years in question.

Source: Infocentre de santé publique. MSSS, Québec cancer registry. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

While cancer is still the main cause of death in the Nunavik population aged 55 years and over, global mortality rates associated with cancer over the period in question appear to display a certain downward tendency (non-significant) (Figure 30). This being said, mortality rates associated with cancer are still nearly two times higher in Nunavik than in Québec as a whole.

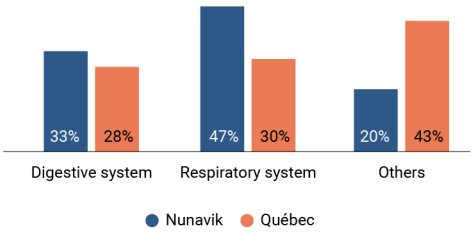
Figure 30. Adjusted mortality rates (/100,000) associated with cancer, Nunavik, Nord-du-Québec, Eeyou Istchee and Québec as a whole, 2000-2004, 2005-2009, 2010-2014 and 2015-2019.



Source: Infocentre de santé publique. MSSS, Fichier des décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: April 2023 version).

Cancers of the respiratory system are responsible for the greatest number of deaths, followed by cancers of the digestive system. These two types of cancer are responsible for over three-quarters (80%) of the deaths from cancer in Nunavik, but only 58% of the deaths in Québec as a whole (Figure 31). It should also be noted that the number of deaths due to other cancers (e.g., breast cancer or cervical cancer) are too small to be presented on their own and are categorized as "others" in Figure 31.

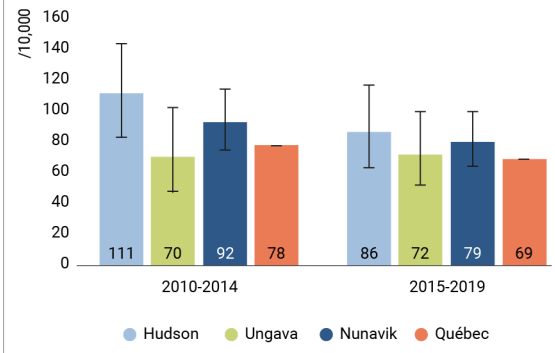
Figure 31. Proportion (%) of deaths from cancer according to site, Nunavik and Québec as a whole, 2015-2019.



Source: Infocentre de santé publique. MSSS, Fichier des décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: April 2023 version).

Hospitalization rates due to cancer are higher in Nunavik than in Québec as a whole, but the difference is non-significant (Figure 32).

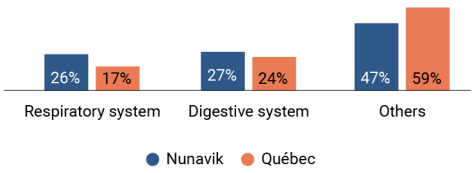
Figure 32. Adjusted hospitalization rates (/10,000) for cancer, Nunavik, Hudson and Ungava coasts and Québec as a whole, 2010-2014 and 2015-2019.



Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

As regards cancer sites, cancers of the respiratory system and cancers of the digestive system account for 53% of all cancer-related hospitalizations in Nunavik. The other sites (breast cancer, prostate cancer or cancer of the female reproductive organs) are too few (with minimum rates) to be presented separately.

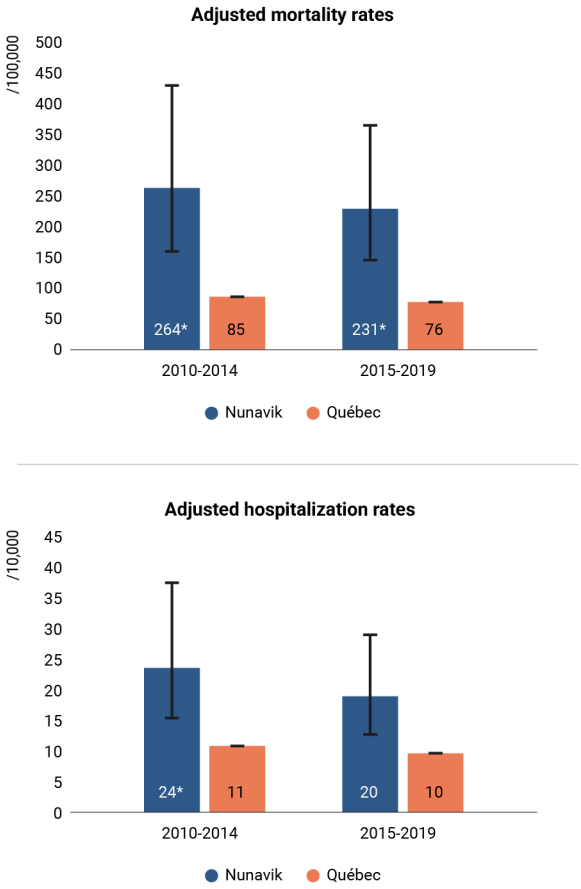
Figure 33. Proportion (%) of causes of hospitalization due to cancer according to site, Nunavik and Québec as a whole, 2015-2019.



Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

Mortality and hospitalization rates for cancers of the respiratory system and cancers of the digestive system are greater in Nunavik than in Québec as a whole. Figures 34 and 35 reveal that for the period observed, mortality and hospitalization rates appear to have stayed the same for both types of cancer.

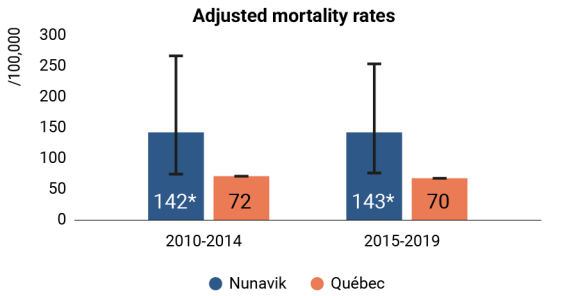
Figure 34. Adjusted mortality (/100,000) and hospitalization rates (/10,000), cancer of the respiratory system, Nunavik and Québec as a whole, 2010-2014 and 2015-2019.

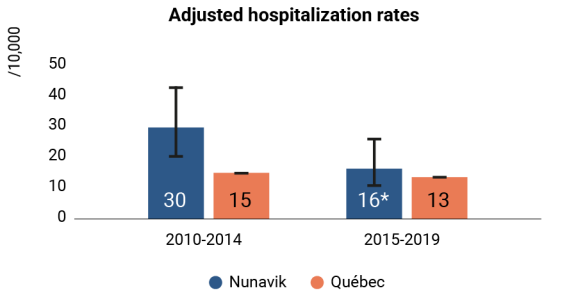


NOTE: *Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution.

Source: Infocentre de santé publique. MSSS, Fichier des décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: April 2023 version).

Figure 35. Adjusted mortality (/100,000) and hospitalization rates (/10,000), cancers of the digestive system, Nunavik and Québec as a whole, 2010-2014 and 2015-2019.





NOTE: *Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution.

Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

Respiratory Diseases

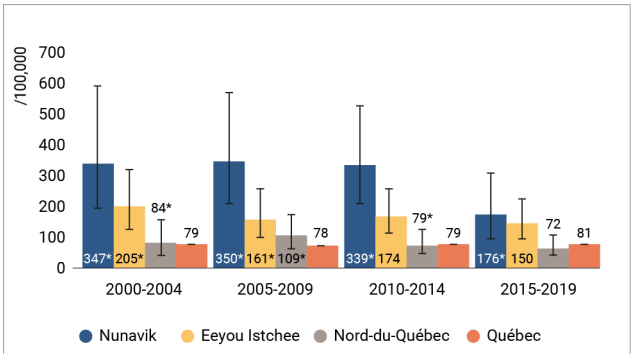
Disorders that fall in the category of "respiratory diseases" include those involving the upper respiratory tract (such as sinusitis and rhinosinusitis) as well as influenza, pneumonia and chronic obstructive pulmonary disease[11] (Statistics Canada, 2019). Hospitalizations linked to tuberculosis were also considered, given the magnitude of the problem in the region.

For further details on the respiratory health of Nunavimmiut, it is recommended to read the *Respiratory health report* in *Qanuilirpitaa? 2017*, which considers elements such as asthma, chronic obstructive pulmonary disease, symptoms of respiratory distress (chronic cough, chronic sputum, chronic bronchitis, wheezing, dyspnea) as well as a person's prior history as per their health record (active TB disease and hospitalization during early childhood due to a respiratory infection; Robert et al., 2020). The *Substance use* report, including information on smoking habits, can also be consulted given that tobacco use is a major risk factor for respiratory disease (Bélanger et al., 2020).

11 Chronic obstructive pulmonary disease (COPD) is characterized by shortness of breath, a chronic cough and an exacerbated production of sputum (Public Health Agency of Canada, 2004)..

It bears remembering that respiratory diseases are the second most frequent cause of mortality among persons aged 55 years or more (Figure 8). The situation, however, seems to be improving, with Figure 36 revealing that mortality rates related to respiratory diseases used to be significantly higher in Nunavik in comparison to other northern regions and Québec as a whole. In fact, the mortality rates presented for 2015-2019 are much closer to the ones historically observed in Eeyou Istchee and Nord-du-Québec.

Figure 36. Adjusted mortality rates (/100,000) associated with respiratory diseases, Nunavik, Nord-du-Québec, Eeyou Istchee and Québec as a whole, 2000-2004, 2005-2009, 2010-2014 and 2015-2019.

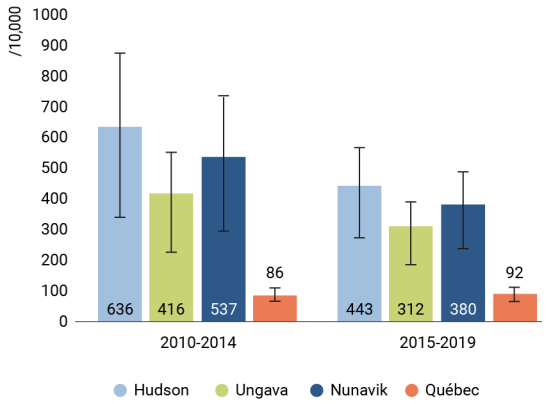


NOTE: *Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution.

Source: Infocentre de santé publique. MSSS, Fichier des décès (death register), electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: April 2023 version).

Similarly, hospitalization rates associated with respiratory diseases show a downward trend on both coasts of Nunavik between 2010-2014 and 2015-2019. However, both coasts continue to have significantly higher hospitalization rates than the ones observed for Québec as a whole (Figure 37).

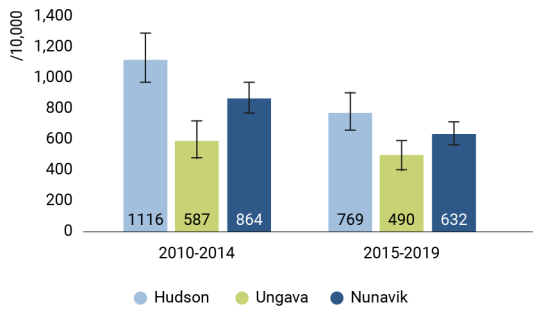
Figure 37. Adjusted hospitalization rates (/10,000) for respiratory diseases, Nunavik, Hudson and Ungava coasts and Québec as a whole, 2010-2014 and 2015-2019.



Sources: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version.
Canadian Institute for Health Information, Discharge Abstract Database, electronic version.
MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2051: January 2025 version).

The hospitalization rate among persons aged 55 or more on the Hudson coast decreased significantly between 2010–2014 and 2015–2019, leading to the decrease observed in the regional rate. The rate on the Ungava coast remained relatively stable over the same period (Figure 38).

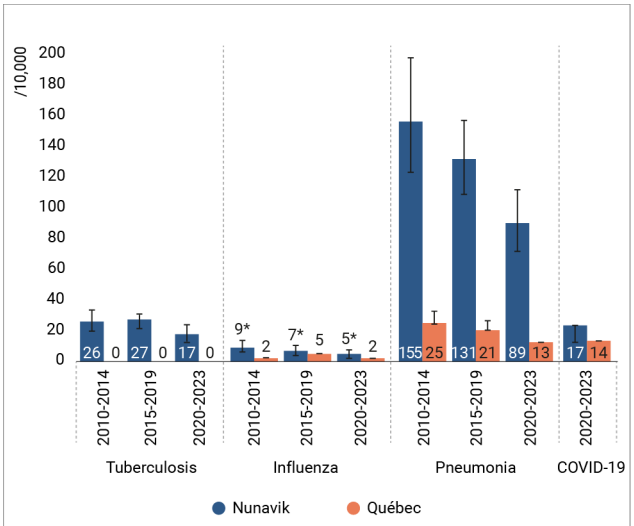
Figure 38. Crude hospitalization rates (/10,000) associated with respiratory diseases, 55 years of age or more, Nunavik, Hudson and Ungava coasts, 2010-2014 and 2015-2019.



Sources: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version.
Canadian Institute for Health Information, Discharge Abstract Database, electronic version.
MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

As regards respiratory infectious diseases, Figure 39 illustrates that hospitalization rates due to tuberculosis, influenza and pneumonia were relatively similar between 2010-2014 and 2015-2019 but dropped in 2020-2023. This period (2020-2023), exceptionally presented as part of this report, is characterized by the onset of COVID-19-related hospitalizations; hospitalization rates due to COVID-19 for this 4-year period were similar for Nunavik and Québec as a whole.

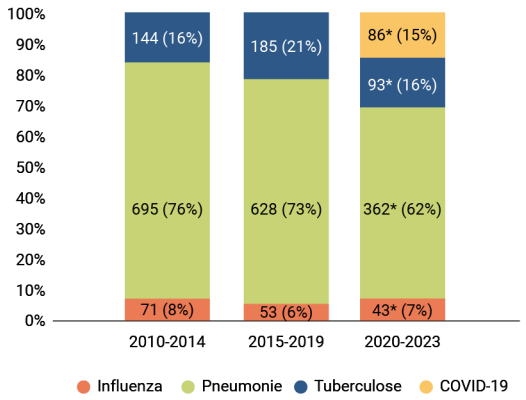
Figure 39. Adjusted hospitalization rates (/10,000) for targeted respiratory infections, Nunavik and Québec as a whole, 2010-2014, 2015-2019 and 2020-2023.



Sources: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version.
Canadian Institute for Health Information, Discharge Abstract Database, electronic version.
MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

In terms of numbers, pneumonia accounted for three times more hospitalizations than tuberculosis and influenza combined during 2010-2014 and 2015-2019 (Figure 40). Figure 40 reveals that COVID-19 hospitalizations, in 2020-2023, accounted for a significant share of all hospitalizations related to the four main infectious diseases examined.

Figure 40. Total number and proportion of hospitalizations (%) linked to the targeted respiratory infections, Nunavik, 2010-2014, 2015-2019 and 2020-2023.



* Total numbers for 2020–2023 cover a 4-year period, whereas the other two periods span 5 years each. Interpret with caution.

Sources: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version.
Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

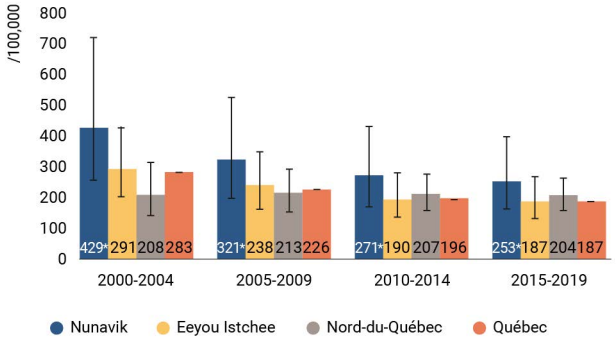
Circulatory Diseases

Circulatory diseases include various diseases involving the heart and blood vessels, among them hypertensive diseases, cerebrovascular diseases and ischemic heart diseases (e.g., angina and myocardial infarction).

For further details on the cardiac and circulatory health of Nunavimmiut, it is recommended to read the *Cardiometabolic Health report* in *Qanuilirpitaa? 2017*, which presents information on ischemic heart diseases, cerebrovascular diseases, cardiometabolic risk factors and other metabolic diseases (Allaire et al., 2021).

Much like the mortality rates associated with respiratory diseases, those associated with circulatory diseases present a non-significant downward trend over time. However, the discrepancies between Nunavik, other northern regions and Québec as a whole were not significantly different across all of the periods observed (Figure 41).

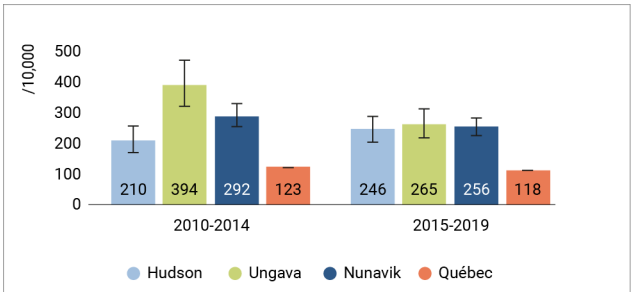
Figure 41. Adjusted mortality rates (/100,000) associated with circulatory diseases, Nunavik, Nord-du-Québec, Eeyou Istchee and Québec as a whole, 2000-2004, 2005-2009, 2010-2014 and 2015-2019.



Sources: Infocentre de santé publique.
MSSS, Fichier des décès (death register), electronic versions
MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: April 2023 version).

Hospitalization rates associated with circulatory diseases decreased significantly on the Ungava coast between 2010–2014 and 2015–2019, catching up with the Hudson coast's rates (Figure 42). However, the hospitalization rate in Nunavik is twice that of Quebec.

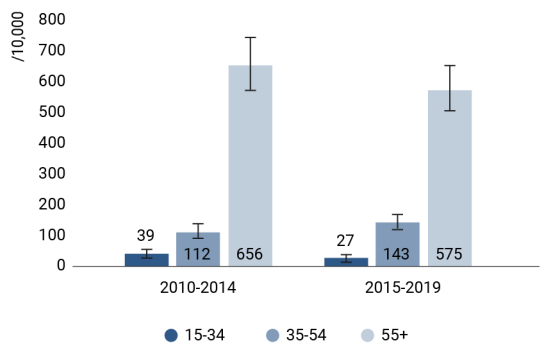
Figure 42. Adjusted hospitalization rates (/10,000) for circulatory diseases, Nunavik, Hudson and Ungava coasts and Québec as a whole, 2010-2014 and 2015-2019.



Sources: Infocentre de santé publique.
MSSS, MED-ÉCHO databank on hospital stays, electronic version.
Canadian Institute for Health Information, Discharge Abstract Database, electronic version.
MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

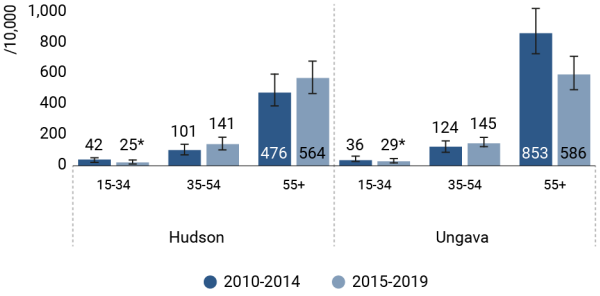
As with respiratory diseases, persons in older age groups are more likely to be hospitalized for cardiovascular diseases. In both age groups, the change in hospitalization rates over time at the regional level is non-significant. (Figure 43). However, trends for persons aged 55 years or more differed between the coasts, notably due to a significant decrease on the Ungava coast (Figure 44).

Figure 43. Crude hospitalization rates (/10,000) associated with circulatory diseases, by age group, Nunavik, 2010-2014 and 2015-2019.



Sources: Infocentre de santé publique.
MSSS, MED-ÉCHO databank on hospital stays, electronic version.
Canadian Institute for Health Information, Discharge Abstract Database, electronic version.
MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

Figure 44. Crude hospitalization rates (/10,000) associated with circulatory diseases, by age group, Hudson and Ungava coasts, 2010-2014 and 2015-2019.



NOTE: *Coefficient of variation is greater than 16.66% and inferior or equal to 33.33%. Interpret with caution.

Source: Infocentre de santé publique. MSSS, MED-ÉCHO databank on hospital stays, electronic version. Canadian Institute for Health Information, Discharge Abstract Database, electronic version. MSSS, Estimations and demographic projections, electronic versions (1981-1995: April 2012 version; 1996-2041: August 2023 version).

Key Findings

As the proportion of elderly people grows in Nunavik, it will be important to monitor the frequency and burden of chronic diseases in the coming years, particularly cancer, respiratory diseases and circulatory diseases.

Cancer:

1. Cancers of the respiratory and digestive systems account for the majority of cancer-related deaths (about 80%) and hospitalizations (about 53%) in Nunavik.

2. Mortality rates associated with cancers in Nunavik are still close to double those observed in Québec as a whole.

3. Hospitalization rates for cancers in Nunavik are decreasing, approaching the rates for Québec as a whole.

4. Hospitalization rates due to cancer are similar for the respective populations of both coasts.

Respiratory Diseases:

1. Mortality rates associated with respiratory diseases are decreasing and approaching the ones for Québec as a whole, but hospitalization rates associated with the same diseases continue to be higher in Nunavik.

2. Hospitalization rates linked to tuberculosis appear to have remained steady for the period observed, and pneumonia continues to be the respiratory infection responsible for the greatest number of hospitalizations in Nunavik.

Circulatory Diseases:

1. Mortality rates associated with circulatory diseases in Nunavik show a downward, though non-significant, trend.

2. Hospitalization rates for circulatory diseases remain steady in the region, although the discrepancy with Québec as a whole is still significant.

CONCLUSION

This profile aims to present hospital morbidity and mortality indicators, along with selected demographic data for the general population of Nunavik, focusing on Nunavimmiut aged 15 years or more. Although Nunavik's population is young, its rapid growth suggests that the adult population will reach 10,000 within the next ten years. Such growth will inevitably impact the health profile of the population and bring about an increased demand for adapted health services.

It bears reiterating that the changes made to the reporting criteria for hospitalizations at the Ungava Tulattavik Health Centre in 2012 may have brought about an increase in hospitalization rates for the population of the Ungava coast. These modifications most likely had a greater impact on hospitalizations associated with unintentional trauma, as these more often result in hospitalization stays of less than 24 hours.

REVIEW OF RESULTS

While the life expectancy of Nunavik's men has varied, that of women has remained stable over the past few decades. For the 2015-2019 period, the life expectancy of the Nunavik population (at 63 years for men and 69 years for women) was around 15 years less than that for the population of Québec as a whole.

Mortality due to all causes appears to be decreasing in the region but is still around twice that of Québec as a whole. However, hospitalizations have experienced a marked increase For the 15-34 and 35-54 age groups. While this rise may be partly explained by changes to hospitalization reporting criteria at the Ungava Tulattavik Health Centre during the period considered, it nonetheless remains an important factor to consider in the ongoing development of health services for a growing and relatively young population.

The most frequent causes of mortality and hospital morbidity among persons aged 15 to 54 are associated with unintentional and intentional trauma. Mortality rates from unintentional trauma in Nunavik are relatively stable but they remain significantly higher compared to those in other northern regions of Québec. Hospitalizations due to unintentional trauma appear to have risen, although this increase is also not statistically significant. The primary causes of unintentional trauma vary by age group: off-road vehicle and motor vehicle incidents are the main causes for the 15-54 age group, while falls are the leading cause among persons aged 55 years or more.

As for intentional trauma, hospitalization rates associated with suicide attempts and assaults significantly increased among Nunavik's population during the period examined. Mortality rates from suicide and homicide are also much higher in Nunavik than in Québec as a whole. The mortality rate for men is twice that of women, while hospitalization rates following suicide attempts are twice as high for women as for men.

The proportion of seniors in Nunavik is growing, which is likely to be accompanied by a rise in chronic diseases, notably cancers, respiratory diseases and circulatory diseases, in the future. The most frequently encountered cancers in Nunavik are cancers of the respiratory and digestive systems. Unlike Québec as a whole, breast and prostate cancers remain rare in the region. Despite decreasing hospitalization rates due to cancer, Nunavik continues to have higher cancer mortality rates than other Québec regions, primarily due to the predominance of cancers with low survival rates (cancers of the respiratory and digestive systems) in Nunavik. Additionally, the slightly higher adjusted cancer incidence is consistent with Nunavik's high tobacco usage rate (Bélanger et al., 2020).

Hospitalization rates for respiratory diseases in the region are decreasing but rates remain stable for tuberculosis, a disease responsible for a high number of hospitalizations among Nunavimmiut. Pneumonia notably accounts for the majority of hospitalizations associated with respiratory infections, representing about three times more cases than tuberculosis and influenza combined, a statistic that highlights pneumonia's significant impact on the population's respiratory health. Meanwhile, hospitalizations for circulatory diseases are decreasing but remain higher than for Québec as a whole. Despite these trends, the mortality rate for respiratory diseases remains high compared to that for Québec as a whole, whereas the mortality rate for circulatory diseases appears similar to that of Québec as a whole.

The period between 2020 and 2023 saw the arrival of COVID-19, a new respiratory infection that significantly affected hospitalization rates. Although COVID-19 hospitalizations represented a notable percentage of all hospital stays during this period, pneumonia remains the dominant cause of respiratory infection-related hospitalizations overall.

IMPLICATIONS FOR SERVICE DELIVERY

Prevention Efforts are Needed

The health profile of Nunavik's adult population highlights specific needs that should be addressed to not only improve health outcomes, but also to bring about a drop in the significant mortality and morbidity disparities between Nunavik and Québec as a whole.

Unintentional and intentional trauma among Nunavik youth and younger adults are the cause of significant premature mortality. This reality underlines the need to offer a continuum of services aimed at both prevention and assistance in order to reduce the incidence of injuries and their consequences. In addition to enhanced injury prevention initiatives due to both motor vehicles and off-road vehicles comprehensive programs aimed at improving youth mental health and social skills are critically needed. Indeed, these programs offered during early school years are also known for their many positively impacts, notably by fostering self-esteem in teenagers. These programs, such as Healthy Schools and Hors-Piste, also have the potential to foster long-term positive repercussions as regards of distress and violence. Moreover, the implementation of the Nunavik Suicide Prevention Strategy, which includes the onboarding of Suicide-Prevention Liaison Workers (SPLWs), the access to culturally safe counseling services and to community support systems, aims to reduce the burden of mental distress on the well-being of Nunavimmiut.

The burden of chronic diseases such as cancer and heart disease are set to increase over the next few years, particularly given that the Nunavik population will continue to age. Early health prevention and promotion initiatives must be intensified and supported by messages aligned with the Inuit population's social and cultural norms. Lastly, the hospitalization rates related to respiratory infections, notably tuberculosis and pneumonia, emphasize the need for strengthened infectious disease prevention and management programs. Given the persistent burden of tuberculosis, targeted screening, early detection and culturally appropriate treatment and support remain essential. It will also be important to not neglect pneumonia prevention strategies, including vaccination campaigns and education on respiratory health and hygiene.

Cultural Safety is Essential

Despite the basic services offered, most of them provided by non-Inuit healthcare professionals, health indicators suggest the ongoing presence of barriers to accessing care. Improved access will call for hiring Inuit personnel and adapting programs to local realities. Therefore, additional efforts targeting ways of mobilizing, supporting and valuing Inuit personnel are needed. A greater presence of Inuit staff will also increase the services offered in Inuktitut, which is another step toward ensuring cultural safety in healthcare.

The Inuit identity has taken a beating and continues to suffer from the Western approaches adopted by public institutions over the years. Fostering community initiatives and cohesion has the potential to not only reduce the burden of diseases but to improve mental health by promoting a stronger sense of belonging among the Inuit.

In closing, the circumstances underpinning Nunavik's health inequities must be addressed through a multisectoral approach going well beyond health services. It includes, among other things, ensuring a strong political, organizational and community will to work on structural factors such as housing, food security, employment and social and economic development. The Nunavik population must have the opportunity of evolving in conditions that will enable each person to draw their own path towards health and well-being.

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