

NUNAVUT DEPARTMENT OF HEALTH AND SOCIAL SERVICES

Report on

Comparable Health Indicators for Nunavut and Canada

This report was produced by:

Information and Research Section Programs Division Health and Social Services Government of Nunavut Iqaluit, NU, X0A 0H0

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Introduction

Health and health care provision continue to be top priorities of both individual Canadians and the Canadian government. In September of 2000, the First Ministers met to define goals and commitments regarding health in Canada. Their vision was that Canadians would have publicly funded health services that would provide quality health care and promote the health and well-being of Canadians in a cost-effective and fair manner. Accountability was a key part of the realization of that vision. Understanding this, the First Ministers agreed to direct Health Ministers in each province and territory to regularly report to the public on a number of health and health care system indicators. It was believed that clear public reporting, with appropriate, independent, third party verification would enhance the performance of health care in Canada.

A framework of 14 health indicators with common methods of measurement and reporting was developed through collaboration and consultation with health care professionals and other experts across Canada. The result is the following report, which gives the people of Nunavut a variety of comparable indicators measuring health status (e.g. life expectancy), health outcome (e.g., reduced burden of disease and illness) and quality of service (e.g. patient satisfaction). This report's primary objectives are:

- to allow the people of Nunavut and Canadians as a whole to see how we are doing in attaining our goals and objectives
- to assist individuals, governments, and health care providers in making more informed choices
- to promote the identification and sharing of best practices within Nunavut and across
 Canada, contributing to continuous service improvement
- to help Nunavut residents understand how their publicly funded health services are being delivered

We are pleased to be able to report on the majority of the 14 health indicators for Nunavut and are committed to providing the people of Nunavut with comprehensive and regular reporting on the health programs and services that we deliver. See the Note to the Reader below for those indicators that are excluded. It is our hope that this report will stimulate and guide further discussion and serve as a framework for collaborative action toward a healthier Nunavut.

Note to the Reader

Nunavut will not be able to report on 35 out of 67 indicators. Numbers for the following indicators are too small to be reported with confidence, or the data is unavailable at this point.

5a-f: Mortality rates for prostate cancer, colorectal cancer, and stroke

Relative survival rates for cancer (5-year)

30-day acute myocardial infarction in-hospital mortality

30-day stroke in-hospital mortality

365-day relative survival rate for AMI

180-day relative survival rate for stroke

6a: Total hip replacement rate

7a,b,d: Incidence for prostate and colorectal cancers

Potential years of life lost due to prostate cancer, colorectal cancer, and stroke

Prevalence of diabetes

8a-d: Wait times for cardiac surgery

Wait times for hip and knee surgery

Wait times for radiation therapy

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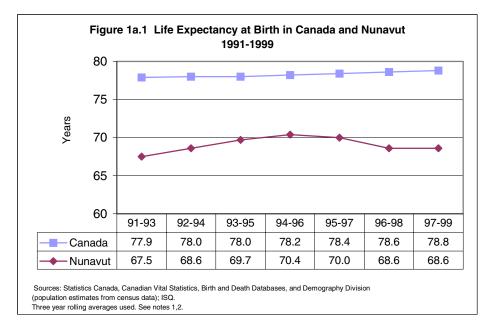
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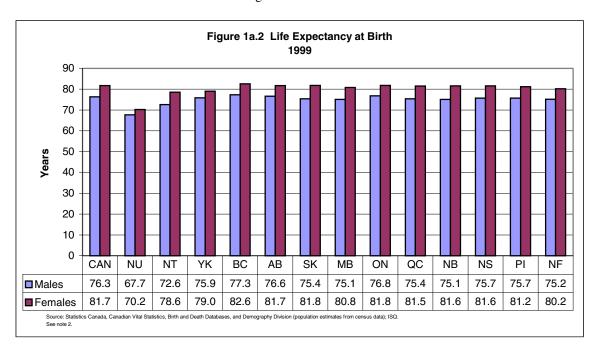
Indicator 1: Life Expectancy

Indicator 1a: Life Expectancy in Years at birth and at age 65

Life expectancy at birth is the number of years a person can expect to live, starting at birth, if current age-specific mortality rates continue to apply throughout his or her lifetime.



Since 1991, there has been a net increase in life expectancy at birth for Nunavut residents by 1.1 years, similar to the net increase for Canadians in general.

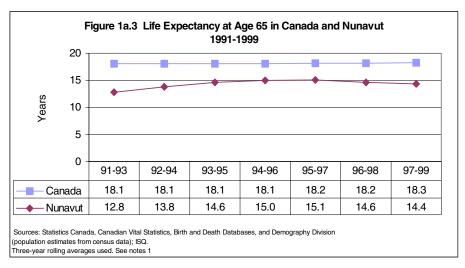


Life expectancy differs by gender. In all provinces and territories, females have longer life expectancies than males. Nunavut females, with a life expectancy of 70.2 years, exceed Nunavut males by 2.5 years.

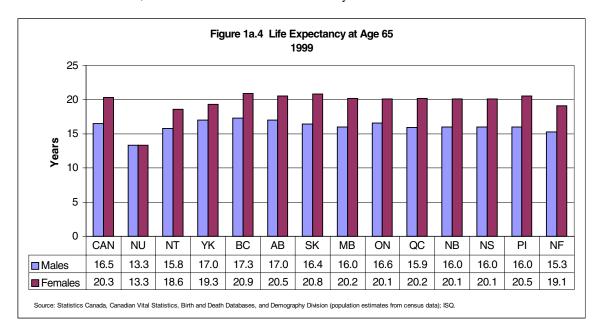
However, both men and women in Nunavut have lower life expectancies than the national average. In 1999, women lived 11.5 years less and men lived 8.6 years less than the national average.

Nunavut residents share a similar life expectancy at birth when compared to other circumpolar groups: Life expectancy at birth was 68.4 years in 2001 for Greenlanders² and 69.4 years in 1994-98 for native Alaskans.³ Indigenous Australians, however, have a lower life expectancy of 60 years for those born in 1997-99.⁴

Life expectancy at age 65 is the number of years a person can expect to live, starting at age 65, if current age-specific mortality rates continue to apply throughout his or her lifetime.



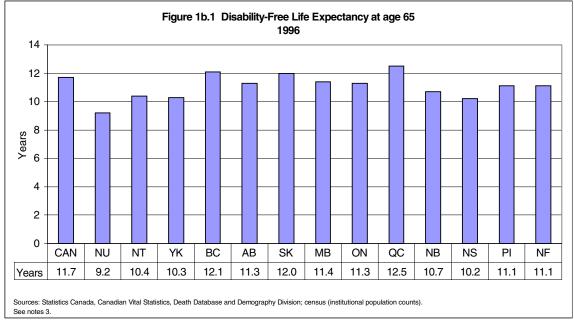
At age 65, life expectancy in Nunavut has become closer to the Canadian norm over the ten-year period between 1991 and 1999, while Canada has remained relatively stable.



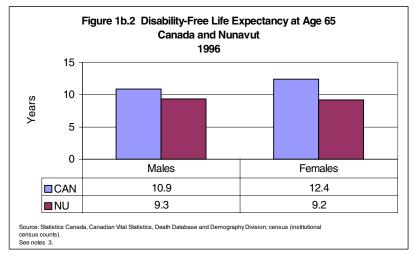
For Nunavut residents, no gender difference can be seen in life expectancy at age 65. In 1999, Nunavut women could expect to live 7 years less than their Canadian counterparts, and Nunavut men could expect to live 3.2 years less.

Indicator 1b: Disability-Free Life Expectancy in Years at age 65

Disability-free life expectancy is the number of years an average individual would be expected to live free of moderate or severe disability, starting at age 65. Disability-free life expectancy emphasizes quality of life. It is used to distinguish between years of life free of any activity limitation and years experienced with at least one activity limitation. To that end, disability-free life expectancy establishes a threshold based on the nature of such limitations. Years of life lived in conditions above this threshold are counted in full. Those lived in conditions below the threshold are not counted.



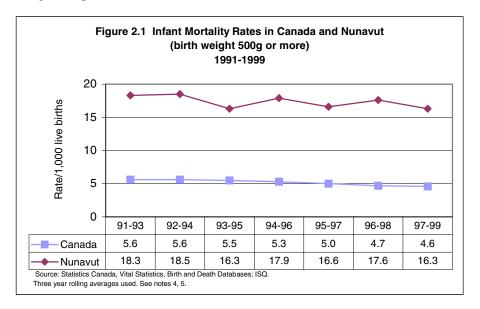
On average, a 65 year old Nunavut resident can expect to live 9.2 years disability-free, two and a half years less than the Canadian average. Nunavut men and women share roughly the same disability-free life expectancy.



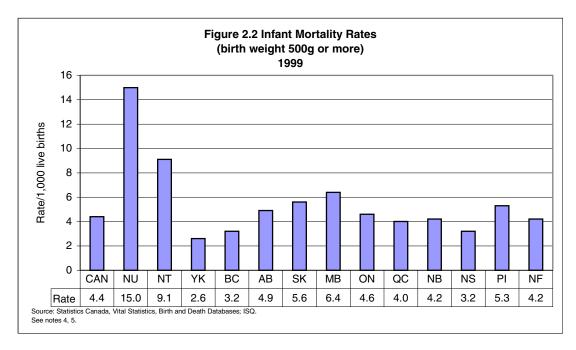
In comparison to Nunavut, Canadian females can expect to live 3.2 more years disability-free, and Canadian males can live 1.6 more years disability-free.

Indicator 2: Infant Mortality

Infant mortality rate is defined as the number of infant deaths (under one year of age), with a birth weight of 500 grams or greater, per 1,000 live births.



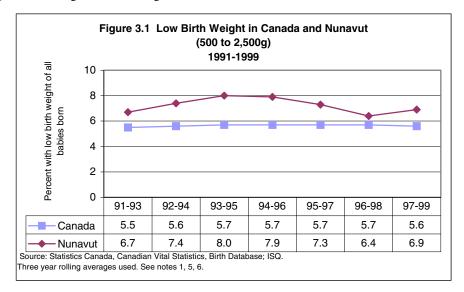
Infant mortality rates in both Canada and Nunavut appear to be declining. In 1999, Canadian rates were about 20% lower than in 1991, and Nunavut rates, although much higher, appear to be declining at a similar rate.



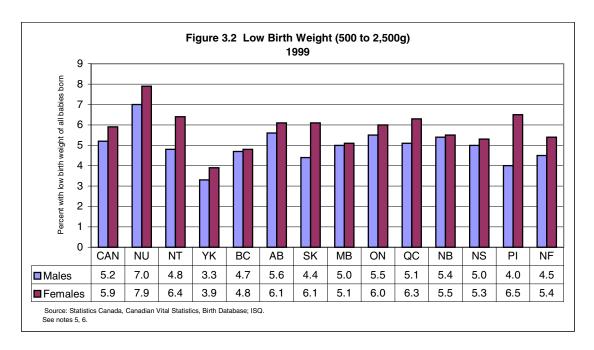
Although Nunavut has a high infant mortality rate relative to the rest of Canada, our rates are similar to other indigenous populations. The infant mortality rate (per 1,000 live births) is 9.4 among Alaskan natives (1999),⁵ 17.8 among residents of Greenland (2001),² and 13.5 among indigenous Australians (1998-2000).⁶

Indicator 3: Low Birth Weight

Low birth weight is defined as live births with a birth weight less than 2,500 grams, expressed as a percentage of all live births with known birth weights. It has been adjusted for borderline viable births by excluding all birth weights under 500 grams.



Trends in low birth weight appear to have changed very little between 1991 and 1999 in both Nunavut and the whole of Canada.

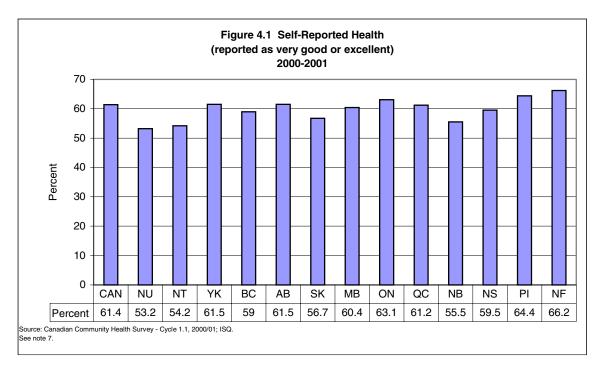


Low birth weight tends to show a gender difference, with females in all jurisdictions experiencing a greater percentage of low birth weight. Low birth weight babies are more common in Nunavut than Canada as a whole. In 1999, about 35% more infants were born underweight in Nunavut compared to the rest of Canada.

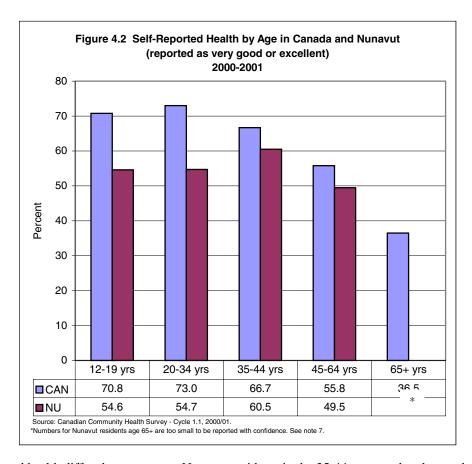
Indicator 4: Self-Reported Health

Self-reported health is defined as the percentage of the adult population (age 12 and over) who report that their health is very good or excellent. Responses were gathered through the Canadian Community Health Survey, and about 800 people in Nunavut were involved.

Self-reported health is useful as a broad indicator of the health of a population. When people rate their own health, they factor information into their choice that might otherwise be missed, such as disease severity, physiologic/psychological reserve, and level of social and mental functioning. As a result, self-reported health is predictive of mortality even when more objective measures, such as clinical evaluations, are taken into account.⁷



The majority of Canadians across the country, including residents of Nunavut, consider their health very good or excellent. However, less people in Nunavut claim good health than Canadians in general.



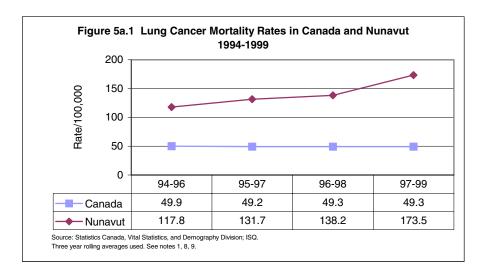
Self-reported health differs by age group. Nunavut residents in the 35-44 year age bracket tend to consider their health the best, while 45-64 year olds consider their health the worst. This is slightly different from the national average, where the greatest percentage of people reporting very good or excellent health lies in the 20-34 year age bracket.

Indicator 5: Change in Life Expectancy

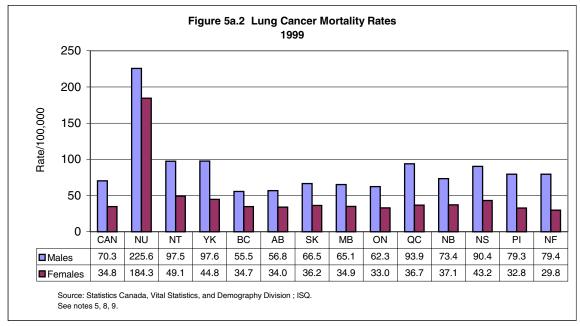
Indicator 5a: Mortality Rates for lung cancer, breast cancer, and acute myocardial infarction

The mortality rate is defined as the number of deaths of individuals, per 100,000 population, where the underlying cause of death is one of those specified. Rates have been age standardized according to the 1991 Canadian population.

Lung Cancer Mortality Rates



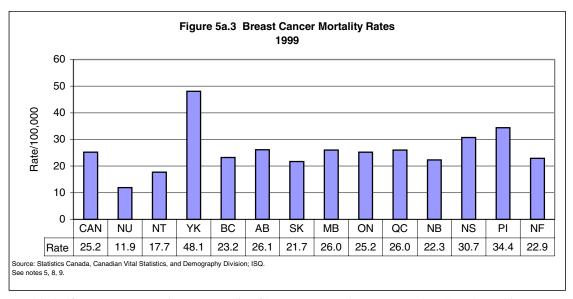
Mortality rates in Canada due to lung cancer appear very stable over the period of 1994-99. Nunavut's rates, however, appear to be increasing significantly in this period.



Nunavut lung cancer mortality rates are much higher than the national average, and more men die of the disease than women. Rates in Nunavut are 3.2 times the national average among men and 5.3 times among women. These high rates likely result from the high smoking rates in Nunavut that are more than double that of the rest of Canada.

Female Breast Cancer Mortality Rates

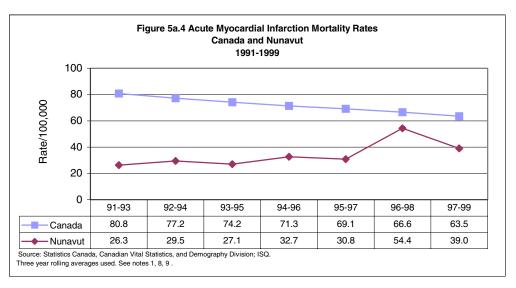
Because there have been few cases of breast cancer in Nunavut relative to Canada as a whole, time trend data for breast cancer mortality is too unreliable to be published. It is very difficult in a small population to assess real trends because small increases or decreases become exaggerated.



Roughly half as many women in Nunavut die of breast cancer when compared to Canada. This may partially be explained by the higher breastfeeding and fertility rates in Nunavut, both of which have some protective effect against breast cancer.⁸

Acute Myocardial Infarction Mortality Rates

Between 1991 and 1999, AMI mortality rates for Nunavut are lower than for Canada; however, the Nunavut rates are now approaching Canadian rates. As Canadian rates seem to steadily decline, Nunavut rates appear to be growing closer to the national average. This may reflect the changes in lifestyle in the past ten years among Nunavut residents that are bringing them closer to their counterparts across the country.

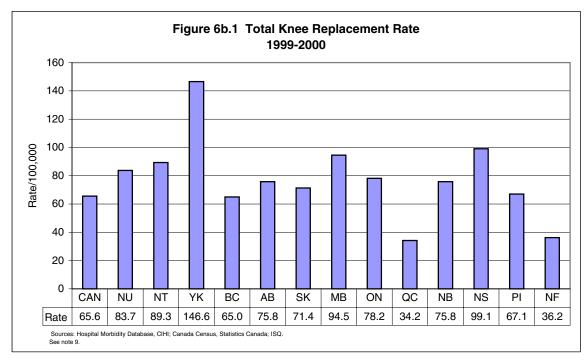


Indicator 6: Improved Quality of Life

Indicator 6b: Total Knee Replacement Rate

Total knee replacement rate is the rate, per 100,000 population, of total unilateral or bilateral knee replacement surgery performed on in-patients in acute care hospitals. Rates have been age standardized according to the 1991 Canadian population.

Knee replacement, like most elective surgery, is performed to increase quality of life by alleviating pain and stiffness and improving overall functioning. Because existing databases are limited, knee replacement rates are used here as an indicator of access to health-related care that enhances the quality of a person's life.



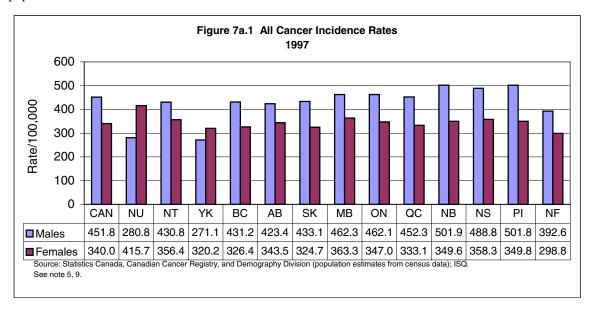
A higher age-standardized rate of knee replacement is seen in Nunavut when compared to all of Canada. In 1999 and 2000, roughly 28% more Nunavut residents underwent knee replacement surgery than the Canadian population as a whole.

Indicator 7: Reduced Burden of Disease, Illness and Injury

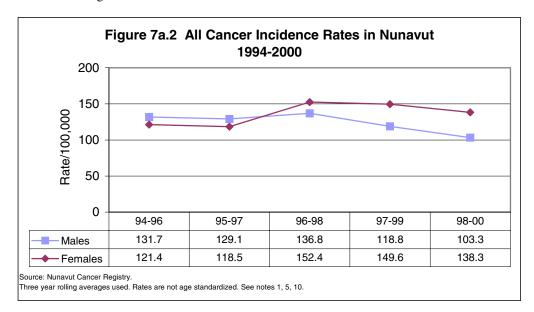
Indicator 7a: Incidence Rates for all cancers and lung and breast cancers

All Cancer Incidence

All cancer incidence is defined as the number of newly diagnosed primary cancer cases of all types in a given year, per 100,000 population. Rates have been age standardized according to the 1991 Canadian population.



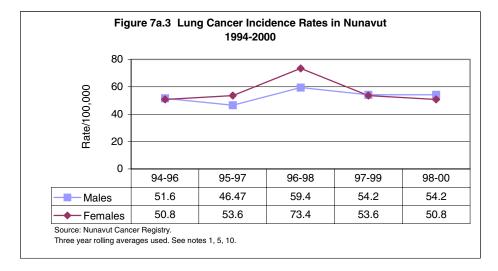
In 1997, unlike most other Canadian jurisdictions, women in Nunavut were more likely to be diagnosed with any cancer than men,. The rate for Nunavut males was lower than the national average, but the rate for women was higher.



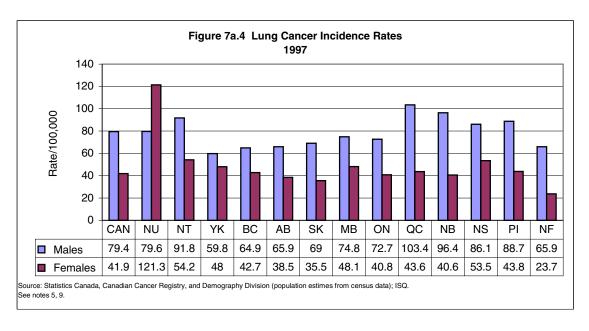
Between 1994 and 2000, incidence rates of all cancers in Nunavut seem to have declined slightly for males while increasing for females. 35% of all cancer diagnosed in women in Nunavut between 1991 and 1996 was cervical cancer.⁹

Lung Cancer Incidence

Lung cancer incidence is defined as the number of newly diagnosed primary lung cancer cases in a given year, per 100,000 population.



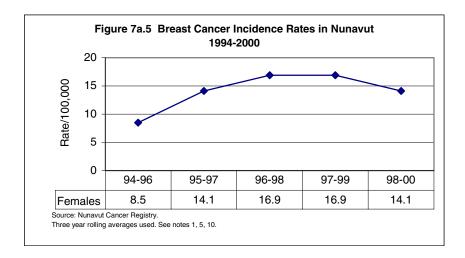
Trends in lung cancer incidence in Nunavut appear stable between 1994 and 2000. Generally, women had slightly higher rates than men.



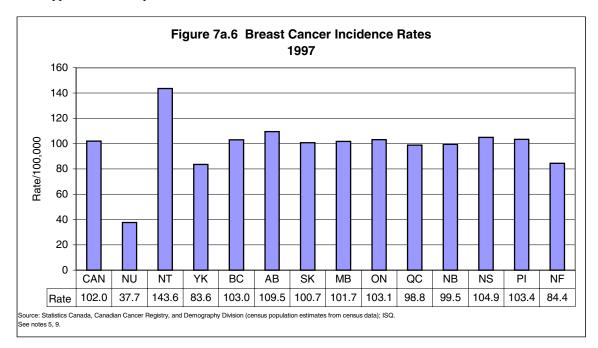
Rates of new lung cancer cases in Nunavut in 1997 were at or above the national average. Canadian and Nunavut men shared roughly the same rate, but Nunavut women were diagnosed with the disease almost three times as often as Canadian women in general.

Female Breast Cancer Incidence

Female breast cancer incidence is defined as the number of newly diagnosed primary breast cancer cases in a given year, per 100,000 population.



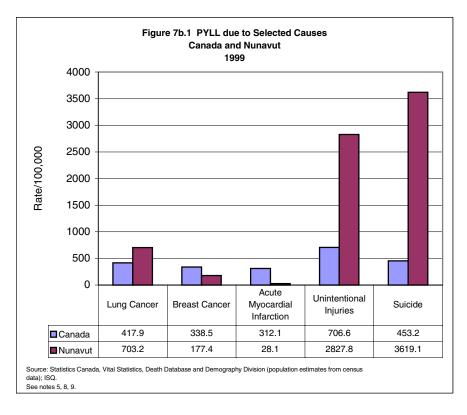
There appears to be an upward trend in breast cancer rates in Nunavut between 1994 and 2000.



However, in 1997, breast cancer rates were still much lower than the national average. In fact, women in Nunavut were almost three times less likely to be diagnosed with breast cancer than Canadian women as a whole. This may partially be explained by the higher breastfeeding and fertility rates in Nunavut, both of which have some protective effect against breast cancer.⁸

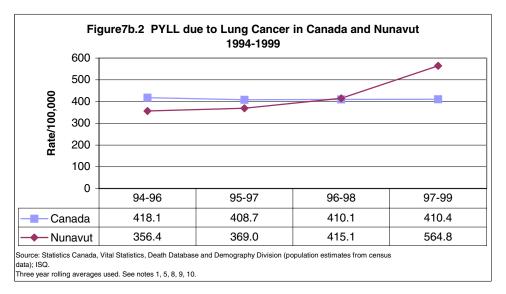
Indicator 7b: Potential Years of Life Lost due to lung cancer, breast cancer, acute myocardial infarction, suicide and unintentional injury

Potential years of life lost (PYLL) is the number of years of potential life not lived when a person dies "prematurely" (defined for this indicator as before age 75), due to one of the following specific causes of death. It is estimated as the difference between age 75 and age at death, and is expressed as a rate per 100,000 population.

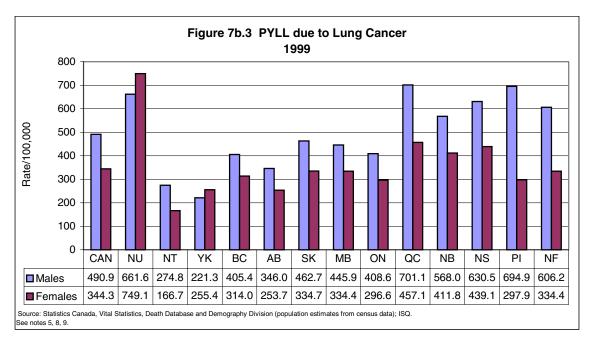


In Nunavut, PYLL are highest by far for unintentional injuries and suicide. Potential years of life lost due to lung cancer are also significantly higher than the national average.

Potential Years of Life Lost due to Lung Cancer

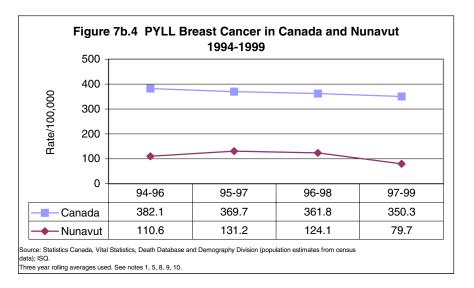


Between 1994 and 1999, potential years of life lost due to lung cancer appears stable for Canada, but increasing for Nunavut.

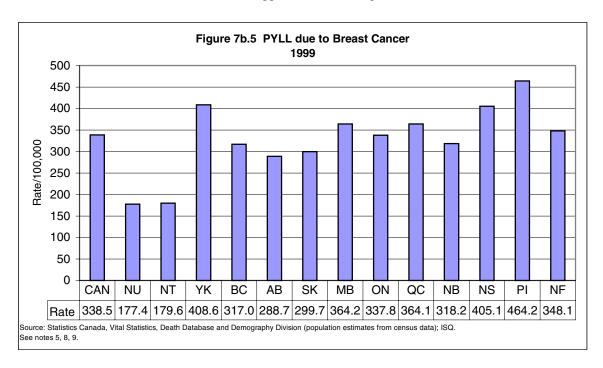


In 1999, Nunavut had high rates for PYLL due to lung cancer when compared with the national average. This applies to both men and women: rates are 1.3 times higher for men and 2.2 times higher for women. Unlike most of the provinces, PYLL due to lung cancer is higher for women than men in Nunavut.

Potential Years of Life Lost due to Female Breast Cancer

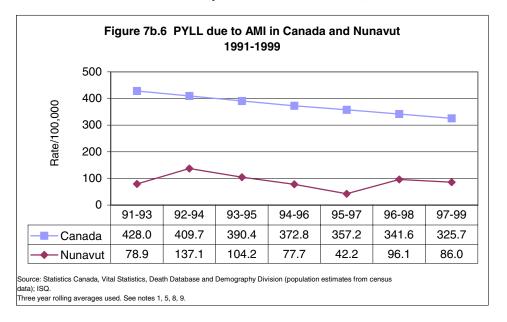


PYLL due to breast cancer were much lower in Nunavut than in Canada as a whole between 1994 and 1999, and PYLL in both Canada and Nunavut appear to be declining.

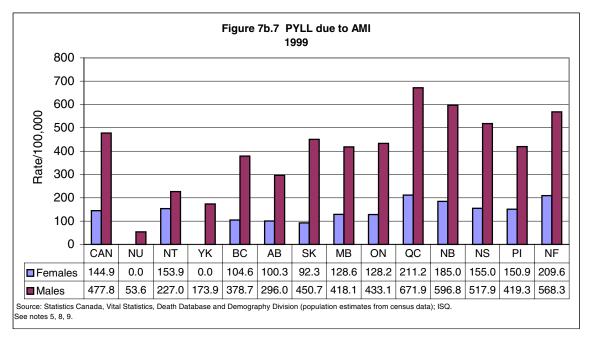


In 1999, PYLL due to breast cancer in Nunavut was roughly half that of Canada.

Potential Years of Life Lost due to Acute Myocardial Infarction (AMI)

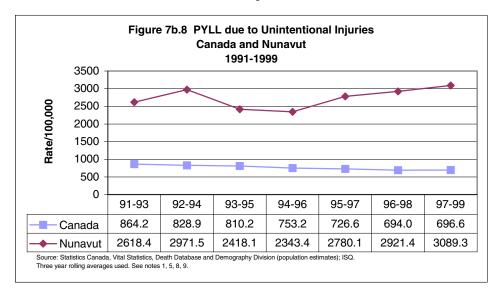


Between 1991 and 1999, it appears that there was a steady decline in PYLL due to acute myocardial infarction in Canada. Rates in Nunavut appear fairly stable in this time period, but they are considerably lower than the national average.

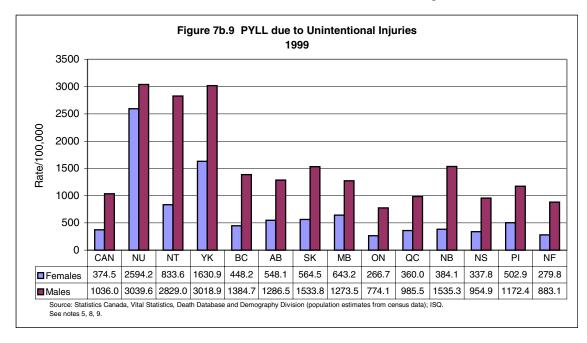


PYLL due to AMI for Canadian males were almost nine times higher than rates for men in Nunavut in 1999. There were no cases of AMI among Nunavut women in 1999. Low rates among Nunavut residents are partially due to the traditional Inuit diet, which consists of large amounts of marine foods rich in n-3 fatty acids. Studies have shown that n-3 fatty acids have beneficial effects on key risk factors for cardiovascular disease. ¹⁰

Potential Years of Life Lost due to Unintentional Injuries

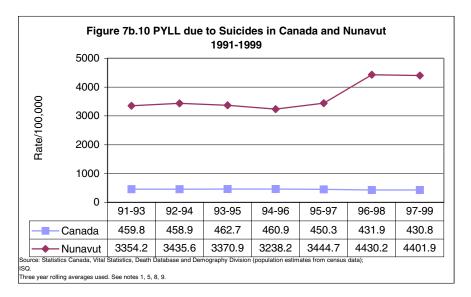


PYLL due to unintentional injuries were consistently higher in Nunavut than in the whole of Canada between 1991 and 1999. While it appears that Canadian rates are declining, Nunavut rates are stable or slightly increasing. Among other things, unintentional injuries include fractures, sprains, wounds, head injuries, and internal injuries. External causes of unintentional injuries include deaths due to accidental causes such as motor vehicle accidents, falls, poisoning, drowning, fires, natural, environmental and mechanical factors, but not medical misadventures, abnormal reactions or complications.

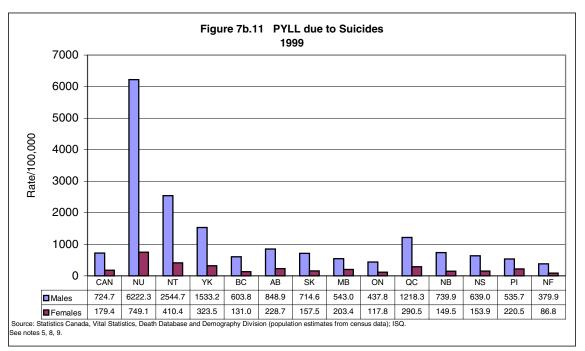


Like the rest of Canada, men in Nunavut have more unintentional injuries than women. However, the difference by gender is not as great as it is in the rest of Canada. The PYLL due to unintentional injuries for Nunavut men are three times the national average, while the rate for Nunavut females is approximately seven times the national average.

Potential Years of Life Lost due to Suicides



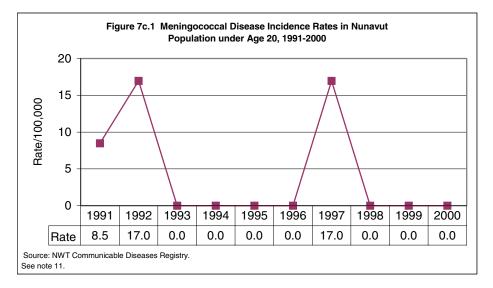
PYLL due to suicides were consistently higher in Nunavut than in Canada between 1991 and 1999, and while Canadian rates are stable, rates in Nunavut appear to be rising.



As in all provinces and territories, more men in Nunavut commit suicide than women. In 1999, this resulted in PYLL due to suicides for men more than eight times that of women. As well, Nunavut men had PYLL due to suicides roughly eight and a half times higher than Canadian men in general. In the same year, Nunavut women had an approximately four times greater rate of PYLL than their national counterparts.

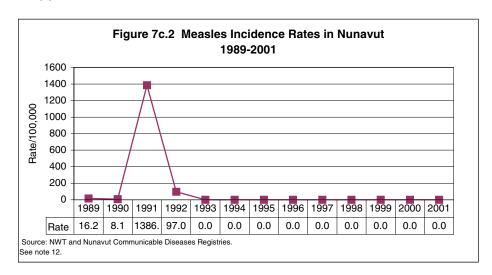
High PYLL due to suicide reflects the high suicide rate in Nunavut. Most suicides are committed by young single Inuit males by hanging. Many factors come into play, among them acculturation, alcohol abuse, depression, and impulsiveness.¹¹

Most suicides in Nunavut occur among 20-24 year olds, ¹² while the largest percentage of suicides in the rest of Canada occur in people 25 years of age or older. ¹³ Victims of suicide in Nunavut are relatively younger, and this is reflected in the higher PYLL.



Indicator 7c (i): Invasive Meningococcal Disease Incidence

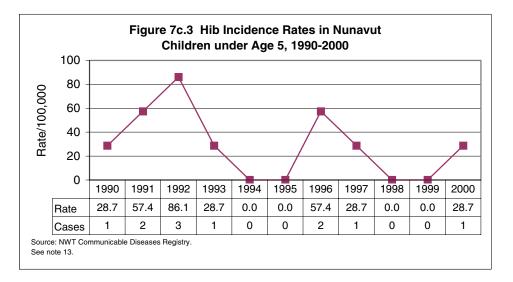
Invasive meningococcal disease is reported as the rate of new cases in the population under age 20 per year, per 100,000 population. Apart from outbreaks in 1991-1992 and 1997, no cases have been seen in Nunavut between 1991 and 2000. As an infectious disease, meningococcal disease tends to appear in outbreaks followed by periods of low incidence. Vaccines are available for certain strains of meningococcal diseases for use in Nunavut in a potential outbreak situation.



Indicator 7c (ii): Measles Incidence

Measles is reported as the rate of new cases per year, per 100,000 population. Except for an outbreak in 1991, measles has not been seen in Nunavut since. As an infectious disease, measles tends to appear in outbreaks followed by periods of low incidence. A one-dose vaccine for measles was introduced in 1983, and an improved two-dose version came into use in 1996-1997. Since the introduction of this vaccine, incidence is extremely low in Canada, and all provinces and territories share the goal of measles elimination in the near future.

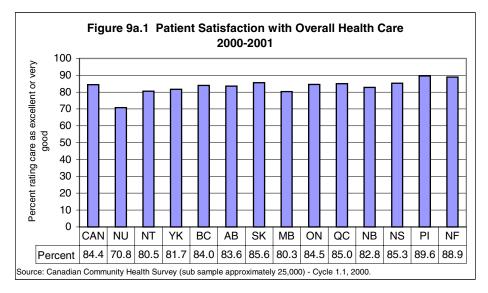
Indicator 7c (iii): Haemophilus Influenzae b (invasive) Disease Incidence



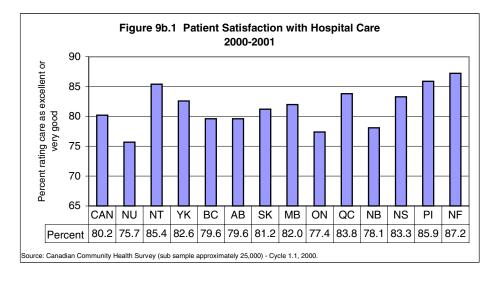
Haemophilus influenzae b (Hib) disease is expressed as the rate of new cases reported by year in children under 5, per 100,000 population. Invasive disease includes meningitis, bacteraemia, epiglottis, pneumonia, pericarditis, septic arthritis, or emphysema. Hib was the most common cause of bacterial meningitis and a leading cause of other serious invasive infections in children prior to the introduction of the Hib vaccine in 1988. ¹⁵ As an infectious disease, Hib tends to appear in outbreaks followed by periods of low incidence. When reported per 100,000, the rates look dramatic, however, they represent a small number of cases.

Indicator 9: Patient Satisfaction with Health Care

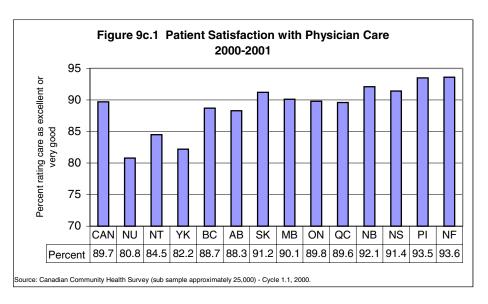
Patient satisfaction is expressed as the percentage of the adult population who rate the quality of the following health care services received in the past 12 months as excellent or very good: (a) overall health services, (b) services received in a hospital, including inpatient, outpatient and emergency room services, (c) services received from a family doctor or other physician, excluding those which may have been received during a hospital visit, and (d) community-based health services received, excluding that received through a hospital or doctor's office.



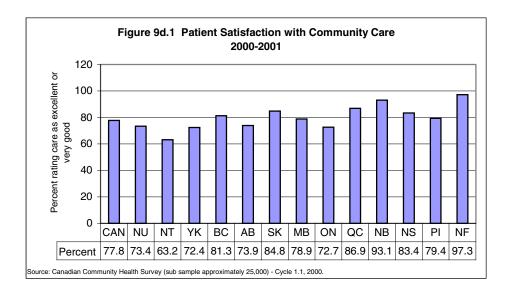
The majority of all Canadians are satisfied with the quality of health care services they have received. However, less Nunavut residents are satisfied overall with their health care. This reflects, in part, lower satisfaction with physician services in Nunavut relative to the rest of Canada.



Satisfaction with hospital care is high in Canada as a whole. Nunavut has the lowest percentage of patients satisfied with their hospital care, partly because hospitals are difficult to access in the territory. Nunavut has only one community with a hospital, and critical cases must be flown to hospitals in other provinces.



While the majority of Canadians are satisfied with the service provided by their family physicians and other doctors, satisfaction among Nunavut residents is lower than anywhere else. The difference is likely due to the fact that the model of health care delivery in Nunavut has primary care provided by the Community Health Nurse with physicians assisting. Few communities have a resident doctor.

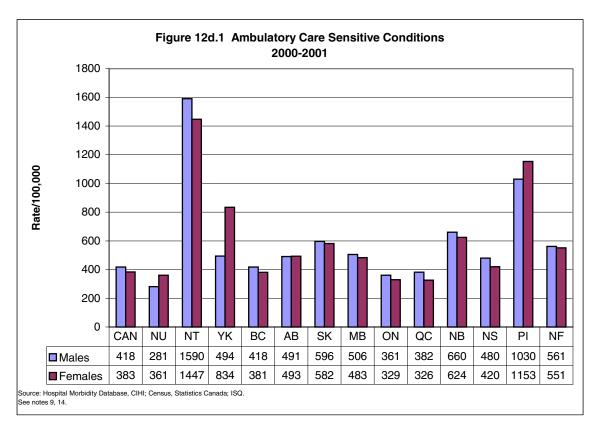


Across Canada as well as in Nunavut, the majority of patients surveyed were satisfied with the community-based care they received. Nurses in a community care setting provide most primary health care in Nunavut, and residents have indicated satisfaction with their care.

Indicator 12: Home and Community Care Services

Indicator 12d: Ambulatory Care Sensitive Conditions

Ambulatory care sensitive conditions are expressed as an age-standardized inpatient acute care hospitalization rate, per 100,000 population, for conditions where appropriate community-based care may have prevented or reduced the need for admission to hospital. Hospitalization rates for conditions which may often be cared for in the community are one indicator of appropriate access to community-based care. Preventive care, primary care, and community based management of long-term conditions such as diabetes, asthma, alcohol and drug abuse, depression, and hypertensive disease can often reduce hospitalizations, improve the patient's health, contribute to better overall community health status, and save health care dollars.

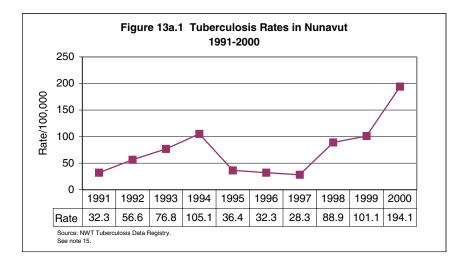


Nunavut has a lower rate of hospitalization for ambulatory care sensitive conditions relative to the whole of Canada.

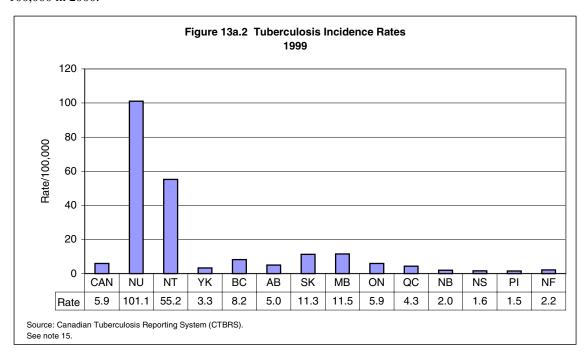
Indicator 13: Public Health Surveillance and Protection

Indicator 13a: Tuberculosis

Tuberculosis is reported as the rate of new active and relapsed infectious cases reported by calendar year, per 100,000 population.



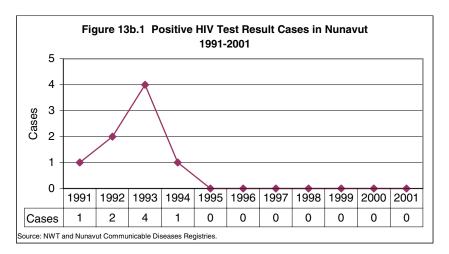
Tuberculosis rates in Nunavut appear to be climbing since 1991, reaching a peak of nearly 200 cases per 100,000 in 2000.



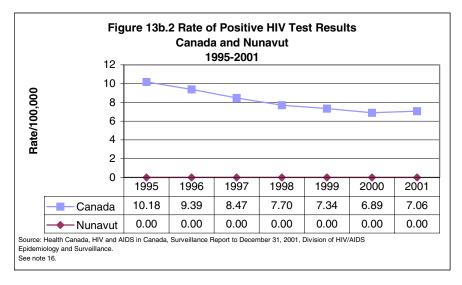
In 1999, Nunavut's tuberculosis incidence rate was about 17 times higher than the Canadian average. The high rate is partly due to a large reservoir of latent tuberculosis from earlier cases that reactivate as Nunavut residents age.

Indicator 13b: HIV

HIV is expressed as the rate of diagnosed HIV infection per calendar year, based on positive tests, per 100,000 population. The numbers represent only those diagnosed with HIV in a given year, not necessarily all those who contract HIV in a given year. Some individuals infected in a given year will test positive for HIV in that year, but the majority will not be diagnosed until a subsequent year. For this reason, trends are influenced by testing patterns and should be interpreted with caution.



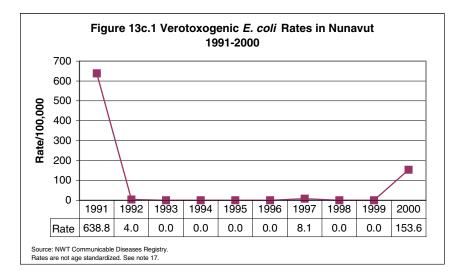
Nunavut has seen no new cases of HIV infection since 1994. Eight cases were reported in the four year period prior to 1995.



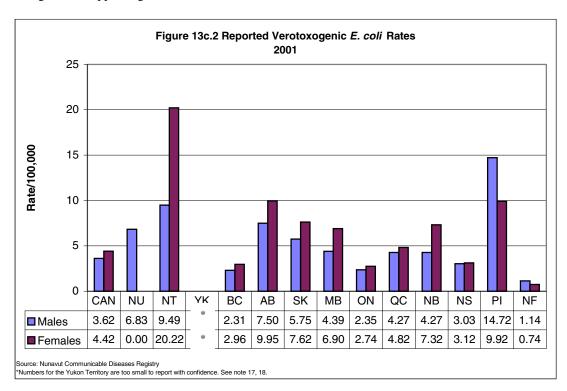
In Canada as a whole, the HIV rate appears to be declining. Because there have been no new diagnoses of HIV infection in Nunavut for the past seven years, no trend can be seen in this territory.

Indicator 13c: Verotoxogenic E. coli

Verotoxogenic E. coli is expressed as the rate of new cases reported by year, per 100,000 population.



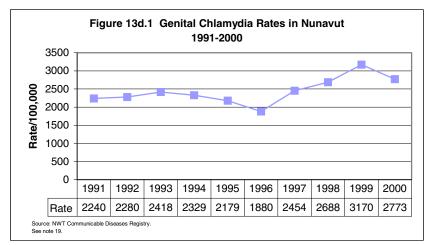
Over the past ten years, reported cases of *E. coli* infection are relatively rare in Nunavut. An outbreak occurred in 1991 and 2000. In Nunavut, verotoxogenic *E. coli* is mainly spread through contaminated hamburger meat, appearing in occasional outbreaks.¹⁴



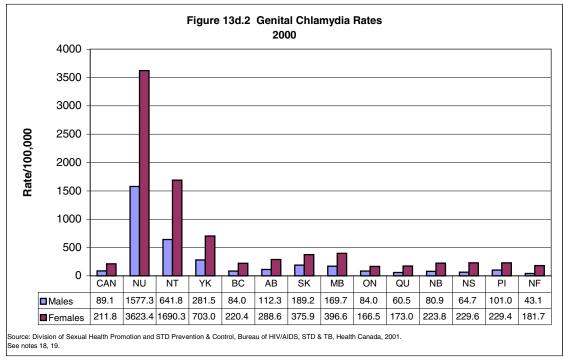
The graph above depicts the occurrence of E. coli cases in Canada in 2001. The rate is calculated per capita and although Nunavut is almost two times higher than the national average, this actually only represents one case in Nunavut.

Indicator 13d: Chlamydia

Chlamydia is expressed as the rate of reported new genital infections by calendar year, per 100,000 population. This is a common sexually transmitted disease which may result in female infertility and ectopic pregnancy. Rates of chlamydia are an excellent indicator of change in risk behaviours and reflect the effectiveness of primary and secondary prevention. The properties of the properties of primary and secondary prevention.



The chlamydia infection rate in Nunavut appears to be climbing since 1991. The introduction of a new, less invasive testing method using PCR technology in 1997 accounts for some of the increase in incidence since 1996.

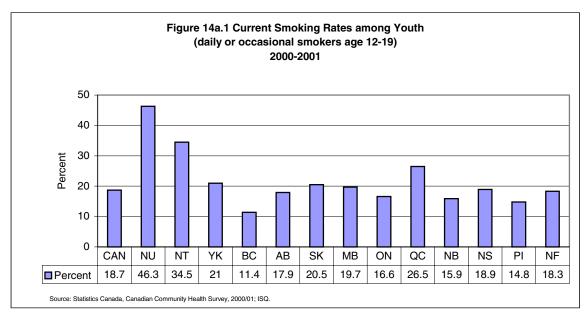


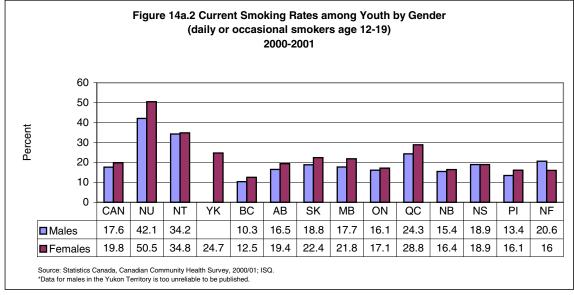
Nunavut has a high rate of chlamydia infection relative to the rest of Canada. In 2000, 17 times more women and almost 18 times more men were diagnosed with chlamydia in Nunavut than in the whole of Canada. Women are more than twice as likely to be reported with chlamydia infection than men. This reflects, in part, more women being tested at well-women clinics and prenatal screening.

Indicator 14: Health Promotion and Disease Prevention

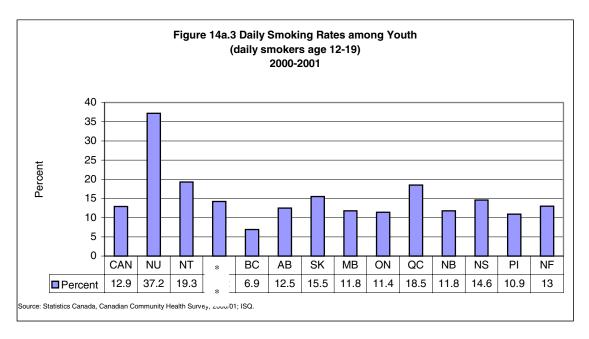
Indicator 14a: Youth Smoking Rates

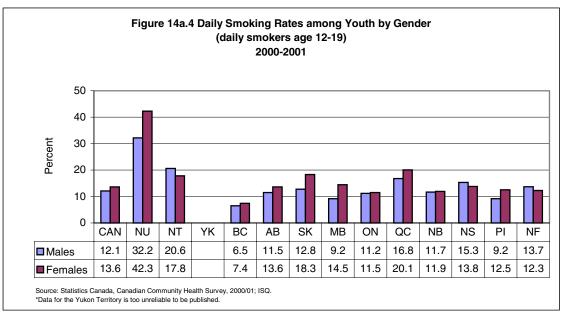
Smoking rates are expressed as the percentage of the population aged 12 and over who are current or daily smokers. Current smokers are those who reported smoking either on a daily or occasional basis when interviewed for the Canadian Community Health Survey. Daily smoking refers to smoking at least one cigarette per day for each of the 30 days preceding the survey. Occasional smoking refers to smoking at least one cigarette during the past 30 days preceding the survey, but not every day.





The percentage of teenagers in Nunavut who currently smoke is nearly two and a half times the national average. In both Canada and Nunavut, teenage girls are more likely to smoke than teenage boys. The high smoking rate probably contributes to the lung cancer statistics for Nunavut. Nunavut has more new cases of lung cancer per year, more potential years of life lost to lung cancer, and higher lung cancer mortality rates than Canada as a whole.

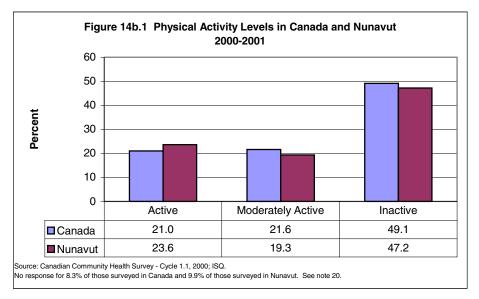




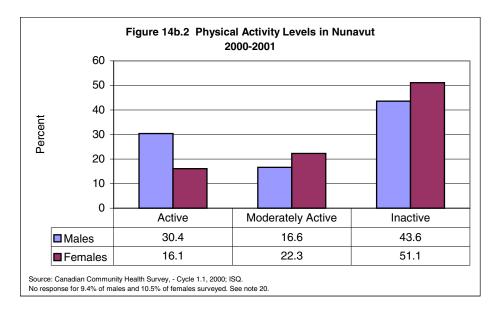
The percentage of Nunavut youth who smoke DAILY is nearly three times the national average.

Indicator 14b: Physical Activity Rates

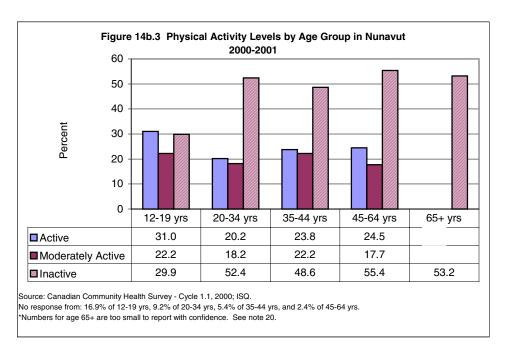
Physical activity is expressed as the percentage of the population aged 12 and over reporting inactive, moderately active, or active levels of physical activity, based on their responses to questions about the frequency, duration, and intensity of their participation in leisure-time physical activity. Responses were gathered using the Canadian Community Health Survey.



Activity levels in Canada and Nunavut are similar. In 2000-01, nearly half of Nunavut residents were inactive, and less than one quarter reported an active lifestyle. This puts them at risk for diabetes. ¹⁹



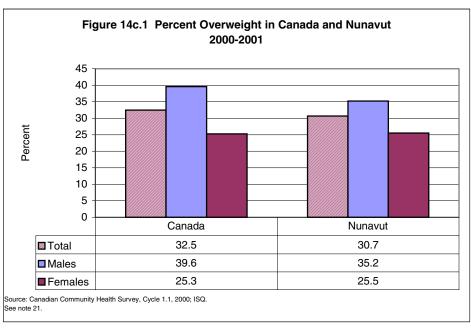
More men were active than women. In fact, nearly twice as many men than women reported an active lifestyle. The difference may partly be due to the fact that traditional activities for Inuit men, such as hunting and fishing, are more physically active than many traditional activities for Inuit women, such as sewing and food preparation.

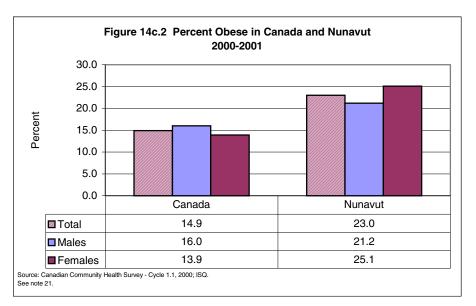


Among all age groups in Nunavut in 2000-01, children age 12 to 19 were the most active. Roughly half of adult residents of Nunavut, however, reported being inactive.

Indicator 14c: Body Mass Index (International Standard)

Body mass index (BMI) is used to determine an individual's healthy weight range based on his or her height. BMI is calculated as follows: weight in kilograms divided by height in metres squared. The international index is: under 18.5 (underweight), 18.5-24.9 (acceptable weight), 25.0-29.9 (overweight), and 30.0 or higher (obese).

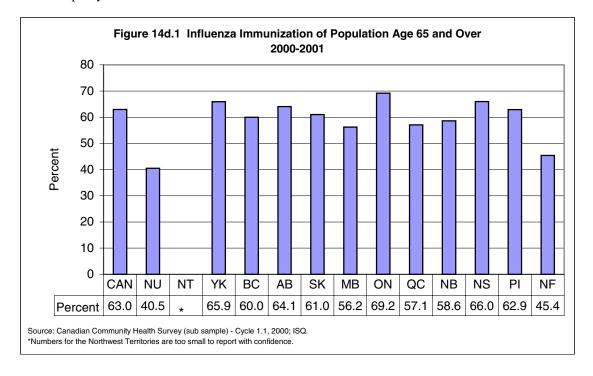




By these standards, 30.7% of Nunavut residents are overweight and 23% are obese. A similar number of Canadians are overweight, but fewer are considered obese. More men in Nunavut are overweight than women, yet more women tend to be obese. Excess weight is a major risk factor for hypertension, hyperlipidemias, diabetes, and coronary heart disease.²⁰

Indicator 14d: Immunization for Influenza

This indicator is expressed as the percentage of the population age 65 and over who report having had a flu shot in the past year.



The majority of Canadian seniors were immunized in 2000/01, but only about 40% of Nunavut seniors were immunized. Influenza immunization, an important part of elderly care, reduces the risks for pneumonia, hospitalization, and death in elderly persons.²¹

Notes for PIRC Report:

- 1. A rolling average combines data over several years of observation in order to limit wide fluctuations in data which often occur in small populations. ²²
- 2. Rates exclude: births to mothers not resident in Canada; births to mothers resident in Canada whose province or territory of residence was unknown; deaths of non-residents of Canada; deaths of residents of Canada whose province or territory of residence was unknown; deaths for which age of deceased individual was unknown.
- 3. The estimates are based on three years of death data (1995 to 1997), questions on activity limitations from the 1996 Census, and the 1996 population estimates.
- 4. Rates exclude: births to mothers not resident in Canada; births to mothers resident in Canada whose province or territory of residence was unknown; deaths of infants not resident in Canada; deaths of infants resident in Canada, province or territory of residence unknown.
- 5. Rates for the Yukon Territory, the Northwest Territories, and Nunavut should be interpreted with caution due to a small underlying count.
- 6. Rates exclude: births to mothers not resident in Canada; births to mothers resident in Canada whose province or territory of residence was unknown; births with unknown birth weight.
- 7. Exclusions: Persons living on First Nation Reserves and on Crown lands, residents of institutions, full-time members of Canadian Armed Forces and residents of certain remote regions are excluded from the sample. Persons less than 12 years of age are not surveyed.
- 8. Rates exclude: deaths of non-residents of Canada; deaths of residents of Canada whose province or territory of residence was unknown; deaths for which age of deceased individual was unknown.
- 9. Rates have been age standardized according to the 1991 Canadian population. Age standardization of data produces the annual number of events (per 100,000 population) which would be observed in that population if it had the same age composition as a reference or standard population (in this case, Canada's population as a whole). Age-standardized rates make adjustments for population distribution variations in age groups so that comparative studies can be done.
- 10. Data prior to 1994 is not available. The Nunavut/Northwest Territories Cancer Registry was instituted in 1991, but prevalent data cannot be excluded for the first three years of its existence.
- 11. A confirmed case is defined as invasive disease with laboratory confirmation of infection: isolation of *Neisseria meningitidis* from a normally sterile site (blood, cerebrospinal fluid, joint, pleural or pericardial fluid) or demonstration of *N. meningitidis* antigen in cerebrospinal fluid.
- 12. A confirmed case is defined as laboratory confirmation of infection in the absence of recent immunization with measles containing vaccine: isolation of measles virus from an appropriate clinical specimen, significant rise in measles specific antibody titre between acute and convalescent sera, or positive serologic test for measles IgM using a recommended assay or clinical case in a person who is epidemiologically linked to a laboratory confirmed case.
- 13. A confirmed case is defined as invasive disease with laboratory confirmation of infection in the absence of recent immunization with Hib-containing vaccine: isolation of H. influenzae type b from a normally sterile site or epiglottis in a person with epiglottitis, or demonstration of H. influenzae type b antigen in cerebrospinal fluid. Invasive disease includes meningitis, bacteraemia, epiglottitis, pneumonia, pericarditis, septic arthritis, or emphysema.
- 14. Patients not treated as inpatients in acute care hospitals (eg. those seen only in an emergency department or chronic case institution) have been excluded.
- 15. A confirmed case is defined as the presence of mycobacterium complex (i.e. *M. tuberculosis*, *M. bovis*, {excluding BCG strain} or *M. africanum*) demonstrated on culture or in the absence of bacteriological proof, or cases clinically compatible with active tuberculosis that have, for example: Chest x-ray changes compatible with active tuberculosis including idiopathic pleurisy with infusion, active extrapulmonary tuberculosis (meningeal, bone, kidney, peripheral lymph nodes etc.), or pathologic or post-mortem evidence of active tuberculosis.
- 16. Comparative numbers are unavailable prior to 1995 due to variations among jurisdictions in duplicate test removal for the period 1985-1994. Duplicate positive HIV test reports (repeat tests for the same individual who is HIV positive) result in an overestimate of the number of positive HIV test reports. The removal of duplicate positive tests is difficult due to the non-nominal (or non-identifying) nature of HIV reporting in some jurisdictions.

- 17. A confirmed case is defined as laboratory confirmation of infection with or without symptoms with isolation of verotoxin producing *Escherichia coli* from an appropriate clinical specimen.
- 18. Data is preliminary and subject to change.
- 19. A confirmed case is defined as laboratory confirmation of infection detection of *C. trachomatis* by appropriate laboratory techniques in genitourinary specimens.
- 20. Active is defined as expenditure of an average 3.0+ kcal/kg/day of energy, or exercise required for cardiovascular health benefit. *Moderate* is defined as expenditure of 1.5-2.9 kcal/kg/day, or some health benefits but little cardiovascular. *Inactive* is defined as energy expenditure below 1.5 kcal/kg/day.
- 21. Exclusions: pregnant women and persons less than 3 feet (0.914 metres) tall or greater than 6 feet 11 inches (2.108 metres).

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