



FIRST NATIONS AND INUIT HEALTH

*Health Status of First Nations On Reserve
in Atlantic Canada 2014*



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Debra Keays-White

*Regional Executive Officer,
First Nations and Inuit Health Branch-Atlantic Region*

FOREWORD

Welcome to the fourth annual Health Status Report of First Nation People living On Reserve in Atlantic Canada! Like previous versions, the intent of this report is to help paint a picture of the current health status of First Nation communities in the Atlantic Region.

No matter what part of the health system one works in, relevant, accurate, timely information helps us make better decisions. In clinical care settings, practitioners use information such as blood pressure readings, body temperature, x-rays and blood chemistry to help them determine how to improve an individual's health. In public health practice, we rely on aggregate data, such as the information you will find here, to see where our efforts to improve community and population health should be focussed. I am delighted that every year our available information improves in quantity and quality.

In last year's report we talked about using health status information to inform decisions for planning, policy and/or practice purposes. Feedback we have received indicates that the use of information in these reports could be increased. So how do we make this report *more user-friendly*?

We would appreciate hearing from you about your ideas. Specifically:

- What would help with program planning?
- What would help with community health planning?
- How could FNIHB staff help you use this report?

As the intent of this report is to be useful to First Nation communities and stakeholders, your feedback will be invaluable. One request we have heard and responded to in this version of the report is the inclusion of a Child and Youth chapter. This section uses data from available indicators in the Atlantic Health Partnership's Child and Youth Strategic Plan.

This report begins by outlining the data sources used. We have started with this topic as it is important to be aware of data limitations and how they may impact the interpretation of results. It is equally important to use data limitations as opportunities for discussion on improving the quality/quantity of health data. As the availability and quality improves, Health Status Reports will also improve.

Each version of the Health Status Report has included a section documenting a different aspect of health surveillance. This year we are highlighting the lessons learned from the Population Health Surveillance Capacity Development Project. We are also including an interview about data use with First Nation community Health Director, Elaine Allison, who was part of this project.

I hope you find this report useful.

Sincerely,

A handwritten signature in black ink, appearing to read 'Debra Keays-White', written in a cursive style.

Debra Keays-White

Regional Executive Officer, First Nations and Inuit Health Branch-Atlantic Region





SECTION 1: DATA SOURCES

Understanding data quality will lead to more confident interpretation and reporting and will inform more successful actions to improve health.

The information in this report represents the best available data at First Nations and Inuit Health Branch (FNIHB), both regionally and nationally, from 2009 to 2013. This data consists of FNIHB program reports and the Non-Insured Health Benefits (NIHB) Pharmacy Claims database. Data from the Regional Health Survey, Aboriginal Peoples' Survey, Aboriginal Affairs and Northern Development Canada (AANDC) and Statistics Canada are also included.

A limitation common to all FNIHB program data is that not all communities submit reports or some submit incomplete reports. It is unclear how these missing data would change the results presented within this report. While this is a concern, it should be noted that for most programs, the number of communities submitting reports and the completeness of reports has increased since earlier versions of the health status report.

Descriptions and limitations related to each data source used in this report are provided in subsections 1.1 to 1.5. It is hoped that the documentation of these limitations will continue to inform efforts to improve data quality.

1.1 FNIHB PROGRAM DATA

1.1.1 Community-Based Reporting Template

Almost all communities complete the CBRT, although not every community reports every section.

The Community-Based Reporting Template (CBRT) is a Health Canada form that communities complete to report program data on several different FNIHB funded programs. The CBRT was introduced in 2008-2009 as a reporting requirement of the new type of funding agreements between Health Canada and First Nation communities. It replaced some of the individual program reports. As a community's previous funding agreements expired, they have been rolled over to the new agreements and CBRT. As of 2013-2014, there were 32 communities (97%) who were required to report on CBRT.

Table 1.1 Number of Communities Reporting by Program Area (2013-2014)

Total Number of Communities Required to Report	32
Total Number of Communities Reporting	31
Total Number of Communities Reporting Aboriginal Head Start On Reserve	24
Total Number of Communities Reporting Maternal Child Health	31
Total Number of Communities Reporting Mental Wellness	19
Total Number of Communities Reporting Communicable Disease Control and Management	28

Source: Atlantic Region CBRT Report (2013-2014)

1.1.2 Electronic Service Delivery Reporting Template (eSDRT) – Home and Community Care

Most communities submit all required eSDRT reports.

It is mandatory for all communities to submit monthly eSDRT reports. However, every year there are some communities that do not submit for every month. These reports are considered missing data or reports. Table 2 illustrates the decreasing proportion of missing reports over the past three years. It should be noted that there have been no missing reports from First Nation communities in either Prince Edward Island or Newfoundland and Labrador from 2009-2010 to 2013-2014.

Table 1.2 Percentage of eSDRT Reports Missing from Total Due, Atlantic First Nations On Reserve Communities (2009-2010 to 2012-2013).

Reporting Year	Percentage of Reports Missing
2009-2010	9%
2010-2011	4%
2011-2012	3%
2012-2013	1%

Source: Atlantic Region eSDRT reports (2010-2013)

The eSDRT reports are used by communities to document hours of service, number of visits, age groups of clients using the services, the types of services that are delivered to the client, and the primary reasons for obtaining home care. They do not report health status. These reports allow communities to look at developing trends and the reasons why home care services are delivered. It is helpful for community health planning purposes to know which populations are being served and which services are provided most often.

Data entry errors can result in under-reporting in one category and over-reporting in another. Currently, this issue is being addressed by more clearly defining the data entry categories and processes.

The primary reasons reported for home care services do not reflect distinct numbers of clients; rather, they reflect the number of services delivered. For example, one person may have been seen for diabetes 10 times, counting for 10 contacts; two people could have been seen for cardiovascular reasons, five times each, for a total of 10 contacts. The current eSDRT does not reflect the primary health concern, only the reason that the home care service is provided. For example, the client's primary health issue may be diabetes but the reason for service is wound care because that can be a complication of diabetes.

1.1.3 Environmental Health Information System (EHIS)

Environmental Health Officers (EHO) enter inspection data in the EHIS database. All 33 First Nation communities have an assigned EHO.

1.1.4 WaterTrax

WaterTrax is used by community-based water monitors and EHOs to record water quality data. In 2013-2014, 33 communities had a Community-Based Water Monitor.

1.1.5 FNIHB Dental Database Service and Productivity Reports

Services provided by dental therapists and Children's Oral Health Initiative (COHI) service providers are entered into FNIHB's national web-based dental database. Seventeen First Nation communities have a dental therapist; 27 communities receive funding for a COHI aid (all communities with COHI have a dental therapist).



1.1.6 Immunization

Since 2008, there has been a steady increase in the number of communities reporting immunization coverage data (Table 1.3)

It is mandatory for all 33 communities to report their immunization coverage rates, yet not all communities do so, and some reports are incomplete. Also, some children receive their immunizations Off Reserve and are not being captured in the immunization report. Therefore, immunization coverage rates reported for the Atlantic Region are likely to be under-reported.

Table 1.3 Number of Atlantic First Nations On Reserve Communities Reporting Immunization Coverage Rates (2008-2013)

Reporting Year	Number of Communities Reporting Immunization Coverage
2008	21
2009	26
2010	26
2011	30
2012	31
2013	31

Source: Atlantic Region immunization coverage reports (2008-2013)

1.1.7 Treatment Centre Data

There are 5 treatment centres and one youth treatment centre in Atlantic Canada. All 6 reported to FNIHB in 2013-2014. The National Native Alcohol and Drug Abuse Program (NNADAP) Treatment Centres are required to submit annual reports containing the number of applications and admissions, demographics and substances used. Some centres gather client information using the Substance Abuse Information System (SAIS), while others use custom systems to track clients.



1.1.8 Teleform

It is mandatory for all 33 communities to report births, deaths and notifiable diseases to FNIHB*. They do this by completing monthly reporting via a fax-based Teleform system. However, not all communities consistently report data each month. Also, the Community Health Nurses who fill out the reports may not always be aware of all deaths or of cases of notifiable diseases. Therefore, rates of births, deaths, and notifiable diseases presented in this report may be lower than the actual rates in the communities.

Table 1.4 Number of Atlantic First Nation On Reserve Communities Reporting Live Births (2010-2013)

Reporting Year	Number of Communities Reporting Live Births
2010	25
2011	26
2012	25
2013	25

Source: Atlantic Region Teleform community reports (2010-2013)

* A notifiable disease is one that is required by provincial and/or territorial legislation to be reported to provincial/territorial public health officials¹⁰.

Table 1.5 Percentage of Notifiable Disease Reports Missing from Total Due, Atlantic First Nation On Reserve Communities Reporting Live Births (2010-2014)

Reporting Year	Percentage of Reports Missing
2009-2010	1%
2010-2011	2%
2011-2012	3%
2012-2013	3%
2013-2014	2%

Source: Atlantic Region Teleform community reports (2010-2014)

Unlike most other data sources, the percentage of missing reports has increased slightly since 2009-2010. In 2009-2010, the low percentage of missing reports is likely related to the enhanced reporting for H1N1.

1.1.9 Non-Insured Health Benefits (NIHB) Pharmacy Claims Database

The NIHB database is a valuable and unique tool for estimating First Nation health. The following limitations should be considered when interpreting information based on NIHB data:

- The place of residence for claimants (On or Off Reserve) cannot be identified. Therefore, Off Reserve claimants are included in the analysis.
- Prescriptions paid by cash, other drug plans, or through NIHB in another region are missing from this report.
- The numerator (NIHB claimants) and denominator (total First Nation population) are from different data sources (Figure 1.2).
- Approximately two-thirds of eligible First Nation band members access at least one prescription per year. Estimates of medication usage based on the pharmacy claims database may underestimate utilization by the Atlantic First Nation population.
- Information is not available regarding: the reason for prescribing the medications, whether the medications were used as prescribed, or whether the medications were used by the person they were prescribed to.

Figure 1.1 How percentages using NIHB data are calculated

$$\begin{array}{ccc}
 \text{Percentage} & = & \frac{\text{Numerator}}{\text{Denominator}} \\
 \text{(for example, the \% that filed a claim for a drug)} & & \begin{array}{l} \text{(from NIHB claims data)} \\ \text{(from AANDC Indian Registry data)} \end{array}
 \end{array}$$

In 2011, the Qalipu Mi'kmaq First Nation Band was established in Newfoundland and Labrador. By 2013, the Qalipu had 23,927 band members recognized as Registered Indians. This accounts for 39% of all Atlantic Canadian Registered Indians. Because this Off Reserve group is large, when doing analysis using NIHB data, the Qalipu are excluded from the Newfoundland and Labrador data and analysed separately.

1.2 ABORIGINAL AFFAIRS AND NORTHERN DEVELOPMENT CANADA INDIAN REGISTRY

The Indian Registry (IR) includes all Registered Indians (persons registered under the Indian Act) living On Reserve, Off Reserve, outside Canada and those in institutions. Key demographic data includes age, sex, and residence (On or Off Reserve). The following limitations should be considered:

- Delays in reporting births and deaths.
- Information about individuals moving On or Off Reserve may not be captured as residence is usually only reported to AANDC at the time of birth or death of an individual.
- Only registered First Nations are included in the registry so the non-registered population living On Reserve is not counted.

In this report, with the exception of the NIHB data, AANDC's On Reserve population counts are used as the denominator for all rate calculations.

1.3 REGIONAL HEALTH SURVEY

This report contains data from the First Nation Regional Health Survey (RHS) that was conducted between June 2008 and November 2010. The sample population for the RHS 2008-2010 was designed to represent the First Nation population living in First Nation communities in all provinces and territories, except Nunavut. Across Canada, 216 communities were included and five percent of the population was surveyed. Across the Atlantic Region, the RHS participants were selected from a total of 22 First Nation communities (1 First Nation Community in NL, 12 in NS, 2 in PEI, and 7 in NB). The Regional Health Survey is a First Nation governed survey of the On Reserve population. Data for this report is from the Atlantic Region, 2008-2010¹¹.

1.4 ABORIGINAL PEOPLES SURVEY

The Aboriginal Peoples Survey (APS) is a survey of First Nation people living Off Reserve, Metis, and Inuit. Data for this report is from the Atlantic Region, 2012.

1.5 OTHER CONSIDERATIONS ABOUT DATA SOURCES AND DATA

Ideally, health status information is reported by calendar year. However, as some FNIHB programs request data from communities based on fiscal year, there are some sections of this report that are reported by calendar year and some by fiscal year. It is important to note the time-frame of what is being reported, especially in reference to comparative information.

In an attempt to make the information in this report easier to read, we have rounded all numbers to the nearest whole number. In doing so, some totals no longer add up to 100%.



SECTION 2: COMMUNITY SURVEILLANCE PROJECT

2.1 WHY DID WE DO THE POPULATION HEALTH SURVEILLANCE CAPACITY DEVELOPMENT (PHSCD) PROJECT?

Context

Collecting and using health information at the *community level* and at *FNIHB* is a priority in both the Regional and National strategic plans.

Need

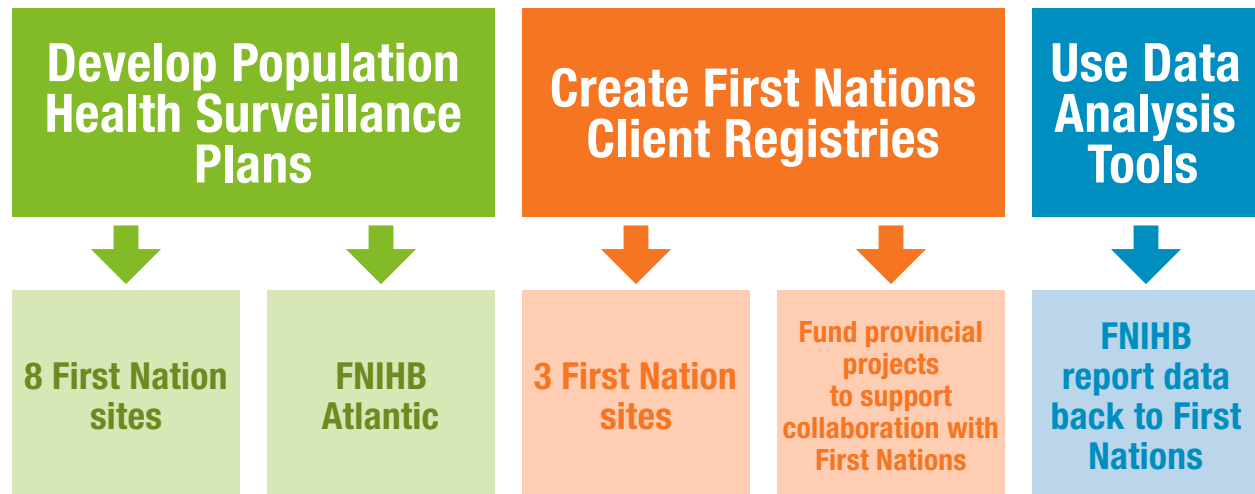
To meet this priority, capacity needs to be developed at the *community level* and at *FNIHB*.

Response

The PHSCD project aimed to build skills and processes for **collecting and using health information**.

2.2 WHAT WAS THE PHSCD PROJECT?

The PHSCD was a 5 year project (2008-2013). The objectives were:



The full project matrix (i.e. logic model) is in Appendix A.

2.3 WHAT DID WE LEARN FROM THIS PROJECT?

Overall, both the FNIHB and community projects were considered to be very successful. A community example of success is presented in the next section.

Key learnings from the project included:

- Over the course of the project, communities collected data on 50 indicators. We learned that it would be better to pick a smaller number of indicators and work them through the entire data cycle (collection, analysis and interpretation, reporting, and action). Why? Because it would be more manageable for communities and it would allow for quality improvement of data collection, analysis, and use.
- Some communities used their Electronic Medical Record (EMR) for data collection, and some tracked data on paper tools. We learned that there is still value in paper-based tracking tools. Why? Communities using an EMR reported many frustrations, including cost, difficulty with collection, and inability of their system to produce reports on the data entered.
- Reporting requirements of the project were documented in the Agreement Summary Forms that accompany contribution agreements. However, we learned that a more detailed

project plan would have been helpful. Why? This project was complex, involved many partners and spanned several years. A signed project plan would have supported stronger project management and clearer expectations for investments of time and money.

- Community health plans include indicators of progress toward community priorities. The PHSCD project developed community surveillance plans, which documented how health status indicators were to be collected, analysed, reported, and potential actions. We learned that surveillance plans should be created as part of the health planning process. Why? Communities selected indicators independent from the community health planning process, and they were not well used for annual reports on progress towards community priorities, or for outcomes in staff workplans.

2.4 HOW DID WE LEARN FROM THIS PROJECT?

FNIHB and community projects had annual meetings to share information (2008-2013). In 2013, an independent evaluator was hired to document the successes and lessons learned, as well as recommend next steps. In 2014, FNIHB drafted proposed actions in response to the evaluation and then sought feedback from community participants on our response. These learnings are being implemented through workplanning processes and ongoing work with communities. A full copy of the evaluation report and FNIHB response is available on request (email Atlantic_Epis@hc-sc.gc.ca).

2.5 WHAT DOES A HEALTH DIRECTOR HAVE TO SAY ABOUT DATA USE?

Interview with Elaine Allison, Health Director in Wagmatcook

Wagmatcook First Nation in Cape Breton, Nova Scotia, participated in the Population Health Surveillance Capacity Development Project. We asked Elaine Allison, Health Director, to share one of her data use success stories with us.

The Evidence

Health centre staff in Wagmatcook First Nation began to notice prescription drug misuse several years ago. Initially, their observation of the issue was purely anecdotal. As time passed they began to realize they were going to have to take specific action as the rates of misuse seemed to be increasing.

They started by looking at all the information sources they had. Information came from provincial partners, their Regional health authority, Cape Breton District Health Authority (CBDHA), their own Health Centre records, FNIHB Atlantic data (NIHB), and the wisdom of their community members. This information provided the evidence they needed to form an action plan toward reducing the misuse of prescription drugs in their community.

The Actions

Their first step was forming a Mental Health and Addictions team in the community to address the problem head on. They reallocated funds within their FNIHB contribution agreement to better align with their priority. They hired two social workers; one employed by the community and one an employee of CBDHA. The social workers and other health staff, such as the Nurse Practitioner and the Physician, took a team approach to addressing the issue.

The Successes

The Team's work in the community is two-fold. Firstly, they have increased awareness of the issue among community members, leadership, and other partners. Secondly, the Team provides outreach and services to community members who are abusing prescription medications. In the future, the Team hopes to expand into quantifying the impact it could have outside the community, given that the issue of prescription drug misuse extends beyond the community.

Throughout the process of gathering evidence, formulating actions, and monitoring/reporting outcomes, the community has built new relationships and strengthened existing ones. Annually, with their partners, the Team reviews their impact by revisiting the data. This will allow them to adapt their approach accordingly.



SECTION 3: SOCIAL ENVIRONMENT

3.1 WHY IS KNOWING ABOUT AGE DISTRIBUTION IMPORTANT?

Age and sex are two of the biggest influences on health. As such, they can also influence how accurate it is to compare one population to another. For example, First Nation communities tend to have a greater percentage of their population younger than 25 years of age compared to the general Canadian population. Therefore, you would expect to see higher levels of health issues that affect young people in First Nation communities, just because they have a greater proportion of young people.

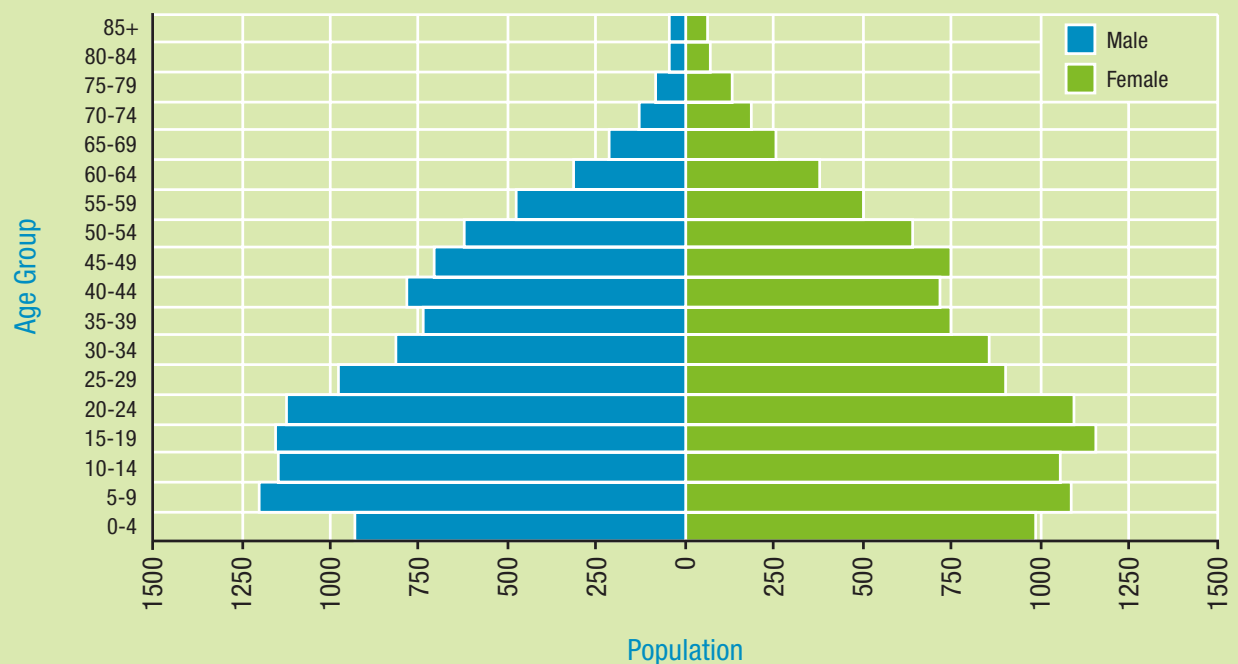
This Health Status Report compares averages for First Nation communities with provincial and national data. Knowing how different the age distributions are in comparison populations can help you interpret the results.

3.1.1 Population Counts and Trends

There was a total of 61,742 Registered Indians living in Atlantic Canada in 2013, both On and Off Reserve. Approximately 1 in 3 (37%) of the Registered Indian population lived On Reserve (23,082): 11,503 males and 11,579 females.

The graph below is showing the number of Registered Indians living On Reserve in 2013 for each age group and by sex.

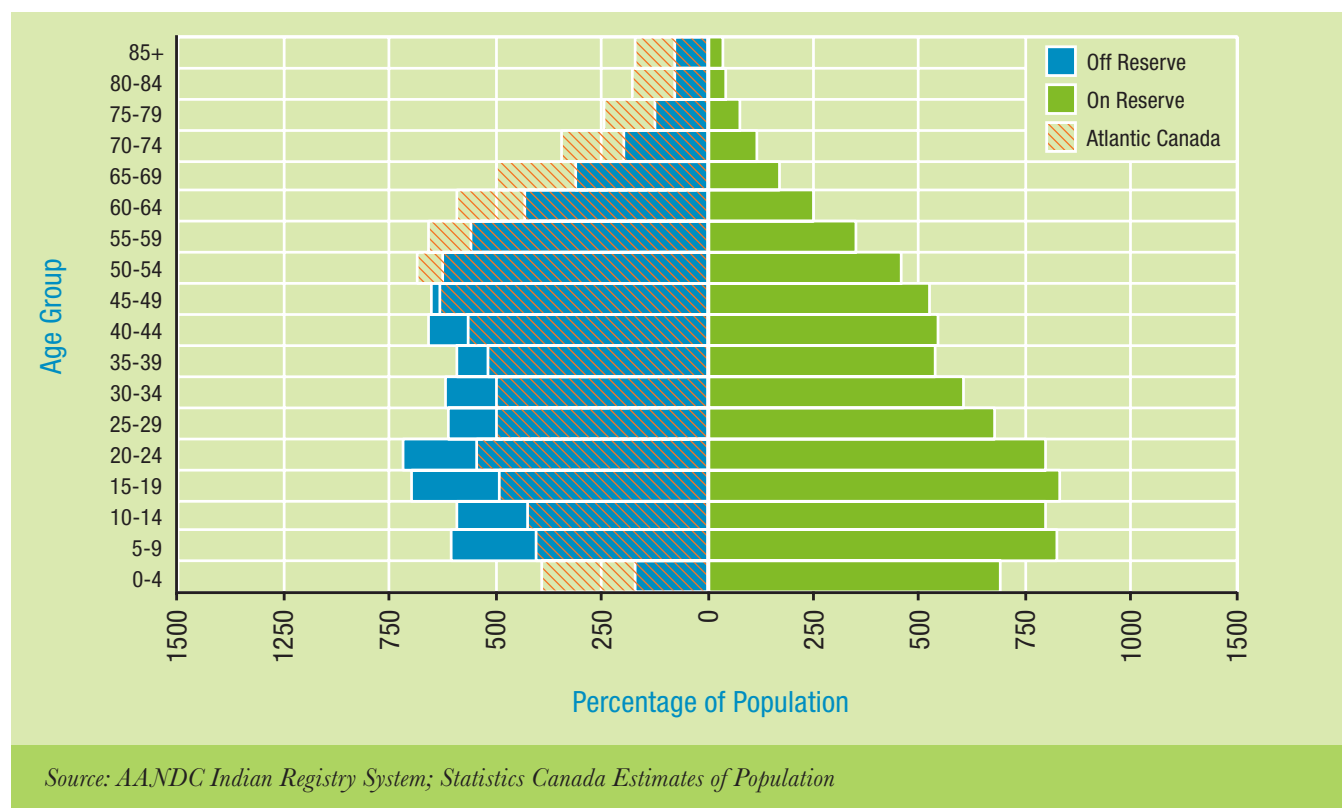
Figure 3.1 Total Population of Registered Indians Living On Reserve in Atlantic Canada by Age and Sex (2013)



Source: AANDC Indian Registry System

Comparison groups used in this report include the Atlantic Off Reserve population and the Atlantic Canadian population. Figure 3.2 shows that the On Reserve population has a greater percentage of younger people and a lesser percentage of senior citizens than these comparison populations.

Figure 3.2 Total Population of Registered Indians Living On and Off Reserve in Atlantic Canada, and General Atlantic Canada Population, by Age (2013)



In addition to the different distributions, these three populations are growing at different rates. Over the past 5 years:

- The On Reserve population grew by eight percent.
- The Off Reserve population, excluding Qalipu, grew by 13% (including the Qalipu it grew 84%).
- The general Atlantic Canadian population grew by four percent.

Over the past 5 years:

- The percentage of the population 24 years of age and under On Reserve decreased by three percent.
- The percentage of the population 65 years of age and older On Reserve increased by 15%.
- The amount of change over five years for First Nation On Reserve is similar to changes in the Atlantic Canadian population (that is, a four percent decrease in the Atlantic Canadian population aged 24 years and under and a 14% increase in the population aged 65 years and older).

3.2 HOW MANY PEOPLE ON RESERVE SPEAK A FIRST NATION LANGUAGE?

Seventy percent of both adult males and females On Reserve in Atlantic Canada understand or speak a First Nation language¹¹. Most describe themselves as “intermediate” to “fluent” for both listening and speaking (60%¹¹). By contrast, less than half (47%) of First Nation people On Reserve Nationally are able to speak a First Nation language¹².

Two First Nation languages in Atlantic Canada are among the 10 most spoken Aboriginal languages¹²:

- Innu/Montagnais is the 5th most reported Aboriginal language in Canada (10,965 speakers).
- Mi'kmaq is the 7th most reported Aboriginal language in Canada (8,030 speakers).

Maliseet was reported to be spoken by fewer than 500 people¹².

The majority of First Nation peoples who speak an Aboriginal language, reported it is the language that is most often used at home¹²:

- Eighty-nine percent of Innu/Montagnais speakers report mother tongue is most often used at home.
- Fifty-three percent of Mi'kmaq speakers report mother tongue is most often used at home.



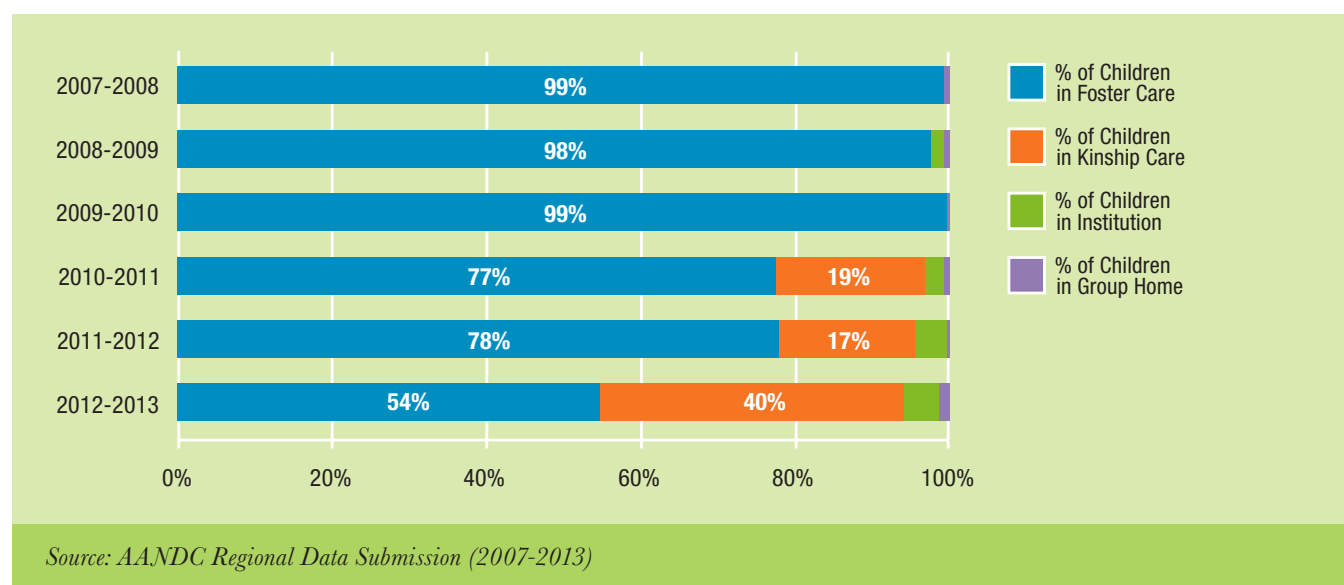
Technology is creating new ways to help learn language. For example, L'nui'suti is an app that helps teach Mi'kmaq words and phrases¹.



3.3 CHILDREN IN CARE

Children in care includes children age 18 years and younger and under in foster care, group homes, institutions, and kinship care. The majority of children in care are in foster care; however, this percentage has decreased from 99% to 55% over the past five years. At the same time, the percentage of children in kinship care has increased from zero percent to 40%.

Figure 3.3 Percentage of First Nation Children in Atlantic Canada in Care by Care Type (2007-2013)



In 2012-2013 there were 1,057 First Nation children in care in Atlantic Canada. This is approximately 13% of children. It is more than double the percentage of First Nation children in care nationally, and is 60% higher than the rate in previous years.

Table 3.1 Percentage of First Nation Children 18 Years of Age or Younger in Care, Atlantic Canada and Canada (2007-2013)

Reporting Year	Atlantic	Canada
2007-2008	8%	5%
2008-2009	7%	5%
2009-2010	7%	5%
2010-2011	7%	6%
2011-2012	8%	6%
2012-2013	13%	6%

Source: AANDC Regional Data Submissions (2007-2013)



SECTION 4: SELF-REPORTED HEALTH AND LIFESTYLE TRENDS

4.1 HOW DO FIRST NATION PEOPLE ON RESERVE IN ATLANTIC RATE THEIR HEALTH?

Males and females differ in perception of their overall health.

- Sixty percent of adult males rate their health as excellent or very good¹¹.
- Forty percent of adult females rate their health as excellent or very good¹¹.

Both sexes identified good diet, sleep and regular exercise as contributing to good health. Females also reported that good social supports and being happy/content were responsible. Forty percent of First Nation On Reserve adults reported that being in balance (physically, emotionally, spiritually and mentally) makes them healthy¹¹.

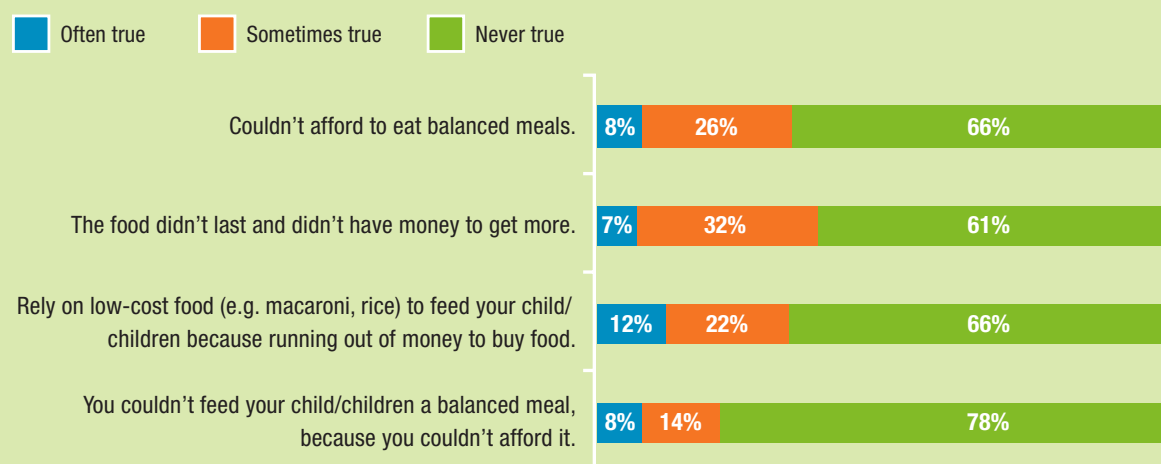
4.2 EATING PATTERNS AND FOOD SECURITY

First Nation adults On Reserve in Atlantic Canada were asked how often they ate a nutritious balanced diet¹¹:

- Twenty-five percent responded always or almost always.
- Fifty-seven percent responded sometimes.
- Eighteen percent responded rarely or never.

Food insecurity can make it hard to eat a balanced diet. Data from the Atlantic Region RHS suggests that 20% of adults had to cut the size of their meal or skip a meal in the past year because there was not enough food¹¹. Among indicators of food insecurity, not being able to afford to feed a child a balanced meal was least likely to be true.

Figure 4.1 Percentage of Atlantic First Nation Adults On Reserve by Food Insecurity Indices (2008-2010)



Source: Atlantic Roll-Up of RHS (2008-2010).

The RHS Atlantic responses to food insecurity questions indicate a larger problem than experienced in the general Atlantic population. Depending on the type of food insecurity, rates in Atlantic Canada have been reported as¹³:

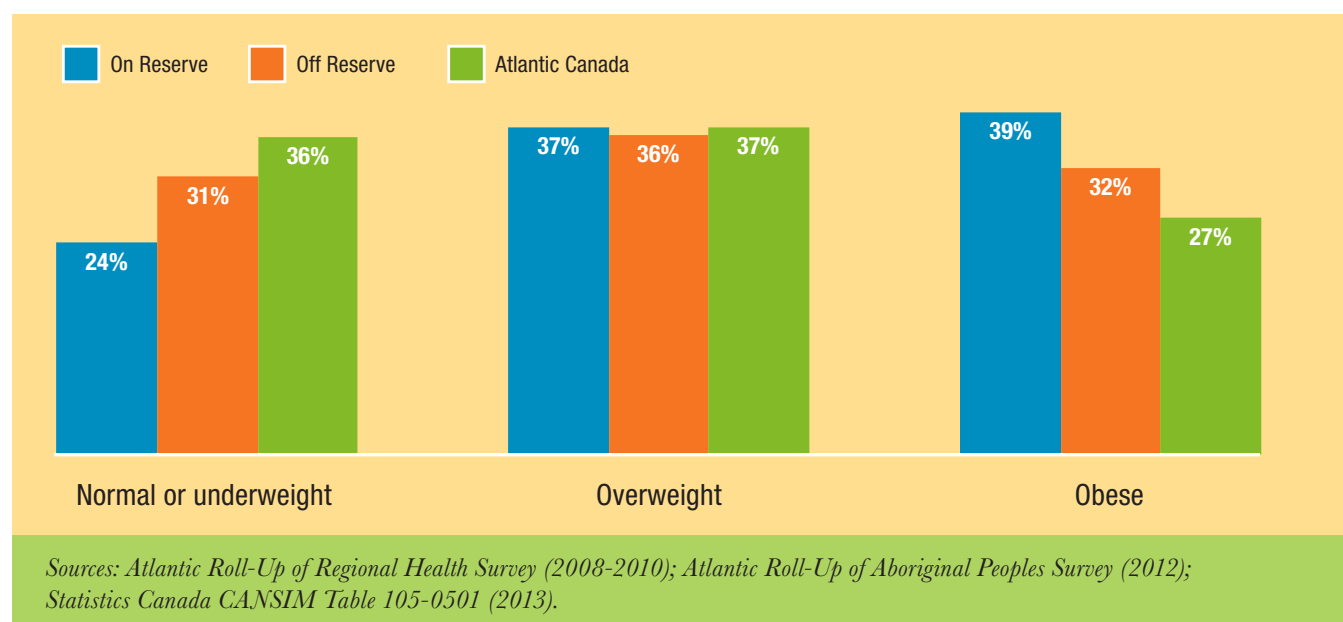
- New Brunswick: between three percent and seven percent of the population.
- Nova Scotia: between three percent and nine percent of the population.
- Prince Edward Island: between three percent and nine percent of the population.
- Newfoundland and Labrador: between two percent and six percent of the population.

4.3 BODY WEIGHT

Rates of obesity are higher for First Nation adults both On and Off Reserve compared to Atlantic Canada as a whole (Figure 4.2). Comparing On and Off Reserve:

- First Nation adults On Reserve have higher obesity rates (39%) than those living Off Reserve (32%).
- Seventy-five percent of First Nation adults living On Reserve are overweight or obese, compared to 69% of First Nation adults living Off Reserve^{11, 14}.

Figure 4.2 Percentage of Nation Adults On and Off Reserve and the Atlantic Canadian Population by Weight Category



Overweight and obesity are major risk factors for a number of chronic diseases, including diabetes, cardiovascular diseases and cancer. Obesity is closely tied to eating patterns, which may in turn be related to socioeconomic status. Globally, risk of obesity are present and growing even in lower income Regions².

Overweight and obesity is an important public health concern across Canada. The Atlantic Provinces have among the highest rates of obesity in Canada, with about 30% of the population estimated to be obese¹⁵.

“Overweight and obesity are defined as abnormal or excessive fat accumulation that presents a risk to health. A crude population measure of obesity is the body mass index (BMI), a person’s weight (in kilograms) divided by the square of his or her height (in metres). A person with a BMI of 30 or more is generally considered obese. A person with a BMI equal to or more than 25 is considered overweight.”
World Health Organization, 2015²

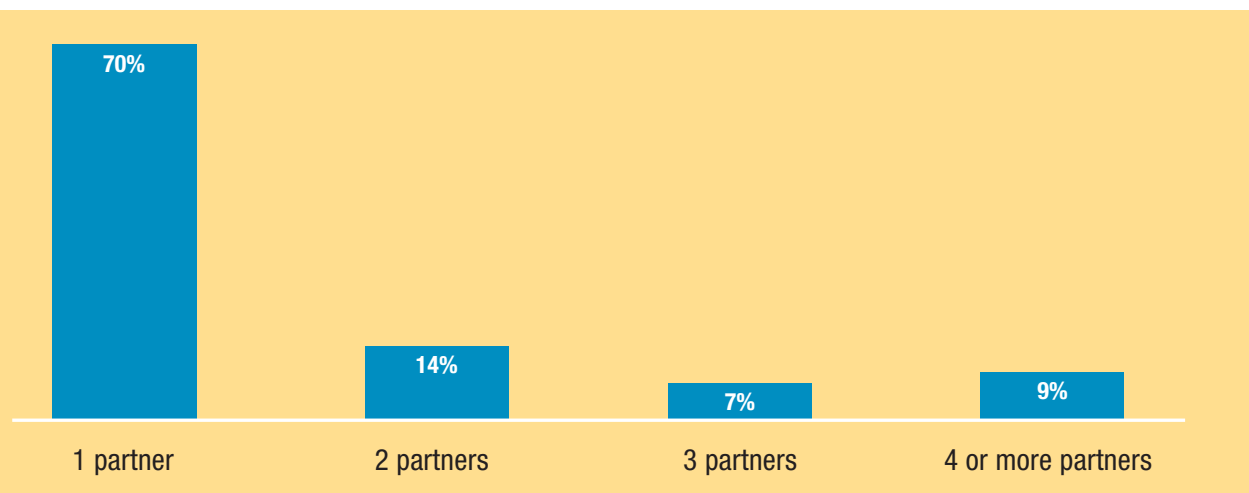


4.4 SEXUAL HEALTH

4.4.1 Sexual Behavior

Among First Nation adults who are sexually active, 70% report having only one partner in the past 12 months and 16% report having three or more partners (Figure 4.3).

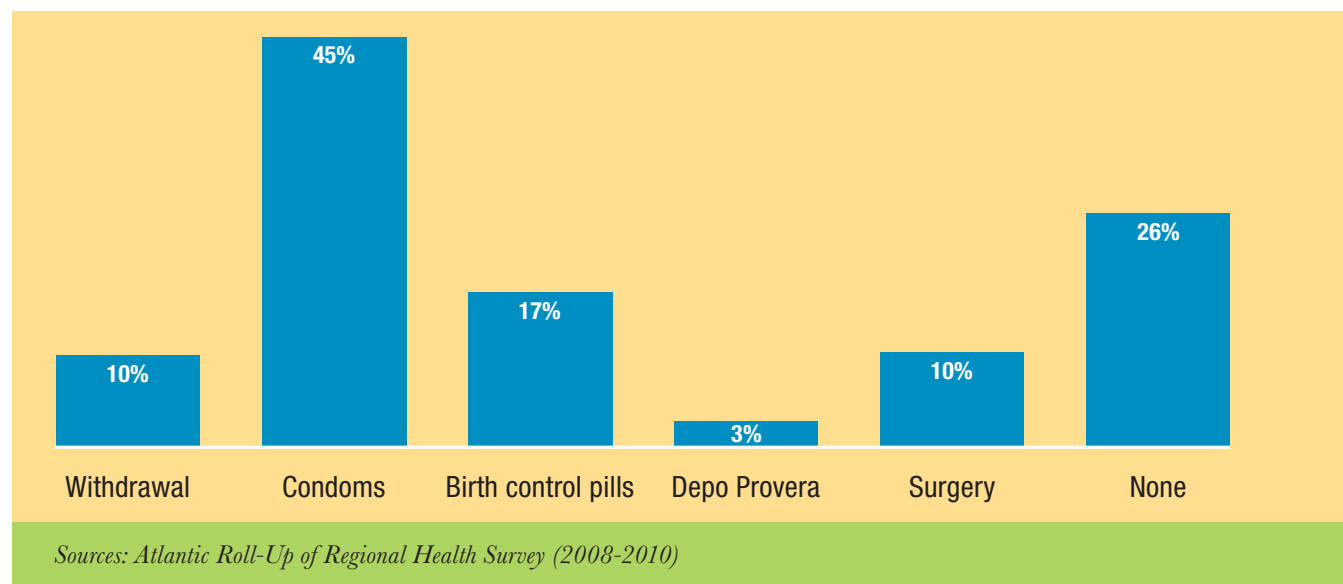
Figure 4.3 Percentage Sexually Active First Nation Adults On Reserve in Atlantic Canada by Number of Sexual Partners in the last 12 months (2008-2010)



Sources: Atlantic Roll-Up of Regional Health Survey (2008-2010)

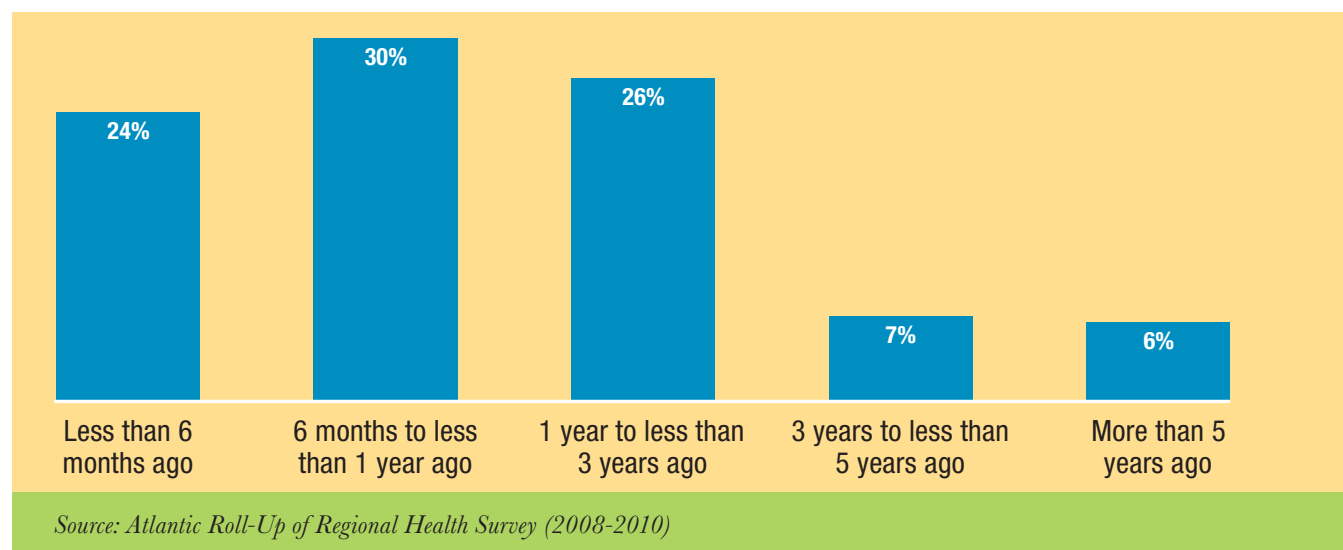
Of those sexually active, 26% reported using no birth control method. Condoms were the most common form of birth control method reported, used by nearly half of sexually active adults (45%, Figure 4.4).

Figure 4.4 Percentage Sexually Active First Nation Adults On Reserve in Atlantic Canada by Birth Control Method (2008-2010)



Eighty percent of First Nation adult females On Reserve in Atlantic Canada have had a Pap smear within the past 3 years (Figure 4.5). This is comparable to the Atlantic Canada population¹⁶.

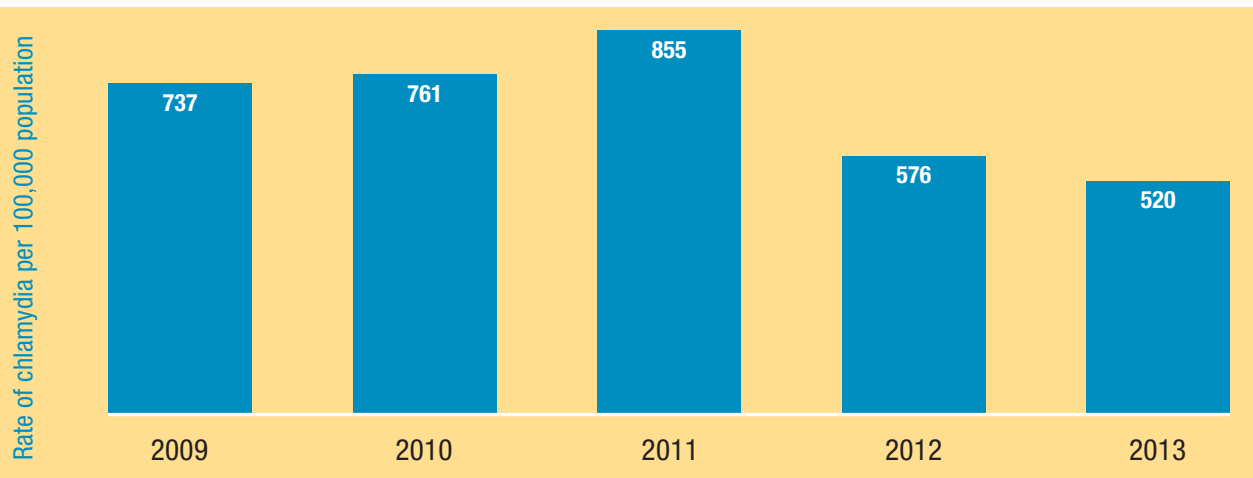
Figure 4.5 Percentage First Nation Adult Females On Reserve in Atlantic Canada Who Have Had a Pap Smear by Length of Time Since Last Pap Smear (2008-2010)



4.4.2 Chlamydia Rates

Chlamydia rates On Reserve in Atlantic Canada have been decreasing since 2011.

Figure 4.6 Chlamydia Rates (per 100,000 people) Among Atlantic First Nations On Reserve (2009-2013)



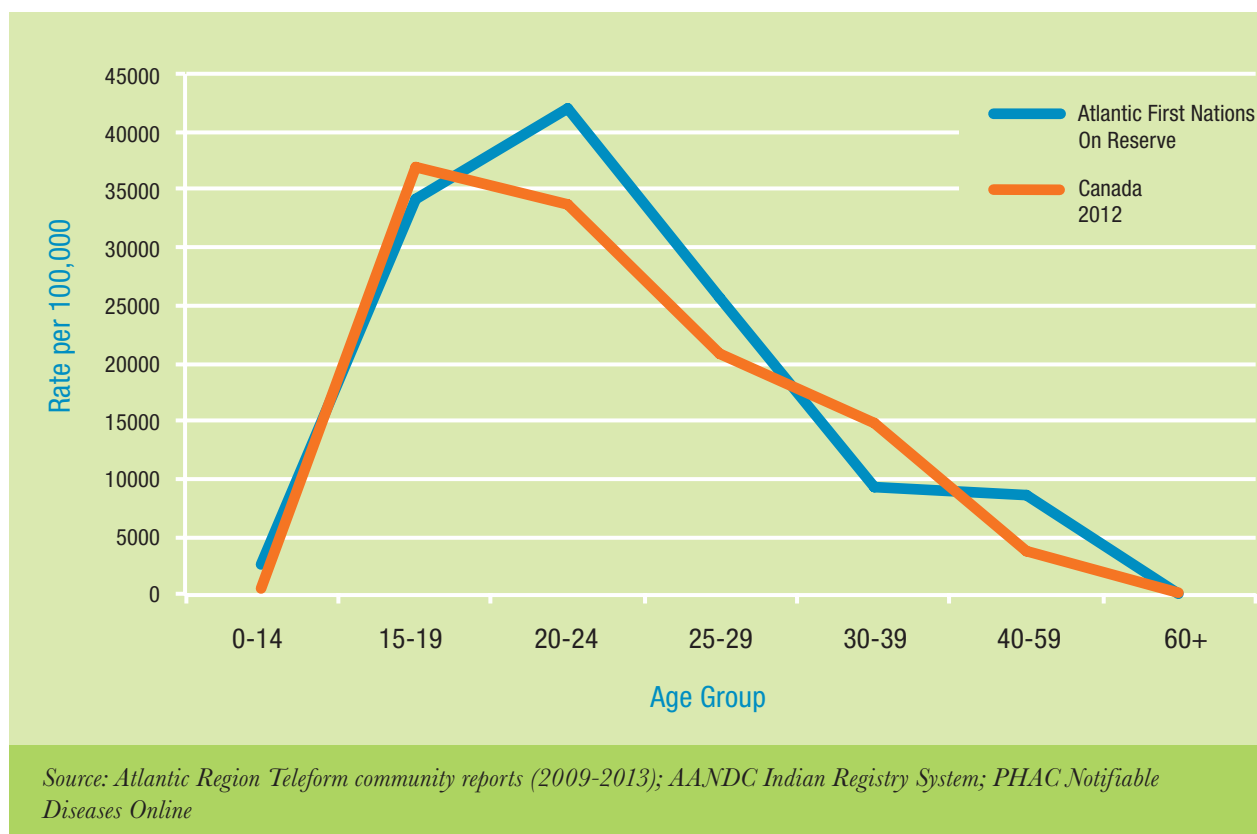
Source: Atlantic Region Teleform community reports (2009-2013); AANDC Indian Registry System

The rates of Chlamydia are decreasing, but are still higher On Reserve than the Atlantic Canadian population. How much higher are they? As noted in Section 3, the age breakdown between First Nation people living On Reserve and the Canadian population are different. Can comparisons between these populations be made more accurate? Yes, standardized rates can help compare populations when the age and/or sex breakdowns of the two populations are different. When adjusting for the difference in age structure (Table 4.6), the difference in Chlamydia rates per 100,000 people between First Nations On Reserve and general Canadian rates appears much smaller. First Nation rates are noticeably higher for ages 20-29, as well as for ages 40-59 (Figure 4.7). Similar to the Canadian population, chlamydia rates are higher for females than males.

Table 4.1 Chlamydia Rates per 100,000, Crude and Standardized Rates

	On Reserve Atlantic Canada Rates 2013	Canada Rates 2012
Crude Rate (not adjusted for age)	520	290
Standardized Rate	447	395

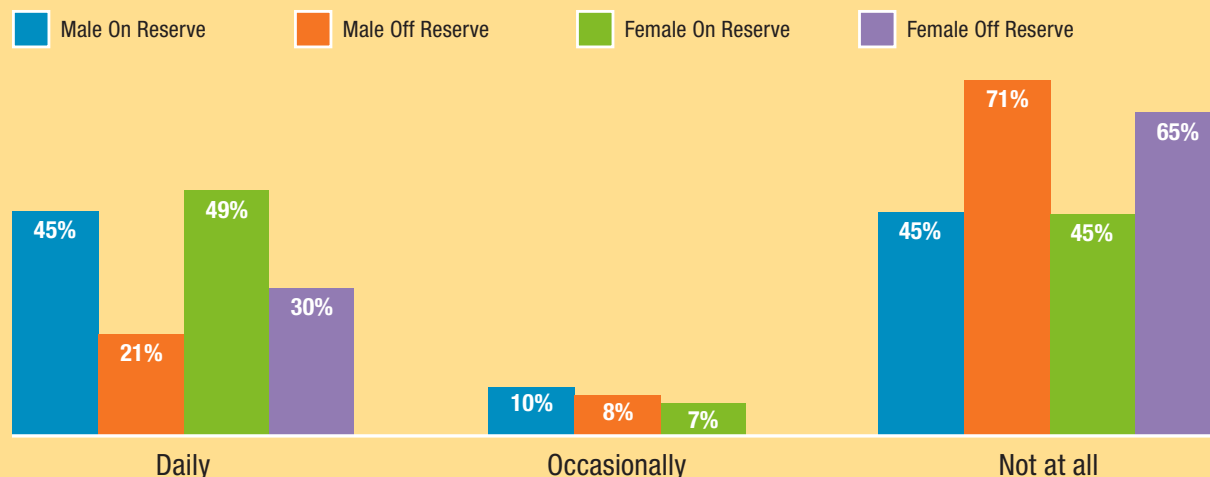
Source: Atlantic Region Teleform community reports; AANDC Indian Registry System; PHAC Notifiable Diseases Online. Standardized to the 1991 Canadian population.

Figure 4.7 Standardized Chlamydia Rates per 100,000 Atlantic On Reserve and Canadian by Age Group

4.5 SMOKING AND SMOKING CESSATION

Forty-seven percent of First Nation adults living On Reserve in Atlantic Canada are daily smokers, compared to 26% First Nation adults living Off Reserve (Figure 4.8). For both On and Off Reserve, females are slightly more likely to be daily smokers than males.

Figure 4.8 Percentage of First Nation Adults On and Off Reserve by Smoking Habits and Sex (2008-2010)



Sources: Atlantic Roll-Up of Regional Health Survey (2008-2010); Atlantic Roll-Up Aboriginal Peoples Survey (2012)

For First Nation adults in Atlantic Canada, 65% On Reserve report living in a smoke free home, compared to 87% Off Reserve^{11, 14}.

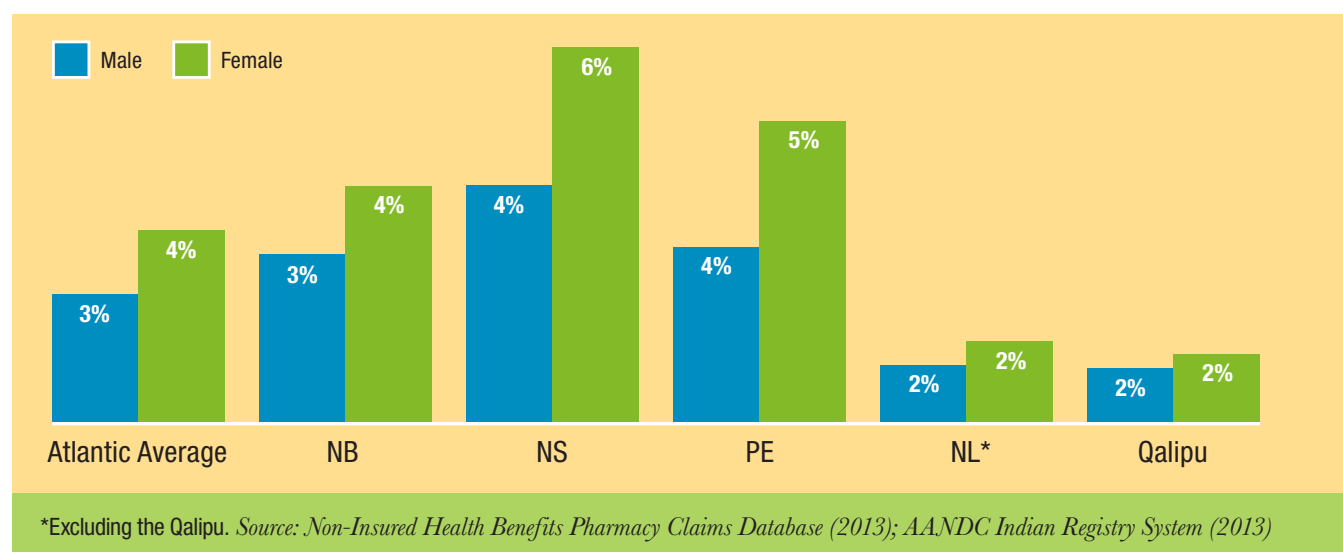
There are various ways to quit smoking; from “cold turkey” to behavioral and clinical interventions. Nicotine replacement therapies, such as Nicoderm®, Nicorette®, Champix®, and Zyban®, can help people quit smoking and are funded by NIHB.

Over the past five years, the percentage of First Nation adults in Atlantic making a claim for a smoking cessation product has decreased. We do not know why these rates are trending downwards, however we do know that:

- Nova Scotia band members consistently have the highest percentage of population making claims for smoking cessation products over the past five years.
- Newfoundland and Labrador band members consistently have the lowest percentage of population making claims for smoking cessation products over the past five years.
- The rates for smoking cessation products for the Qalipu are similar to or higher than for other First Nation adults in Newfoundland and Labrador.

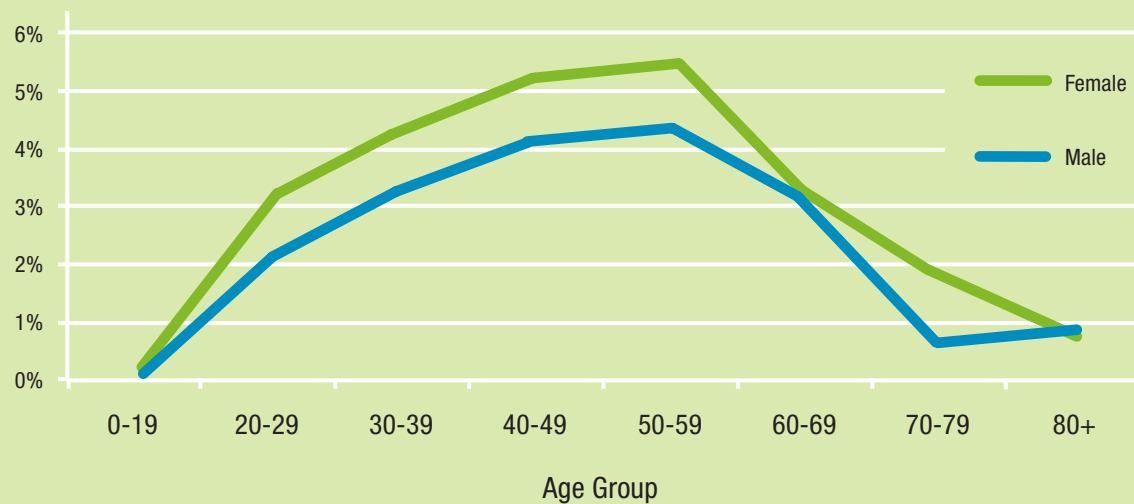
For all four Provinces, females are more likely than males to make a claim for a smoking cessation product for all age groups up to age 80.

Figure 4.9 Prevalence of Smoking Cessation Claimants Among Atlantic Region Band Members (2013)



The percentage of the population making a claim for smoking cessation products increases with each age group up to age 60, after which it decreases.

Figure 4.10 Prevalence of Smoking Cessation Claimants Among Atlantic Region Band Members by Age and Sex (2013)

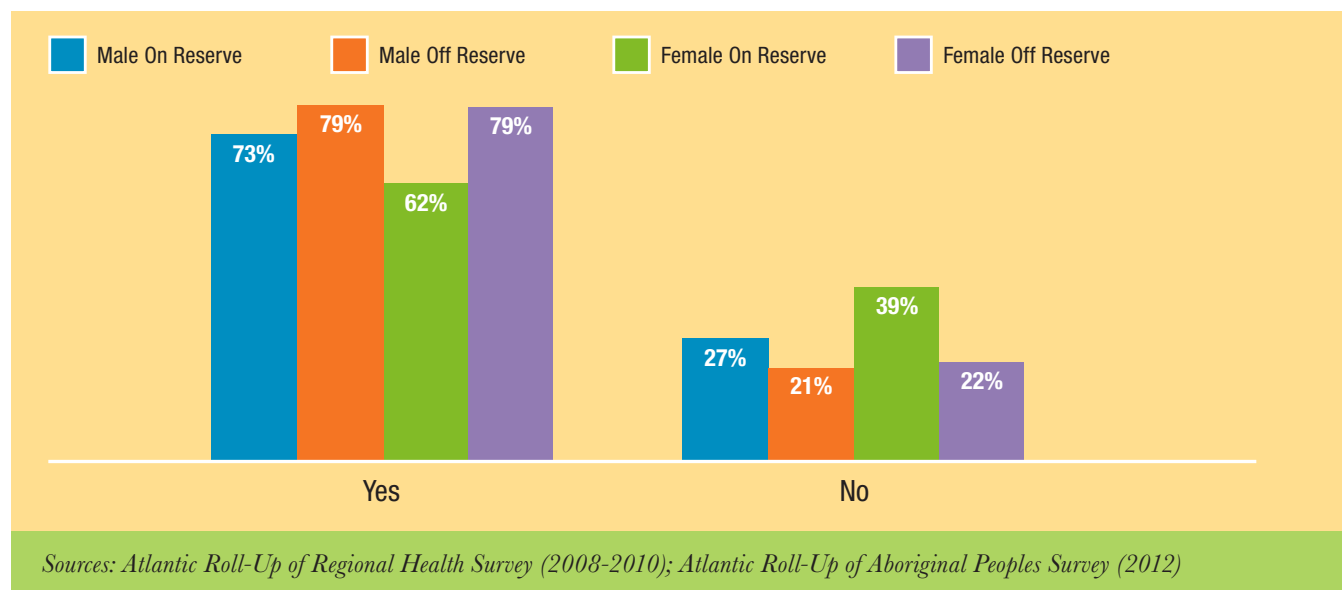


Source: Non-Insured Health Benefits Pharmacy Claims Database (2013); AANDC Indian Registry System (2013)

4.6 ALCOHOL USE

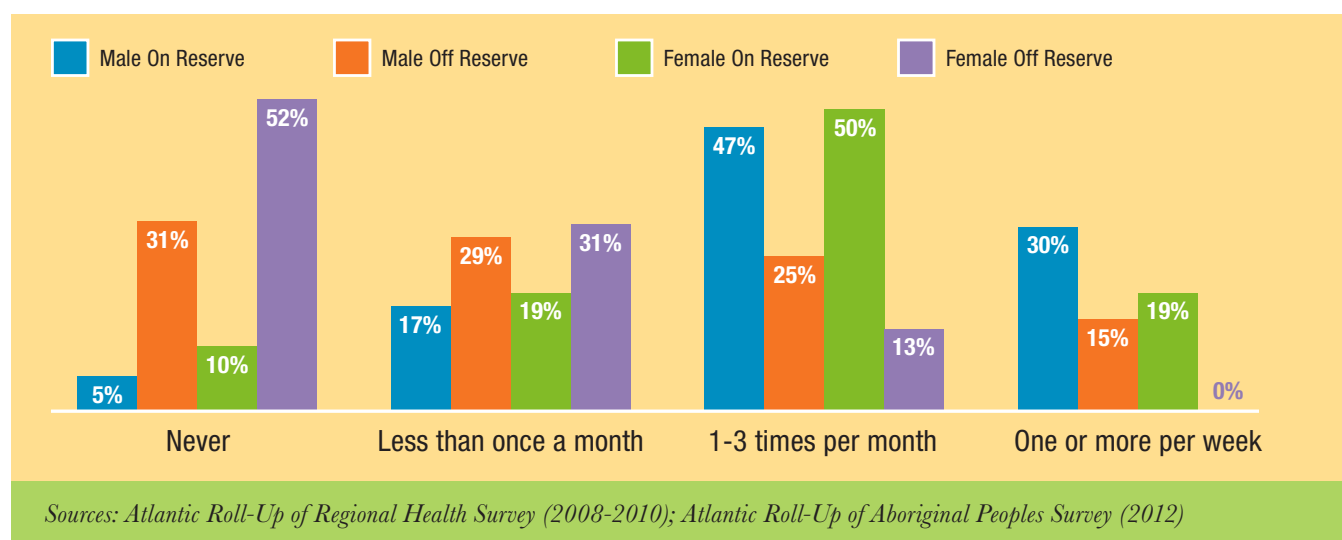
Sixty-seven percent of First Nation adults On Reserve in Atlantic Canada reported having a drink of beer, wine, liquor or any other alcoholic beverage within the past 12 months. This is compared to nearly 80% of First Nation adults living Off Reserve (Figure 4.11). On Reserve females were less likely to have consumed alcohol than males (62% versus 73%); however, Off Reserve males and females were equally likely to have had a drink (79% versus 79%).

Figure 4.11 Percentage of First Nations Adults On and Off Reserve by Alcohol Consumed in the Past 12 Months



First Nation males and females living On Reserve both report higher rates of alcohol consumption than their Off Reserve counterparts. Seventy-five percent of adults On Reserve in Atlantic Canada report having five or more drinks at a time at least once per month over the past 12 months, compared to 27% of those living Off Reserve.

Figure 4.12 Percentage First Nation Adults On and Off Reserve in Atlantic Canada by Consuming 5 or More Alcoholic Beverages at Once



SECTION 5: PHYSICAL HEALTH

5.1 CHRONIC DISEASES

5.1.1 Diabetes

Seven percent of Atlantic Region band members made a claim for an antidiabetic medication in 2013[†]. This percentage is higher than for the general population of the Atlantic Provinces.

Table 5.1 Standardized Prevalence of NIHB Antidiabetic Claimants (2013) and Provincial Diabetes Rates (2008-2009)

	Standardized First Nation Rate	Standardized Provincial Rate
New Brunswick	7%	6%
Nova Scotia	9%	6%
Prince Edward Island	7%	6%
Newfoundland and Labrador*	10%	7%
Qalipu	4%	

*Excluding Qalipu. Source: *Non-Insured Health Benefits Pharmacy Claims Database (2013)*; *AANDC Indian Registry System (2013)*; *Diabetes in Canada*; Standardized to the 1991 Canadian Population

Over the past five years, there has been a steady increase in the NIHB claimants in the Atlantic Region who made a claim for antidiabetic medications.

[†] The exact numbers of First Nation people living On Reserve with diabetes is unknown. There is no systematic reporting or surveillance of diabetes in First Nation communities in Atlantic Canada. In the absence of surveillance systems, Health Canada's NIHB pharmacy claims database was used to identify First Nation people registered to Atlantic region bands (both On and Off Reserve) who had a claim for an antidiabetic medication (i.e. pills taken by mouth and/or injectable insulin). This measure is being used to estimate diabetes prevalence.



Table 5.2 Percentage Increase in the Prevalence of NIHB Antidiabetic Medication Claimants (2009-2013)

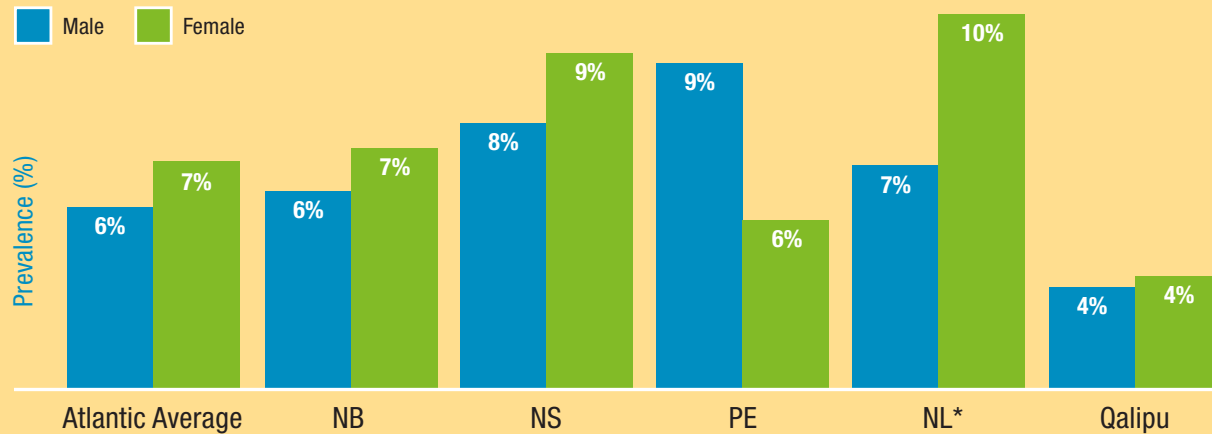
Province	Percentage Increase (2009-2013)
New Brunswick	14% ↑
Nova Scotia	6% ↑
Prince Edward Island	5% ↑
Newfoundland and Labrador*	32% ↑

*Excluding Qalipu. Source: Non-Insured Health Benefits Pharmacy Claims Database (2009-2013); AANDC Indian Registry System (2009-2013)

For band members in each Province, the five-year average of number of new claimants for antidiabetic medications per year (incidence rate) is approximately one percent. Band members in Newfoundland and Labrador (excluding the Qalipu) have higher incidence rates than the other Provinces.

With the exception of Prince Edward Island, First Nation females were more likely than males to have a claim for an antidiabetic medication in 2013. This trend is opposite to the general Atlantic Canadian population, where males have consistently higher rates of diabetes than females¹⁷.

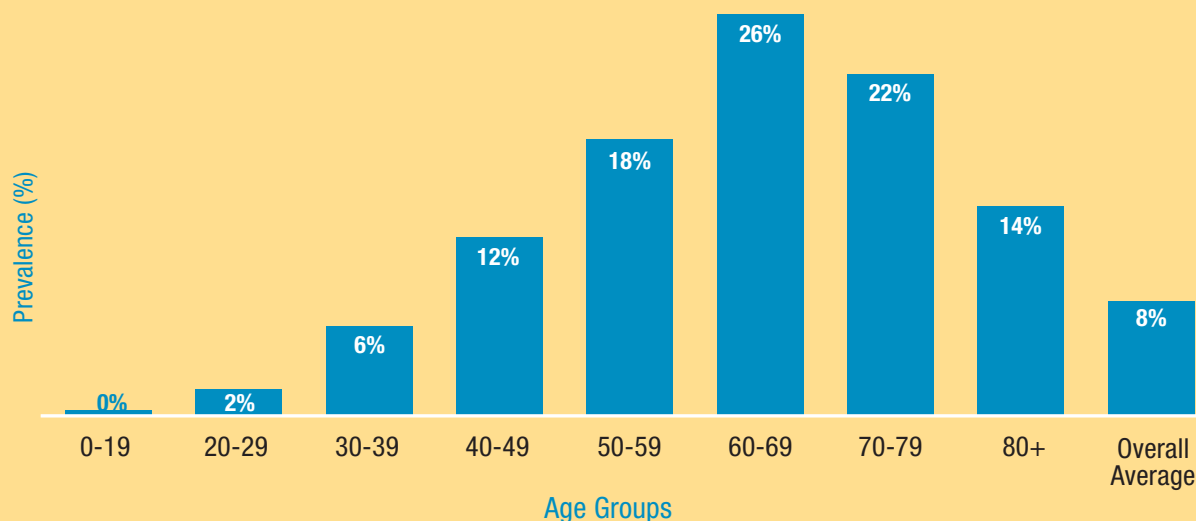
Figure 5.1 Prevalence of NIHB Antidiabetic Medication Claimants Among Atlantic Region Band Members by Sex (2013)



*Excluding the Qalipu. Source: Non-Insured Health Benefits Pharmacy Claims Database (2013); AANDC Indian Registry System (2013)

The percentage of antidiabetic medication claimants by age was similar among Atlantic Region band members from all 4 provinces (excluding the Qalipu). Figure 5.2 shows that the rates increase steadily up to age 60-69 years, after which they start to decrease. In the general Canadian population diabetes rates increase in prevalence up to age 75-79 years¹⁸.

Figure 5.2 Percentage of NIHB Antidiabetic Medication Claimants Among Atlantic Region Band Members by Age Group (2013)



Source: Non-Insured Health Benefits Pharmacy Claims Database excluding the Qalipu (2013); AANDC Indian Registry System (2013); Diabetes in Canada; Standardized to the 1991 Canadian Population

Eighty percent of First Nations On Reserve with diabetes have Type 2 diabetes¹¹. Forty percent of those who reported they have diabetes, also reported activity limitations¹¹.

FNIHB funds the Aboriginal Diabetes Initiative, which exists to improve the health of First Nations people living with Type 2 diabetes. In the Atlantic Region in 2013-2014:





- Nine percent of the population received non-diagnostic diabetes screening.
- Seventeen percent of the population attended a diabetes education clinic.
- Nine percent of the population attended a foot care clinic.

Source: Atlantic Region CBRT Reports (2013-2014)

5.1.2 Cardiovascular Disease

Sixteen percent of Atlantic Region band members made a claim for a cardiovascular disease medication in 2013[‡]. Over the past five years, the percentage of First Nation peoples making claims has fluctuated, with no clear trends across provinces.

Table 5.3 Percentage Increase in the Prevalence of NIHB Antidiabetic Medication Claimants (2009-2013)

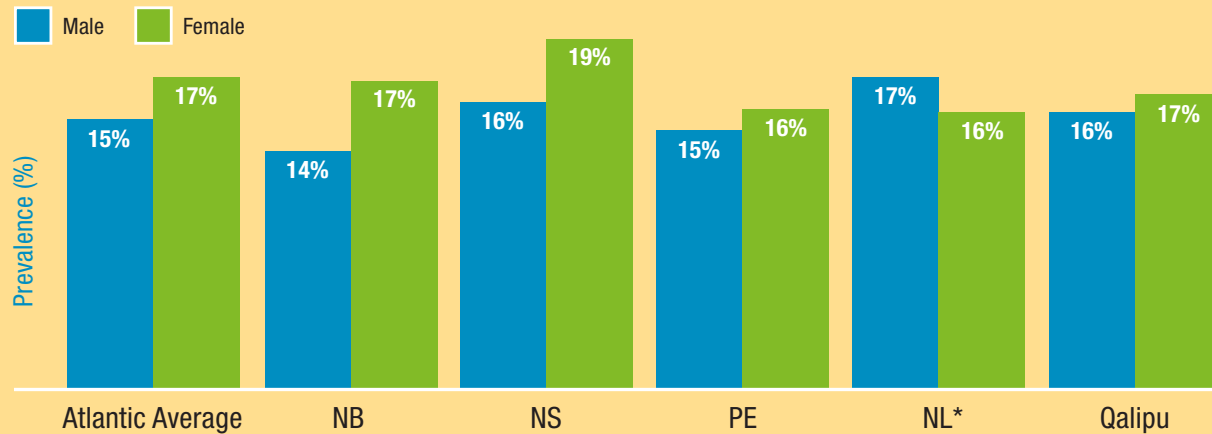
Province	Percentage Change (2009-2013)
New Brunswick	1% 
Nova Scotia	5% 
Prince Edward Island	1% 
Newfoundland and Labrador*	17% 

*Excluding Qalipu. *Source: Non-Insured Health Benefits Pharmacy Claims Database (2009-2013); AANDC Indian Registry System (2009-2013)*

With the exception of Prince Edward Island, First Nation females were more likely than males to have a claim for a cardiovascular disease medication in 2013. This trend is opposite to the rest of Canadians, where males report higher rates of heart disease than females¹⁷.

‡ It is difficult to know the exact numbers of First Nations On Reserve with cardiovascular disease as there is no systematic reporting or surveillance of cardiovascular diseases in First Nation communities in Atlantic Canada. In the absence of surveillance systems, Health Canada's NIHB pharmacy claims database was used to identify First Nations registered to Atlantic region bands (both on and off reserve) that had a claim for cardiovascular medications (including diuretics) for heart disease and stroke.

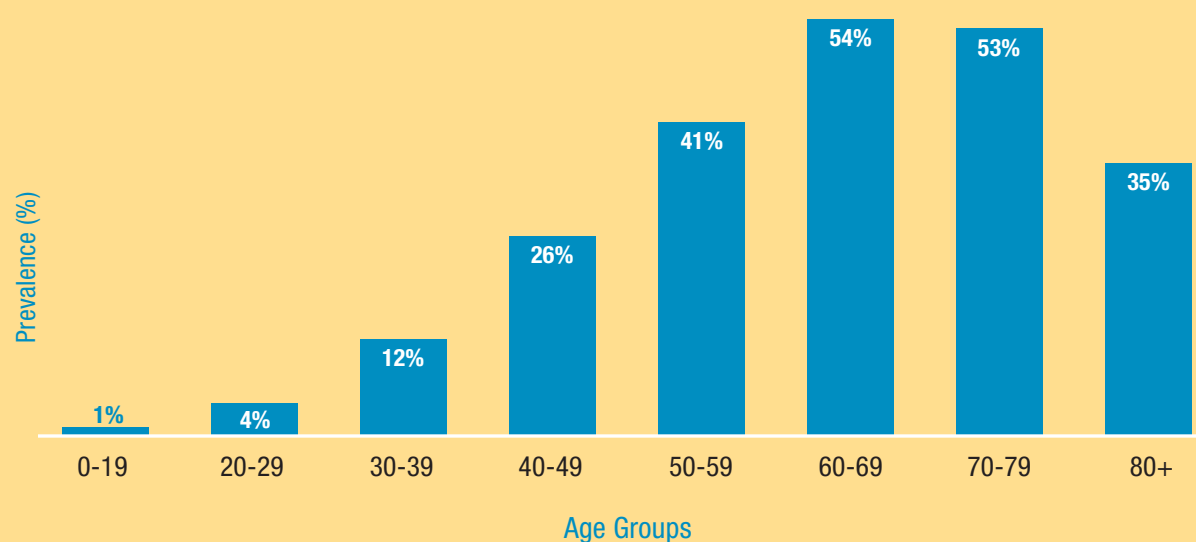
Figure 5.3 Prevalence of Cardiovascular Disease Medication Claimants Among Atlantic Region Band Members by Sex (2013)



*Excluding the Qalipu. Source: Non-Insured Health Benefits Pharmacy Claims Database (2013); AANDC Indian Registry System (2013)

The percentage of cardiovascular disease medication claimants by age was similar among Atlantic Region band members from New Brunswick, Nova Scotia, Prince Edward Island, and Newfoundland and Labrador (excluding the Qalipu). Figure 5.4 shows that the rates increase steadily up to age 60-69 years, after which they start to decrease. The trends for sex and age for cardiovascular disease medications are similar to the trends for antidiabetic medications.

Figure 5.4 Prevalence of Cardiovascular Medication Claimants Among Atlantic Region Band Members by Age Group (2013)



Source: Non-Insured Health Benefits Pharmacy Claims Database (2013); AANDC Indian Registry System (2013)

5.1.3 Respiratory Diseases

Rates of self-reported respiratory diseases are similar to slightly lower for Atlantic First Nation adults On Reserve as compared to Off Reserve^{11, 14, 19}. The rates are similar to slightly higher than what is reported for the Atlantic Provinces^{20, 21}.

Table 5.4 Prevalence of Self-Reported Respiratory Diseases by Adults, On Reserve, Off Reserve, and Atlantic Provinces

	Atlantic First Nations On Reserve	Atlantic First Nations Off Reserve	New Brunswick	Nova Scotia	Prince Edward Island	Newfoundland and Labrador
Chronic Bronchitis	5%	6%	4%	5%	5%	5%
Asthma	11%	15%	10%	9%	8%	8%

Source: Atlantic Roll-Up Regional Health Survey (2008-2010); Atlantic Roll-Up Aboriginal Peoples Survey, (2012); Statistics Canada CANSIM table 105-0501

5.1.4 Arthritis

Rates of self-reported arthritis for Atlantic First Nation adults On Reserve are lower than Off Reserve but higher than the Canadian rate^{11, 14, 22}.

Table 5.5 Prevalence of Self-Reported Arthritis by Adults, On Reserve, Off Reserve, and Canada

	Atlantic First Nations On Reserve	Atlantic First Nations Off Reserve	Canada
Arthritis	20%	26%	16%

Source: Atlantic Roll-Up Regional Health Survey (2008-2010); Atlantic Roll-Up Aboriginal Peoples Survey (2012); Statistics Canada CANSIM table 105-0501

5.1.5 High Blood Pressure

Rates of self-reported high blood pressure for Atlantic First Nation adults On Reserve are similar to the rates both Off Reserve and Atlantic Canadian rates^{11, 14, 17}.

Table 5.6 Prevalence of Self-Reported High Blood Pressure by Adults, On Reserve, Off Reserve, and Atlantic Provinces

	Atlantic First Nations On Reserve	Atlantic First Nations Off Reserve	New Brunswick	Nova Scotia	Prince Edward Island	Newfoundland and Labrador
High Blood Pressure	23%	25%	23%	22%	22%	25%

Source: Atlantic Roll-Up Regional Health Survey (2008-2010); Atlantic Roll-Up Aboriginal Peoples Survey (2012); Canadian Community Health Survey 2007 (as reported in *Tracking Heart Disease and Stroke in Canada*¹⁷).

5.2 NOTIFIABLE DISEASES

Atlantic Region First Nation communities report notifiable diseases to FNIHB on a monthly basis via the Teleform reporting system. The most commonly reported notifiable disease between 2009 and 2013 was chlamydia.

Table 5.7 Number of Notifiable Disease Cases Reported by First Nation Communities in Atlantic Region to FNIHB (2013)

Notifiable Disease	Number of cases Reported to FNIHB 2013
Chlamydia	120
Methicillin-Resistant Staphylococcus Aureus (MRSA)	75
Hepatitis C	23
Louse/Tick Borne	13
Chickenpox	9

Source: Atlantic Region Teleform Reports (2013) for Notifiable Diseases with 5 or more cases.



SECTION 6: MENTAL, EMOTIONAL AND SPIRITUAL HEALTH

6.1 MENTAL AND EMOTIONAL HEALTH

Available information on indicators for mental and emotional health from the RHS includes self-mastery and psychological distress.

6.1.1 Self-Mastery

The RHS used the Self-Mastery Scale developed by Pearlin and Schooler²³. This scale is made up of seven questions. RHS participants rated their level of agreement from “strongly disagree” to “strongly agree.” A participant’s total score for all seven questions was used to measure how much control people felt they had over their lives.

In the Atlantic Region, approximately 90% of respondents said they “agreed” or “strongly agreed” with each of the following statements¹¹:

- 1.They can solve the problems that they have.
- 2.No one pushes them around in life.
- 3.They have control over the things that happen to them.
- 4.They can do just about anything they set their mind to.
- 5.What happens in the future mostly depends on them.

However, approximately 30% “agreed” or “strongly agreed” that¹¹:

- 6.They often feel helpless in dealing with the problems of life.
- 7.There is little they can do to change many of the important things in their life.

In the Atlantic Region, there was no difference between how males and females answered the seven questions¹¹.

Nationally, lower levels of mastery were reported by those who had experienced physical and verbal aggression. Higher levels of mastery were reported by RHS participants with low and moderate levels of psychological distress²³.

6.1.2 Psychological Distress

Nationally, about half of the adults who participated in the 2008-2010 RHS reported moderate or high levels of psychological distress. In the general Canadian population, the proportion is about one-third²³. Despite higher levels of distress, the RHS participants’ risk factors were found to be similar to national trends:

- Males reported lower levels of psychological distress than females.
- Adults without a high school education were more likely to report high distress levels.
- Adults over 50 reported lower distress.

Nationally, the RHS reported that the majority of adults in First Nation communities reported a low level of psychological distress, despite a high prevalence of stressors. However, those who had attended residential school reported higher levels of psychological distress than First Nation adults who had not attended residential school.

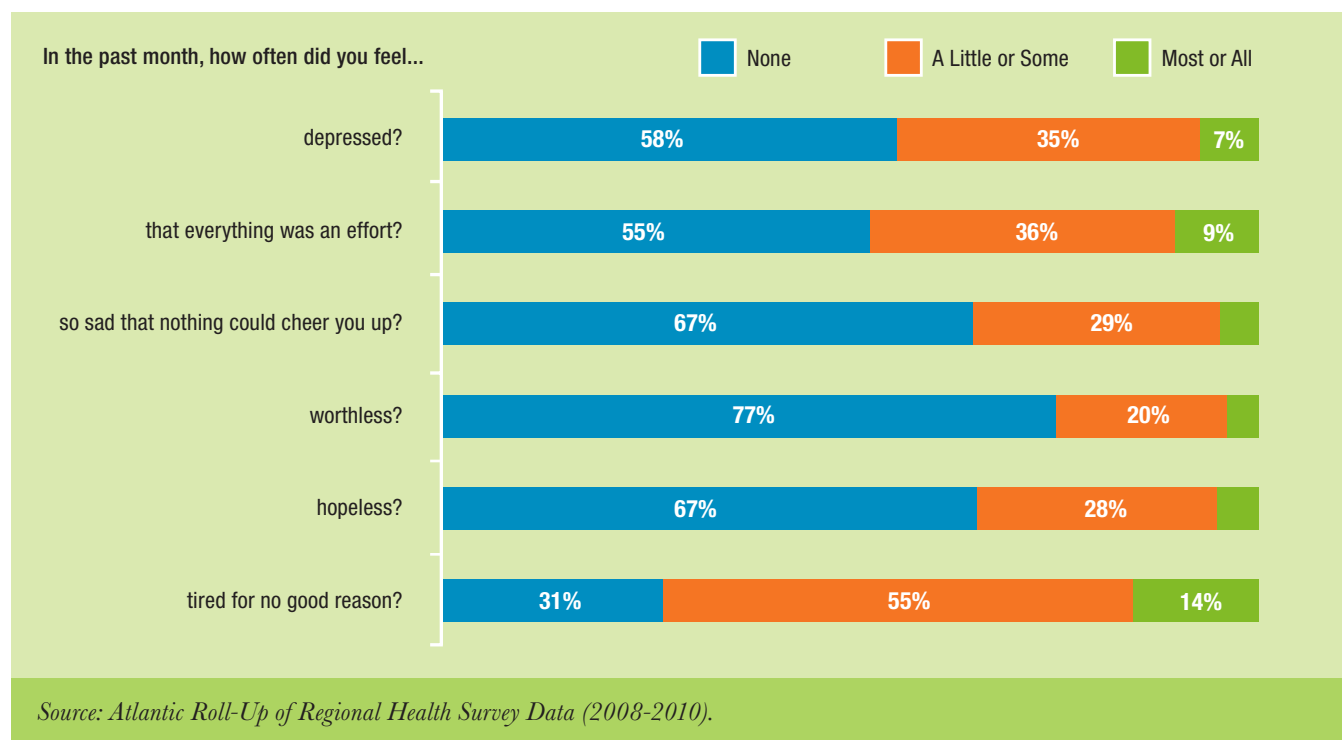
Stressors in Atlantic Region were similar to those reported by RHS respondents across Canada:

- Approximately 30% of Atlantic respondents stated they had personally experienced racism in the past year (33% for RHS participants across Canada).
- Approximately ten percent of Atlantic respondents reported that a close friend or family member had committed suicide in the past year (12% for RHS participants across Canada).

The RHS used the Kessler Psychological Distress Scale to describe the level of anxiety or depression participants had experienced in the previous month²³. This scale is made up of six questions. RHS participants were asked to describe on a five-point scale how much of the time they had felt each of the symptoms, from “none of the time” to “all of the time.” A participant’s total score for all five questions was used to identify psychological distress as high, low, or moderate²³.

In the Atlantic Region, 14% stated that they had felt “tired without a good reason” during most or all of the past month, all other symptoms of psychological distress were reported. Over 30% reported that they had felt hopeless during most or all of the past month (see Figure 6.1).

Figure 6.1 Percentage First Nation Adults On Reserve in Atlantic Canada by Self-Reported Psychological Distress (2008-2010)



6.2 SPIRITUAL HEALTH

Nationally, almost three quarters of RHS 2008-2010 participants reported that they felt balanced “most” or “all of the time” in all four areas of well-being: physical, emotional, mental, and spiritual.

Across Canada about 80% of First Nation adults living On Reserve reported on the RHS 2008-2010 that traditional spirituality was “somewhat” or “very” important in their lives. Adults who had attended residential school were equally likely to report that traditional spirituality is important to them.

Almost 70% of First Nation adults agreed that a specific religion was at least “somewhat important” in their lives. Even among the youngest adults (aged 18 to 29), a majority (61%) agreed that religion is “somewhat” or “very” important in their lives. Among First Nation adults over 60 years old, 80% agreed that religion was important to them. Females were more likely than males to agree that religion was important to them.

In the Atlantic Region, RHS 2008-2010 collected results that were similar to responses from First Nation adults across the country :

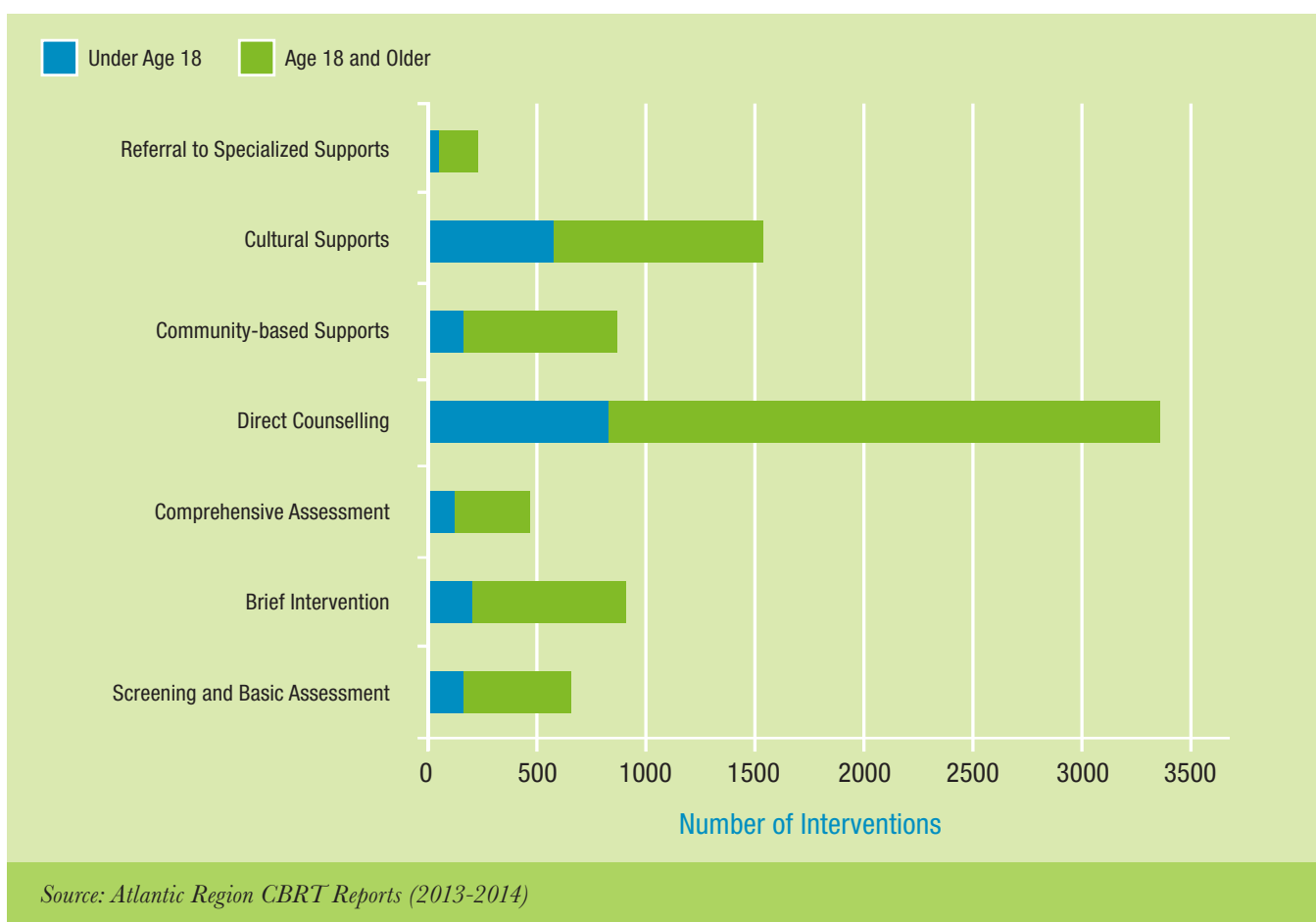
- Seventy percent of RHS respondents in the Atlantic Region felt that they were in balance spiritually “most” or “all of the time.”
- Eighty percent reported that traditional spirituality is “somewhat” or “very important.”
- Seventy percent reported that religion is “somewhat” or “very important.”

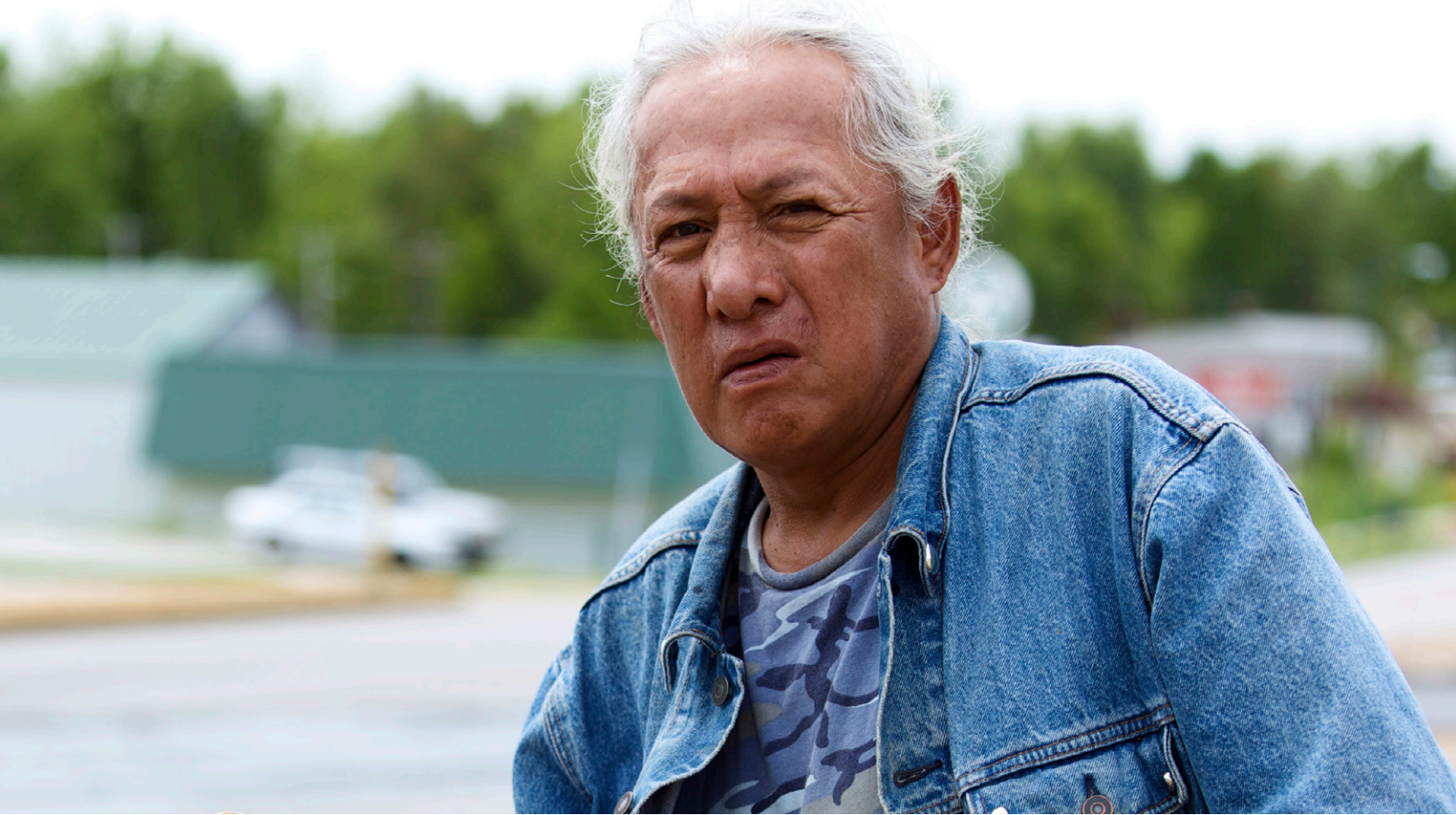
SECTION 7: ADDICTIONS

7.1 NATIONAL NATIVE ALCOHOL AND DRUG ABUSE PROGRAM

Communities reported 7,929 interventions for substance abuse, addictions and mental health at the community level in 2013-2014. Seventy-five of interventions were for adults age 18 and over. The most frequently reported type of intervention was direct counselling and cultural supports.

Figure 7.1 Number of Community-Reported Interventions for Substance Abuse, Addictions, and Mental Health by Age (2013-2014)





Communities also reported referring 741 clients to treatment centres in 2013-2014. Slightly over half were male (57%). Over the past three years:

- The proportion of referred clients referred under 12 years of age decreased by 86%.
- The proportion of referred clients age 12-17 years decreased 45%.
- The proportion of referred clients over age 17 increased 23%.

Treatment centres located in the Atlantic Region reported receiving 307 applicants in 2013-2014, 268 of whom were admitted. Part of the discrepancy between numbers communities report referring and applicants to treatment centres could be explained by referrals to treatment centres out of the Region.

Over the past five years, there has been an almost 50% increase in the number of applicants and a 60% increase in the number admitted to Atlantic treatment centre programs. There is no distinct trend in percentage of clients who completed in-patient treatment, which was 61% in 2013-2014. It is unknown whether these clients relapsed after leaving a treatment centre. The NNADAP program is implementing After Care programming in 2015-2016, which will attempt to track case management and relapse.

The National Native Alcohol and Drug Abuse Program (NNADAP) encourages and supports First Nations and Inuit people to overcome alcohol and drug abuse through both prevention and treatment services.

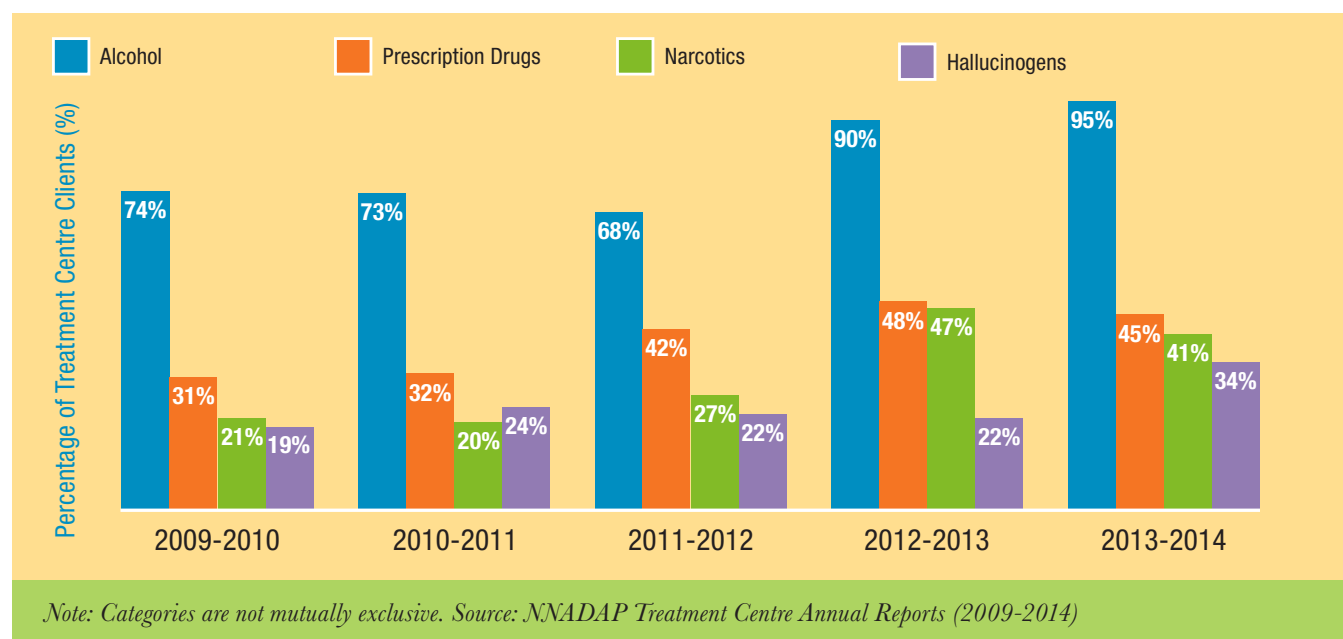
Prevention services address community programs (e.g., education, life skills workshops, self-help groups) and direct client services (e.g., crisis intervention, counselling, support and follow-up, referrals to treatment centres).

There are five NNADAP treatment centres in the Atlantic region, including one youth treatment centre. Clients who need direct treatment interventions are taught about the effects of alcohol and alcoholism, self-awareness, life skills, and how to access support systems.

Treatment centres report reasons why clients were referred. Over the past five years, the percentage of clients referred with alcohol addiction grew to 95% of applicants. In the past year:

- The percentage of clients referred with hallucinogen addiction has consistently increased and is of concern.
- The percentage of clients referred with prescription drug addiction has decreased since the previous year. This is consistent with findings presented in this report showing a downward trend in medication claims for benzodiazepines and opioids.

Figure 7.2 Primary Substances Abused Among Atlantic Region Treatment Centre Applicants by Substance (2009-2014)



7.2 PRESCRIPTION DRUG USE

7.2.1 Benzodiazepine Trends

Ten percent of Atlantic Region band members over age 15 made a claim for a benzodiazepine in 2013[§]. On average for the region, over the past five years, the rates have decreased.

Comparing NIHB claimants among Atlantic provinces, the rates in New Brunswick and Nova Scotia are the highest, but decreased steadily over the past five years. In Newfoundland and Labrador, excluding the Qalipu from the analysis, the rates are the lower than in the other provinces but have increased 47% over five years.

Benzodiazepines can be useful for short-term treatment of anxiety, short-term treatment of insomnia, and as add-on maintenance therapy for managing seizure disorders⁴. Some benzodiazepines used for short term treatment of anxiety are: alprazolam (Xanax[®]), diazepam (Valium[®]), lorazepam (Ativan[®]), oxazepam (Serax[®]), and bromazepam (Lectopam[®])⁴.

Misuse/abuse of benzodiazepines occurs when these drugs are taken to alter the mood, and not for their intended medical purposes^{7, 8}. Addiction/diversion can result from benzodiazepine abuse/misuse and is characterized by the presence of the 4 Cs: craving, loss of control over use, compulsion to use, and use despite negative consequences⁹.

§ Health Canada's Non-Insured Health Benefits (NIHB) pharmacy claims database is used to identify First Nation peoples registered to Atlantic region bands that have benzodiazepine claims in the Atlantic region. It should be noted that this is not "abuse" or "misuse of" or "addiction to" benzodiazepines. It only reports on the proportion of people who filled at least one claim. There is no way to determine: (1) the reason for prescribing the medications, (2) if the medications were used as prescribed, or (3) if the medications were used by the person they were prescribed to.

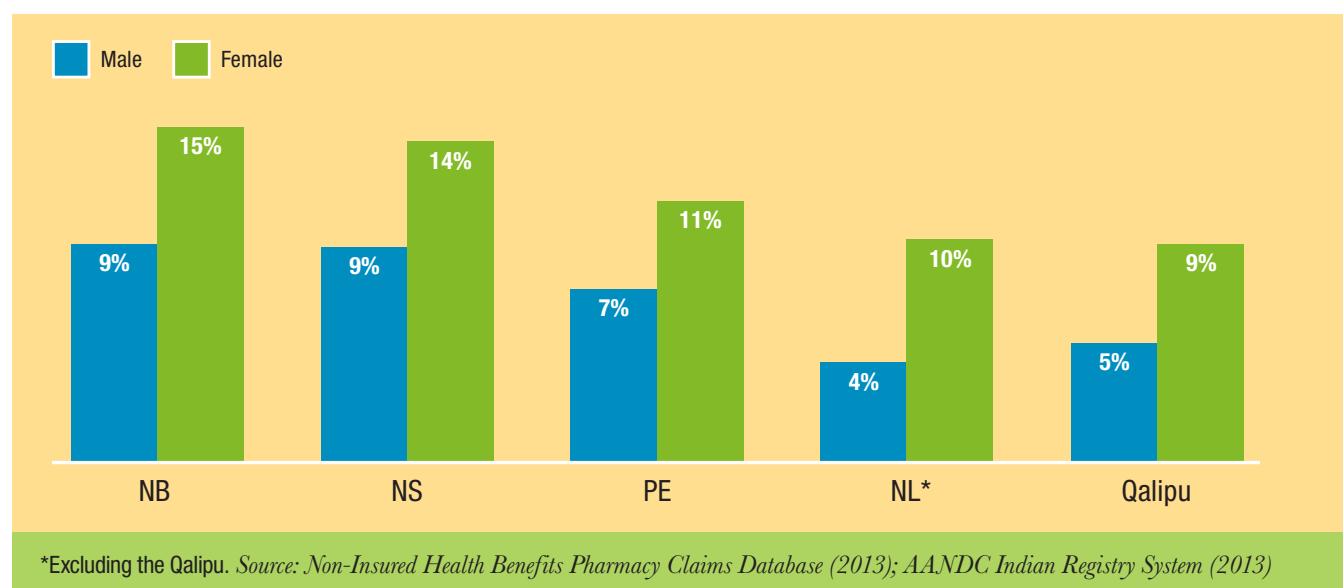
Table 7.1 Prevalence of Benzodiazepine Claimants Ages 15 and Older Among Atlantic Region Band Members (2013) and Percentage Change in Prevalence (2009-2013).

Province	Percentage of Benzodiazepine Claimants Among Atlantic Region Band Members (2013)	Percentage Change (2009-2013)
NB	12%	10% ↓
NS	12%	19% ↓
PE	9%	4% ↓
NL*	7%	47% ↑

*Excluding Qalipu. Source: Non-Insured Health Benefits Pharmacy Claims Database (2013); AANDC Indian Registry System (2013)

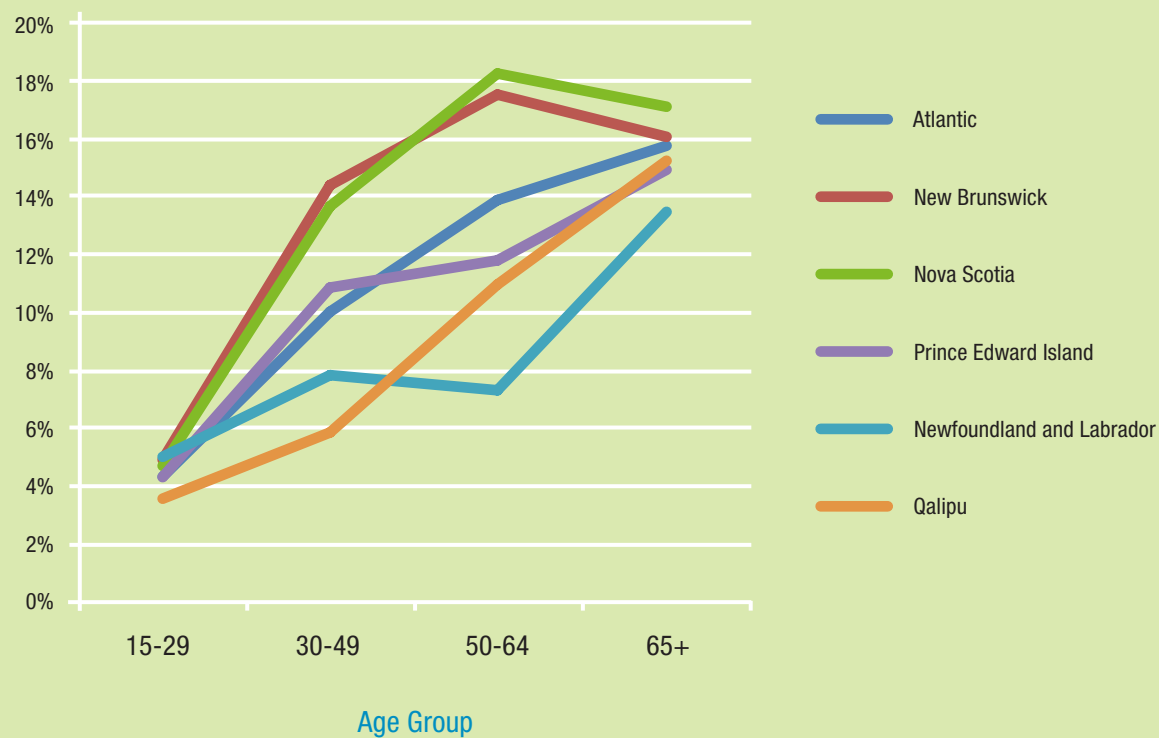
In 2013, female band members in Atlantic Canada were more likely than men to make a claim for a benzodiazepine. This finding is consistent with research in the general population that shows benzodiazepine use is typically higher among females than males^{24, 25}.

Figure 7.3 Prevalence of Benzodiazepine Medication Claimants Ages 15 and Older Among Atlantic Region Band Members by Sex (2013)



The impact of age varies between provinces. New Brunswick and Nova Scotia were similar, with 50-64 year olds having the highest percentage of claimants. For Prince Edward Island, Newfoundland and Labrador (excluding the Qalipu), and the Qalipu, the greatest percentage of claimants were those age 65 years and up.

Figure 7.4 Prevalence of Benzodiazepine Medication Claimants Ages 15 and Older Among Atlantic Region Band Members Age Group (2013)



Source: Non-Insured Health Benefits Pharmacy Claims Database (2013); AANDC Indian Registry System (2013).





7.2.2 Opioid Trends

Ten percent of Atlantic Region band members over age 15 made a claim for an opioid medication in 2013**. On average for the region, over the past five years the rates have decreased.

Opioid analgesics can be important therapeutic options for treating pain³. Some opioids used to treat severe pain are: Percocet®/Endocet®, oxycodone, and Dilaudid® (hydromorphone). Tylenol 1, 2 and 3 are used to treat certain forms of mild to moderate pain. While there is a clinical role for opioids in certain health conditions, there is a potential for abuse and misuse of these medications, with the resulting risk of addiction/diversion.

Misuse/abuse of opioids occurs when these drugs are regularly taken to alter the mood and not for their intended medical purposes^{6, 7}. Addiction can result from opioid abuse/misuse and is characterized by the presence of the 4 Cs: craving, loss of control over use, compulsion to use and use despite consequences⁹.

Table 7.2 Prevalence of Opioid Claimants Among Atlantic Region Band Members Ages 15 and Older (2013) and Percentage Change in Prevalence 2009-2013

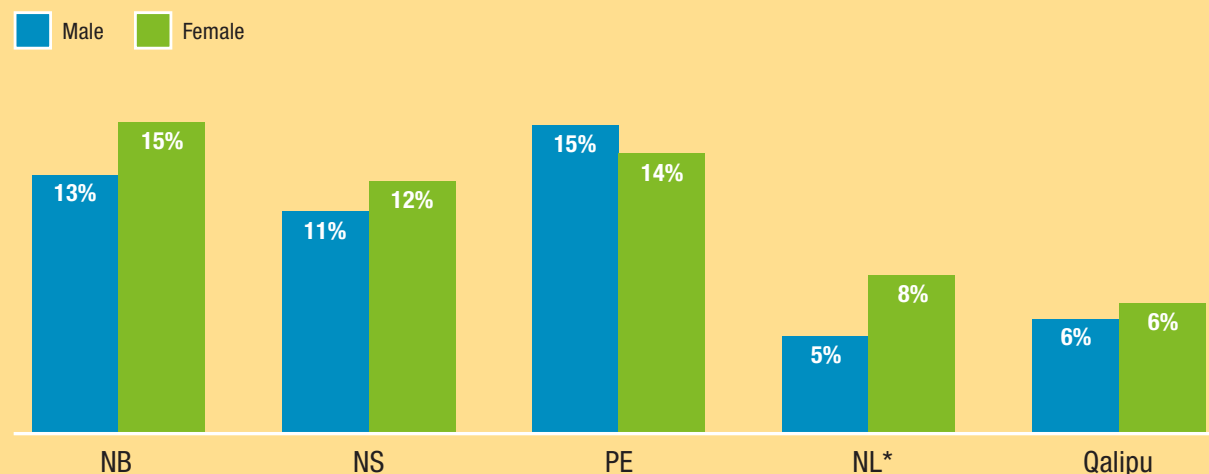
Province	Prevalence of Opioid Claimants Among Atlantic Region Band Members (2013)	Percentage Decrease (2009-2013)
NB	14%	12% 
NS	12%	13% 
PE	14%	10% 
NL*	6%	9% 

*Excluding Qalipu. Source: Non-insured Health Benefits Pharmacy Claims Database (2013); AANDC Indian Registry System (2013)

In 2013 females were more likely than males to have a claim for an opioid in every province except Prince Edward Island.

** Health Canada's Non-Insured Health Benefits (NIHB) pharmacy claims database was used to identify First Nation people registered to Atlantic region bands that had opioid claims in the Atlantic region. It should be noted that this is not "abuse" or "misuse of" or "addiction to" opioids. It only reports on the proportion of people who filled at least one claim. There is no way to determine: (1) the reason for prescribing the medications, (2) if the medications were used as prescribed, or (3) if the medications were used by the claimant.

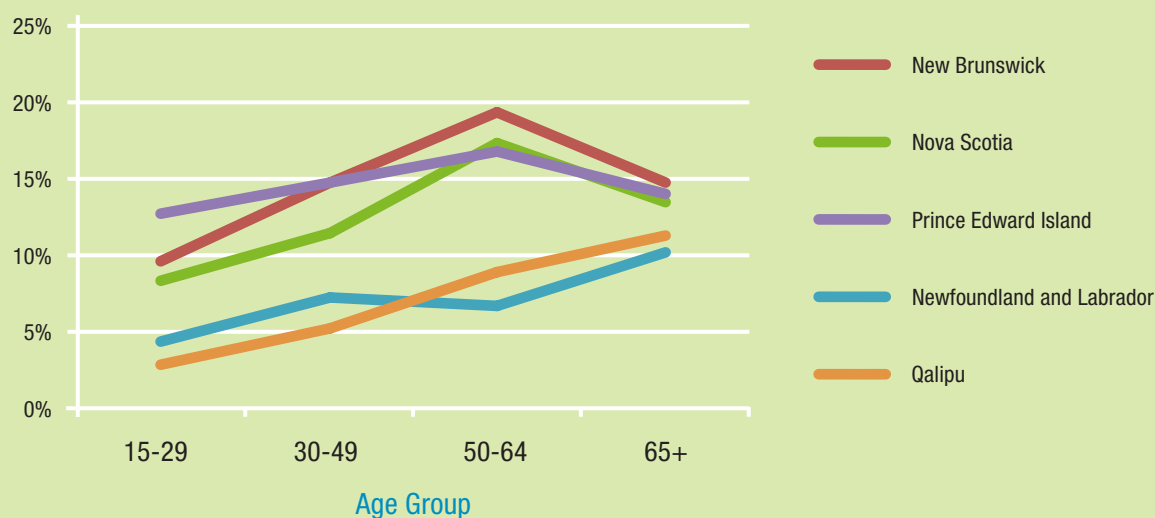
Figure 7.5 Prevalence of Opioid Medication Claimants Ages 15 and Older Among Atlantic Region Band Members by Sex (2013)



*Excluding the Qalipu. Source: *Non-Insured Health Benefits Pharmacy Claims Database (2013); AANDC Indian Registry System (2013)*

The age distribution of NIHB opioid claimants varies across provinces. New Brunswick, Nova Scotia and Prince Edward Island were similar, with 50-64 year olds having the highest percentage of claimants. For Newfoundland and Labrador (excluding the Qalipu), and the Qalipu, the greatest percentage of claimants were those age 65 plus.

Figure 7.6 Prevalence of Opioid Medication Claimants Ages 15 and Older Among Atlantic Region Band Members by Province and Age Group (2013)



Source: *Non-Insured Health Benefits Pharmacy Claims Database (2013); AANDC Indian Registry System (2013).*

7.2.3 Methadone Trends

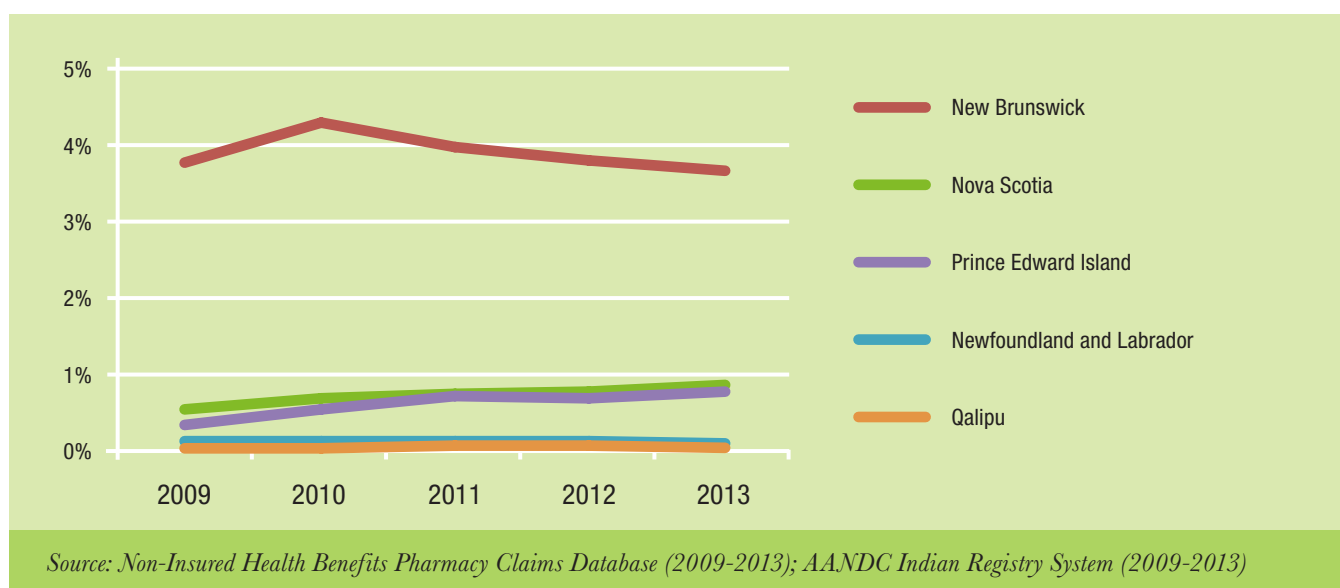
One percent of Atlantic Region band members over age 15 made a claim for methadone in 2013^{††}.

There is variation among Atlantic First Nation claimants in different provinces. New Brunswick has the highest rate in 2013; four percent of band members over age 15 made a claim for methadone. However, New Brunswick rates are also decreasing the most rapidly (15% decrease since their peak in 2010, three percent since 2009).

In all other Atlantic Provinces, less than one percent of claimants over age 15 claimed a methadone prescription.

Methadone is an opioid that has been used since the 1940s to help treat dependence on other opioids such as heroin, codeine, and morphine⁵. Opioid replacement therapy prevents withdrawal and relieves the cravings that can drive an addicted individual to seek their next dose of opioids. Methadone does not, however, cause the euphoria that is typical of other opioids. When methadone is prescribed by a physician, and taken in an appropriately controlled and supported environment, it can help clients overcome the drug-seeking lifestyle. Methadone is medically safe, and is one of the most effective treatments currently available for opioid addiction⁵.

Figure 7.7 Prevalence of Methadone Claimants Ages 15 and Older Among Atlantic Region Band Members by Province Over 5 Years (2009-2013)



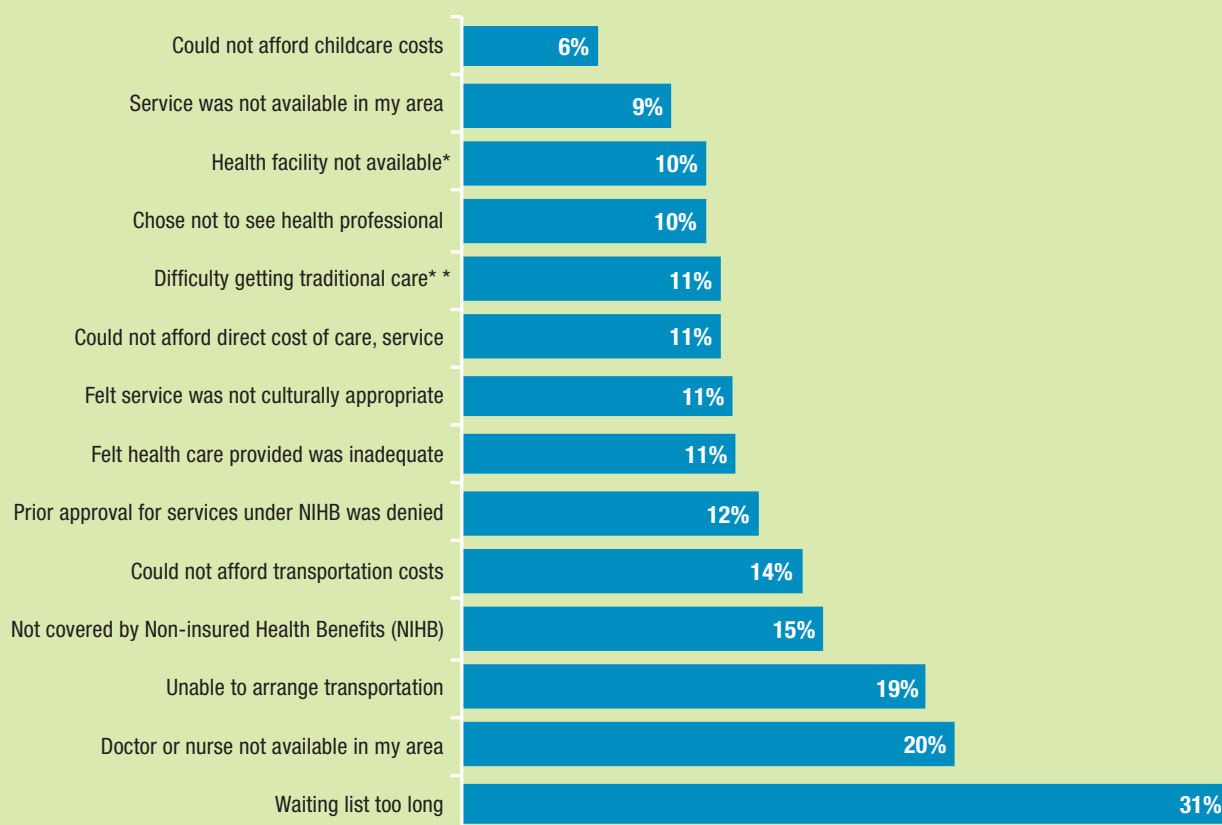
^{††} Health Canada's Non-Insured Health Benefits (NIHB) pharmacy claims database is used to identify First Nation peoples registered to Atlantic region bands that have methadone claims in the Atlantic region. It should be noted that this is not "abuse" or "misuse of" or "addiction to" methadone. It only reports on the proportion of people who filled at least one claim. There is no way to determine: (1) the reason for prescribing the medications, (2) if the medications were used as prescribed, or (3) if the medications were used by the person they were prescribed to.

SECTION 8: HEALTH CARE SERVICES

8.1 ACCESS TO CARE

The most commonly reported barrier to accessing care for First Nation adults On Reserve in Atlantic Canada is that the wait list is too long, followed by a doctor or nurse is not available in their area.

Figure 8.1 Percentage of First Nation Adults On Reserve by Self-Reported Barriers to Accessing Health Care (2008-2010)



*e.g. nursing station or hospital; **e.g. healer, medicine person, or elder. Source: *Regional Health Survey Roll-Up (2008-2010)*



FNIHB Atlantic provides funds to assist with medical transport to medically necessary services. Since 2009, the percentage distribution of reasons for medical transportation trips has not changed.

Table 8.1 Percentage Atlantic Region First Nation Band Members by Reason for Medical Transportation (2013-2014)

Scheduled Appointment	31%
Emergency Treatment	14%
Dialysis	11%
Hospital Admission	0.5%
Other	43%

Source: Medical Transportation Record System (2013-2014)

FNIHB Atlantic also provides funds and equipment for communities to integrate into provincial telehealth services. Twenty-three of 33 communities have telehealth equipment, and 21 of 33 communities have telehealth projects. In 2013-2014 in the Atlantic Region:

- Eighty percent of sessions were for education.
- Ten percent of sessions were for clinical telehealth.
- Ten percent of sessions were for administrative use.

Telehealth/videoconferencing equipment is generally used in three different ways in communities. For clinical use, a client accesses a **clinical** health service with a clinician using videoconferencing equipment. For **educational** use, health staff or community members use the videoconferencing equipment to access education sessions through various sources. For **administrative** use, health staff, community members or other community staff can hold meetings using the videoconferencing equipment.

8.2 HOME AND COMMUNITY CARE

Seven percent of Atlantic First Nations On Reserve accessed Home and Community Care in 2012-2013. This is an increase of 19% over the past six years. In the same time frame, the number of service hours has decreased 12%. Nationally, eSDRT data shows similar trends: an increase in utilization and a decrease in the total hours of service provided. More clients are being served, in less time²⁶.

Consistent with previous years, almost twice as many females as males used Home and Community Care services in 2012-2013. This differs from the FNIHB national average, in which females used just over half of Home and Community Care services²⁶.

Approximately half of people accessing Home and Community Care in 2013 were over the age of 55, which is consistent with previous years. This also is similar to other data in the report indicating that the burden of chronic disease is higher among older age groups.

The proportion of Home and Community Care service hours by service type has remained stable over the past five years. Assisted Living continues to use nearly 70% of service hours. Currently, AANDC funds Assisted Living Services.

The Home and Community Care program is funded by FNIHB for all 33 Atlantic First Nation communities. The intent is to provide access to a range of home and community services to First Nation community members living in a First Nation community.

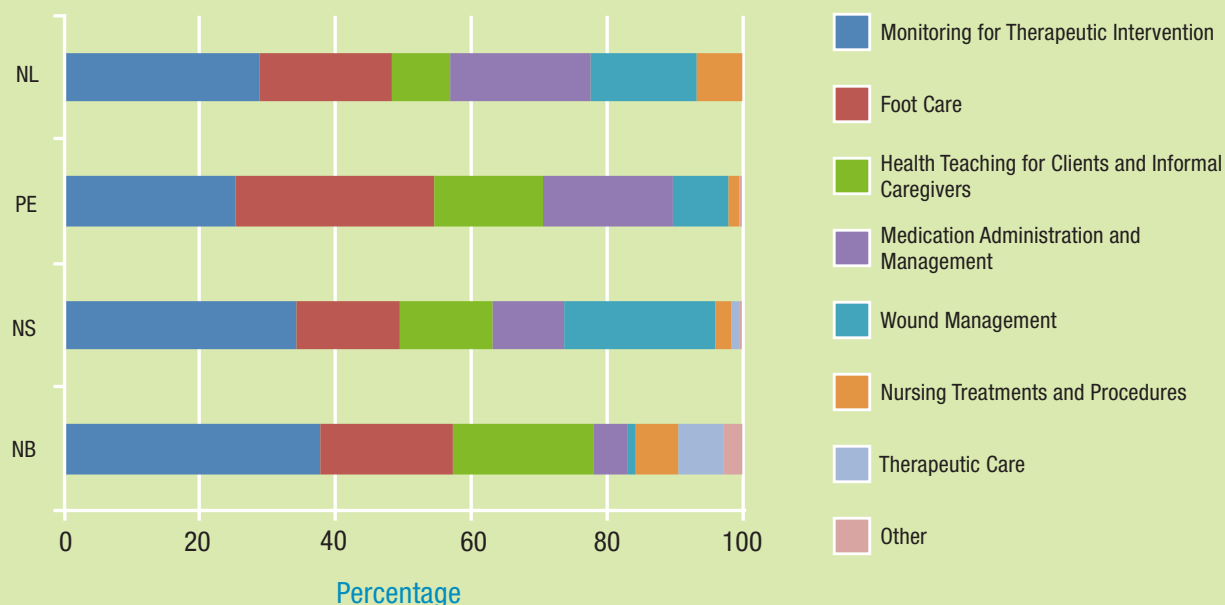
Table 8.2 Proportion of Atlantic Home and Community Care Hours by Service Type (2012-2013)

Assisted Living	67%
Personal Care	15%
Respite Services	7%
Nursing	6%
Case Management	2%
Professional Therapies	1%

Source: eSDRT reports 2012-2013

The proportion of time spent on types of nursing services varied among provinces. In New Brunswick, the low percentage of time for wound care is a result of another organization providing this service.

Figure 8.2 Percentage of Nursing Services for Home and Community Care by Type of Service and Province (2012-2013)

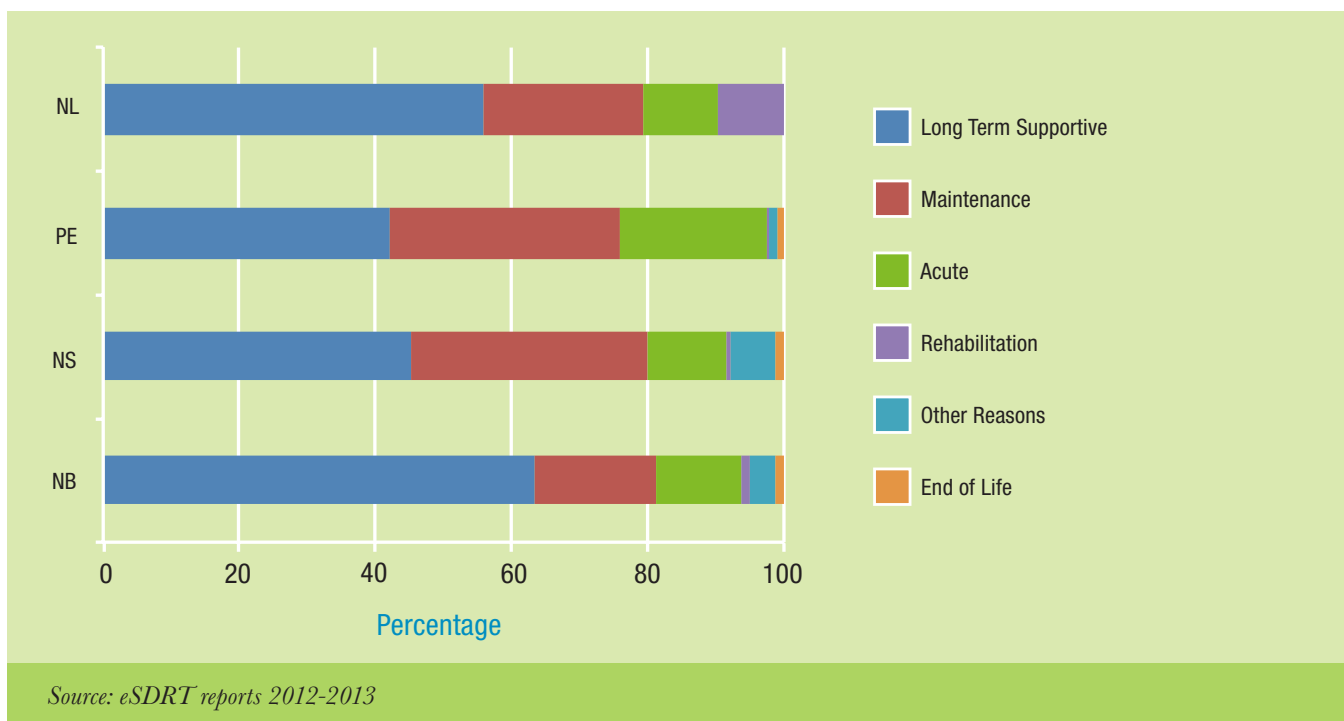


Source: eSDRT reports 2012-2013

Of the 4,352 clients served by Home and Community Care in 2012-2013, approximately 70% of clients were receiving either acute care or long-term supportive care. Diabetes, skin and subcutaneous conditions and musculoskeletal conditions continue to be the top reasons for home care, representing 55% of the primary reasons for visit.



Figure 8.3 Percentage of Home and Community Care Clients On Reserve in Atlantic Region by Type of Client (2012-2013)





SECTION 9: PHYSICAL ENVIRONMENT

9.1 HOW OFTEN ARE ENVIRONMENTAL INSPECTIONS BEING DONE?

There were 325 environmental health inspections On Reserve in Atlantic Canada in 2013-2014; 220 inspections were routine, 105 were on request. There has been an 85% increase in the number of routine inspections over the past 3 years by Health Canada.

The change in the number of inspections by request is not reported. This number depends on whether or not a community/communities have requested a special study, thus, fluctuates year to year. Almost 90% of the requested inspections in 2013-2014 were for housing.

Environmental health services are provided by Environmental Health Officers under the Environmental Public Health Program.

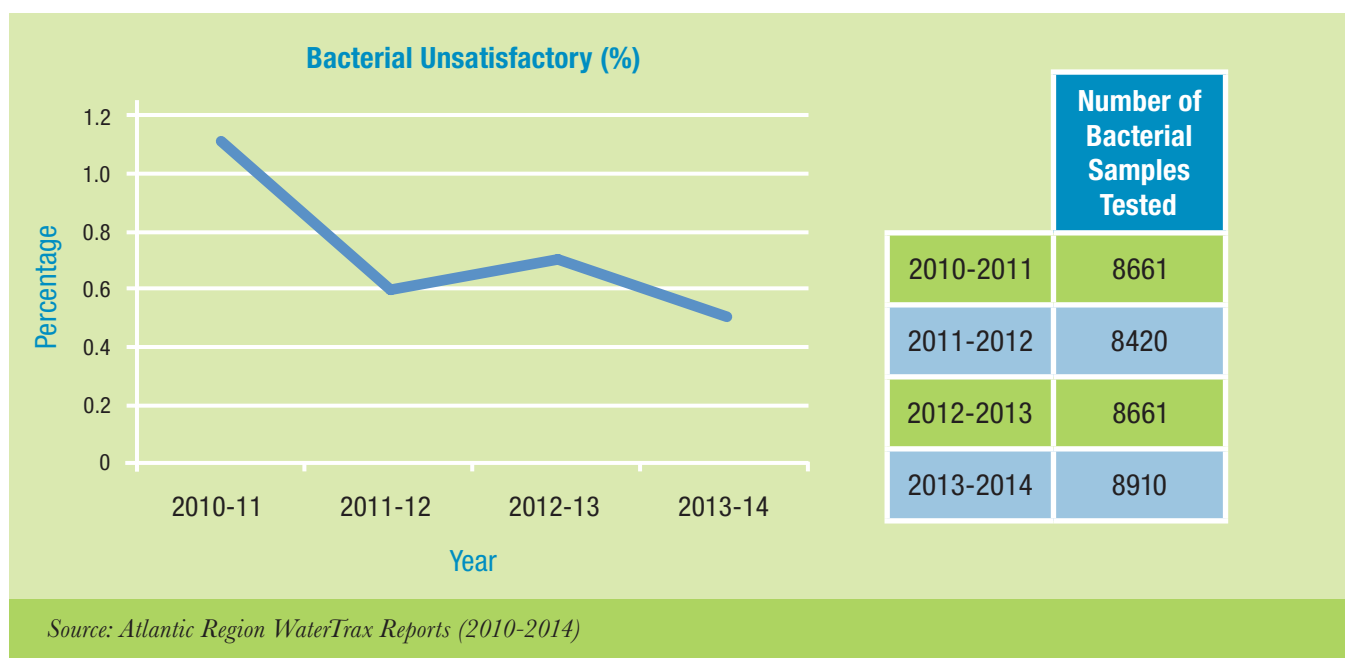
9.2 WATER QUALITY AND TESTING

Over the past four years:

- Three percent increase in the number of bacterial water samples tested.
- Fifty-four percent decrease in the percentage of bacterial samples that were unsatisfactory.

An unsatisfactory sample means that the results did not meet the acceptable limits based on the Canadian Drinking Water Quality Guidelines²⁷.

Figure 9.1 Percentage of Unsatisfactory Bacterial Water Samples On Reserve in Atlantic Canada and Number Of Bacterial Samples Tested (2010-2014)



For the chemical data, we are unable to comment on the number of samples taken. This is because a sample could be for one element (e.g., arsenic or iron) or for many elements at the same time. As such, we do not know if there was truly a change in the number of elements sampled from year to year. Over the past four years there is no distinct trend on the percentage of chemical samples taken that were found “unsatisfactory”.

Another indicator of water quality is a Boil Water Advisory (BWA) or Do Not Consume (DNC) advisory. In 2013-2014 there was a significant decrease in both the number of communities that received an advisory and the number of advisories set.

Boil Water and/or Do Not Consume advisories are recommended by an Environmental Health Officer (EHO) for the following reasons:

- Significant deterioration in source water quality
 - Equipment malfunction during treatment or distribution
 - Inadequate disinfection or disinfectant residuals
 - Unacceptable microbiological quality
 - Unacceptable particle counts
 - Operation of the system would compromise public health
-

Table 9.1 Number of Boil Water Advisories and Do Not Consume Advisories Set and Lifted in Atlantic Region First Nation Communities (2010-2014)

	Number of Communities	Number of BWA/DNC Set During the Fiscal Year	Number of BWA/DNC Lifted During the Fiscal Year
2010-2011	10	15	7
2011-2012	10	15	6
2012-2013	11	17	8
2013-2014	6	4	7

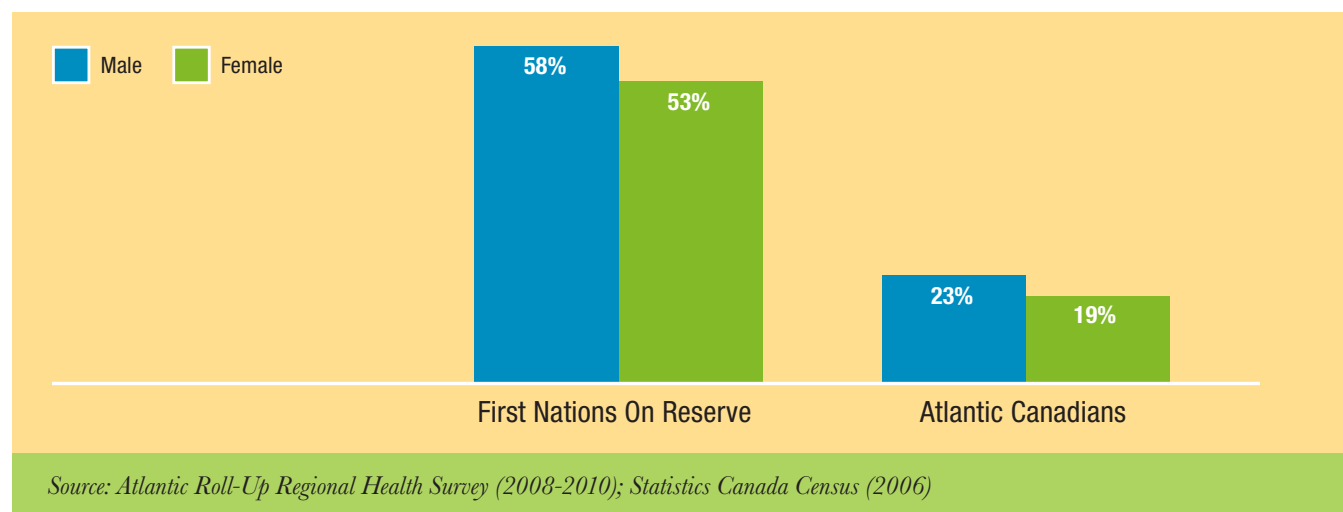
Source: Atlantic Region WaterTrax Reports (2010-2014)



SECTION 10: EDUCATION LEVELS

For First Nation adults On Reserve in Atlantic Canada, 53% of females and 58% of males did not complete high school¹¹. In comparison, for the general Atlantic Canadian population, 19% of females and 23% of males did not complete high school.

Figure 10.1 Percentage of First Nation Adults On Reserve and General Atlantic Canadian Population that Did Not Complete High School, by Sex



More than half of First Nation peoples living On Reserve who complete high school go on to complete some post-secondary training (over 53%). About one third of high school graduates also completed some university. About ten percent of high school graduates continue to earn an additional diploma, certificate, or undergraduate university degree.

Among First Nations people aged 18+ years who completed some post-secondary education, females report slightly more engagement in post-secondary education overall than males. More males than females pursued a trade, technical or vocational education, whereas more females pursued university.

Education as a key determinant of health is well documented^{23, 28}. Better educated individuals are more likely to have the knowledge and financial resources to access health care and make informed decisions about their health²⁸. For example, while 30% of university graduates rated their health as “excellent”, only 19% of respondents with less than a high school did so²⁸. Similarly, First Nation adults who from graduated high school reported lower psychological distress levels than those who had not graduated²³.



SECTION 11: ECONOMIC OPPORTUNITY

11.1 LABOUR FORCE ACTIVITY: EMPLOYMENT RATE

Self-reported employment rates for First Nation adults On Reserve in Atlantic Canada are similar for males (43%) and females (44%). They are lower than the rate of employment of the total Atlantic Canadian population by 15% for males and nine percent for females²⁹.

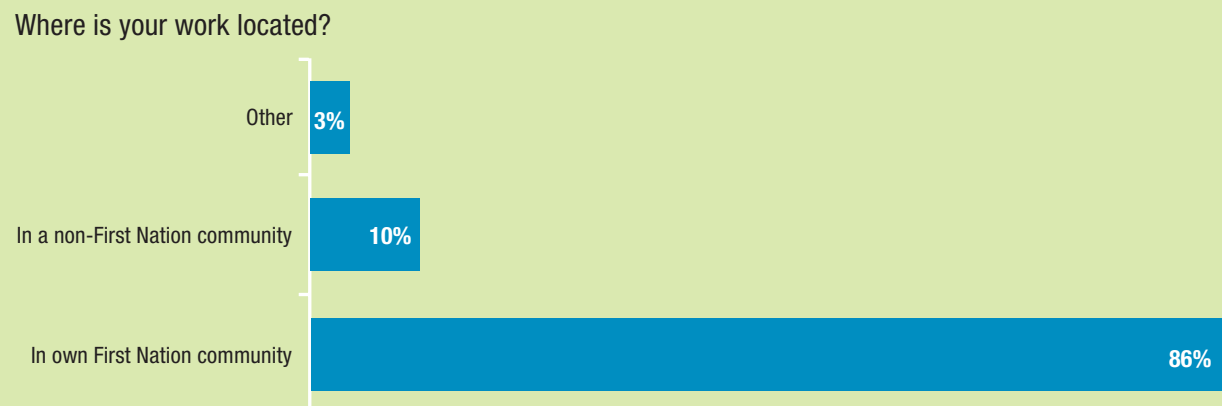
Table 11.1 Employment Rate for First Nation Adults On Reserve and Atlantic Canada

	First Nations On Reserve in Atlantic Canada	Atlantic Canada
Male	43%	58%
Female	44%	53%

Source: Atlantic Roll-Up Regional Health Survey (2008-2010), National Household Survey (2011)

Among the 44% of First Nation adults living On Reserve who currently work for pay, 86% work within their own community. Only ten percent work in a non-First Nation community.

Figure 11.1 Percentage of First Nation Adults On Reserve in Atlantic Canada by Location of Work (2008-2010)



Source: Atlantic Roll-Up Regional Health Survey (2008-2010)

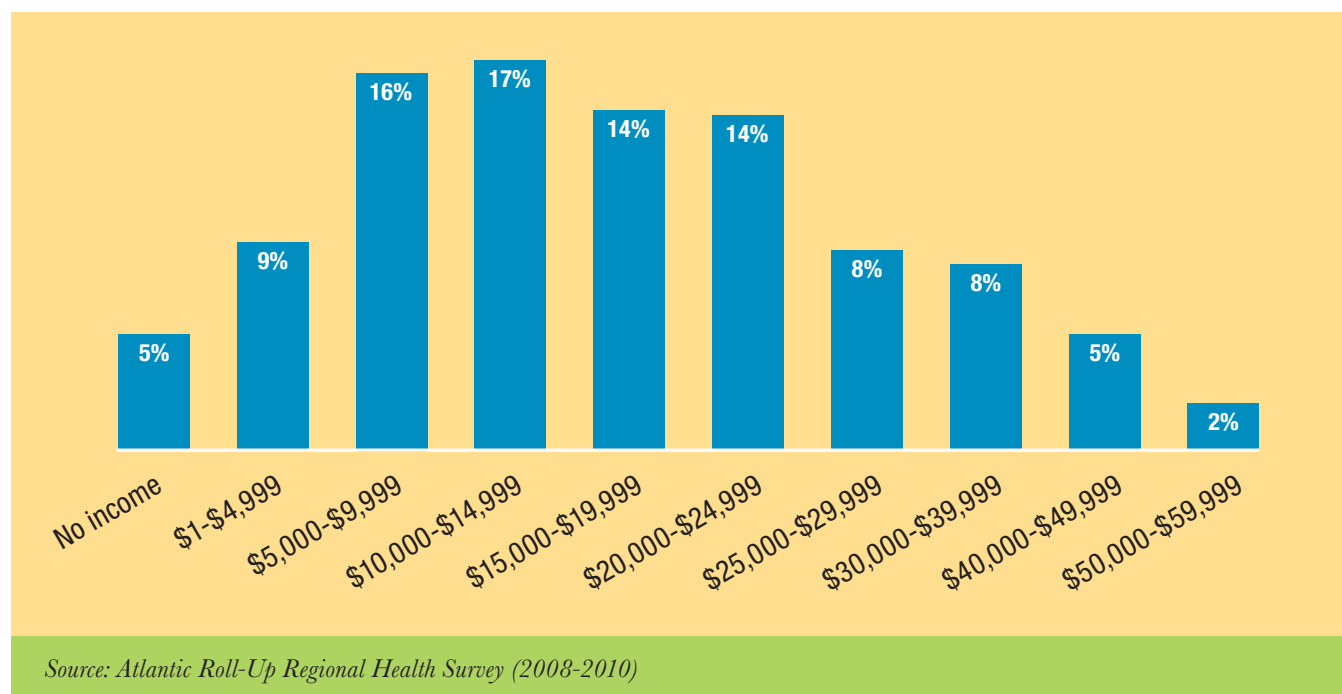
Thirty-eight percent of First Nation adults On Reserve in Atlantic Canada who are not currently working for pay are actively seeking employment¹¹. By sex 51% of males are seeking work, while 26% of females are doing so.

There are a number of reasons why adults living On Reserve in Atlantic Canada are not currently looking for work. For females, the primary reason is childrearing (33%), followed by being a student (28%). The primary reason given by males is that the work they do is seasonal (34%); males also indicate student status as a reason for not seeking employment (15%). About one in ten (eleven percent of males and eight percent of females) state poor health or disability are the reason for not seeking work¹¹.

11.2 INCOME

Seventy-five percent of First Nation adults On Reserve in the Atlantic Region make less than \$25,000 per year. Almost half make less than \$15,000 per year. Nearly five percent report no personal income¹¹.

Figure 11.2 Percentage of First Nation Adults On Reserve by Income Level (2008-2010)



The average income of First Nation males On Reserve is \$18,443 and for First Nation females On Reserve it is \$18,954²⁹. The average income for general Atlantic Canadian males was \$41,475 and for females it was \$28,623²⁹. A gap of approximately \$23,000 exists between First Nation On Reserve males and the total Atlantic male population. A smaller gap of approximately \$9,700 exists between First Nation females and Atlantic females.



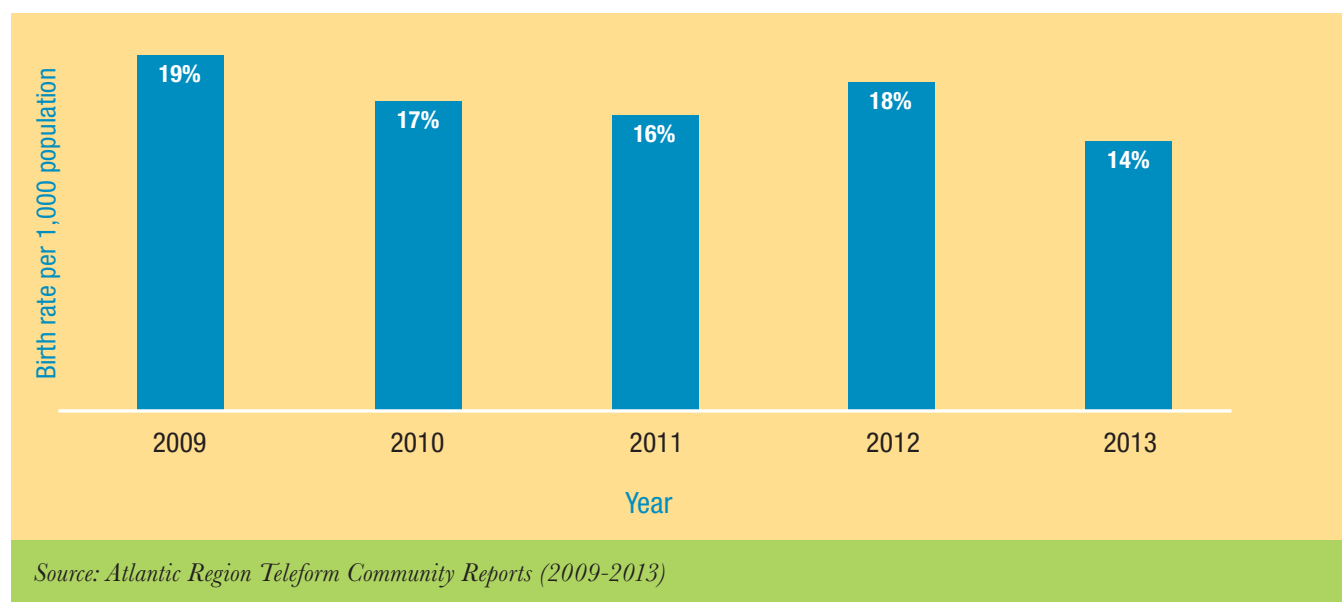
SECTION 12: CHILDREN AND YOUTH

In 2012, what is now known as the Atlantic First Nations Health Partnership developed the *Atlantic First Nations Child and Youth Strategic Plan*. The information in this section represents some of the indicators beginning to be used to track the progress of this plan. Relevant information from the Atlantic Roll-Up of the Regional Health Survey (2008-2010) was also included in this section.

12.1 BIRTH RATE

The birth rate for Atlantic First Nation people living On Reserve in 2013 was 14 births per 1,000 people. While the rate has been decreasing over the past five years, it is still higher than the general Canadian birth rate of 11 per 1,000 population³⁴.

The **birth rate** is calculated by dividing the number of live births by the population size. The birth rate is expressed as the number per 1,000 population per year.

Figure 12.1 Birth Rate for Atlantic Region First Nations On Reserve (2009-2013)

12.2 BIRTH WEIGHT

Seventy-six percent of infants born On Reserve in Atlantic Canada in 2013 had a healthy birth weight, approximately four percent were low birth weight and 19% were high birth weight. The percentage of infants in each birth weight category has remained stable over the past five years.

Low birth weight:	Less than 2500g or 5lb 9oz
Healthy birth weight:	2500g–4000g or 5lb 9oz–8lb 11oz
High birth weight:	Greater than 4000g or 8lb 11oz

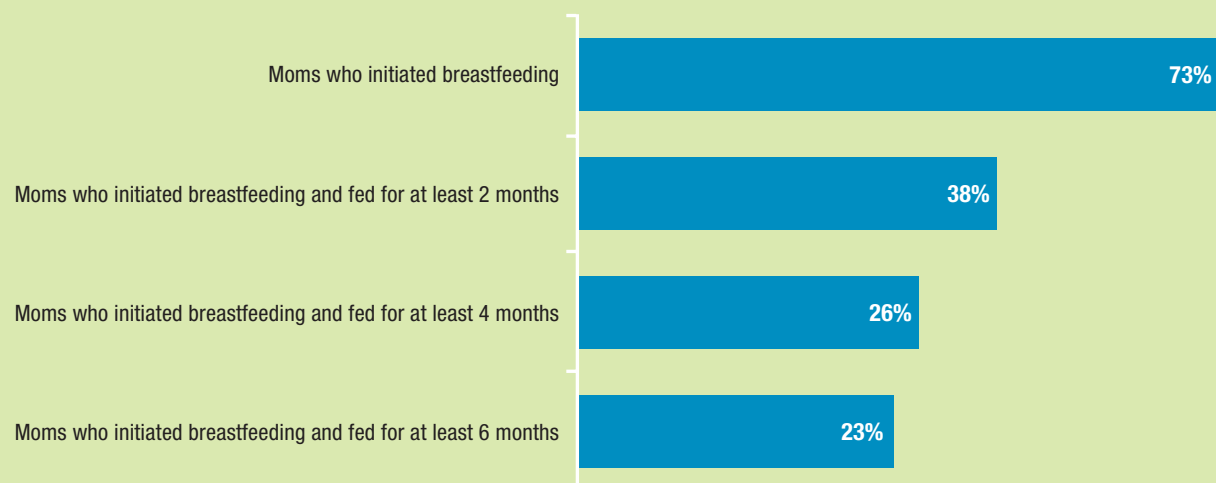
By comparison, in 2011 the percentage of babies with a healthy birth weight born in Atlantic Canada was 81% and the percentage of babies with high birth weight was 13%³⁴. Due to risk factors associated with high birth weight (e.g., diabetes, obesity through childhood to adulthood, and childbirth complications),³⁵ the higher proportion of Atlantic Region First Nation babies born who weighed over 4000g (8lb 11oz) at birth is of concern.

12.3 BREASTFEEDING

Seven out of ten mothers in Atlantic Region First Nation communities initiated breastfeeding. However, only half of these mothers continued to nurse at two months.

The rate of breastfeeding initiation for Atlantic Region First Nation communities is similar to the general Atlantic Canada rate of 75%. Both are below the national average, where 87% of Canadian women reported initiating breastfeeding and 26% breastfed exclusively for six months or more³⁶.

Figure 12.2 Percentage of Atlantic Region First Nation On Reserve Mothers by Breast Feeding Duration (2013-2014)

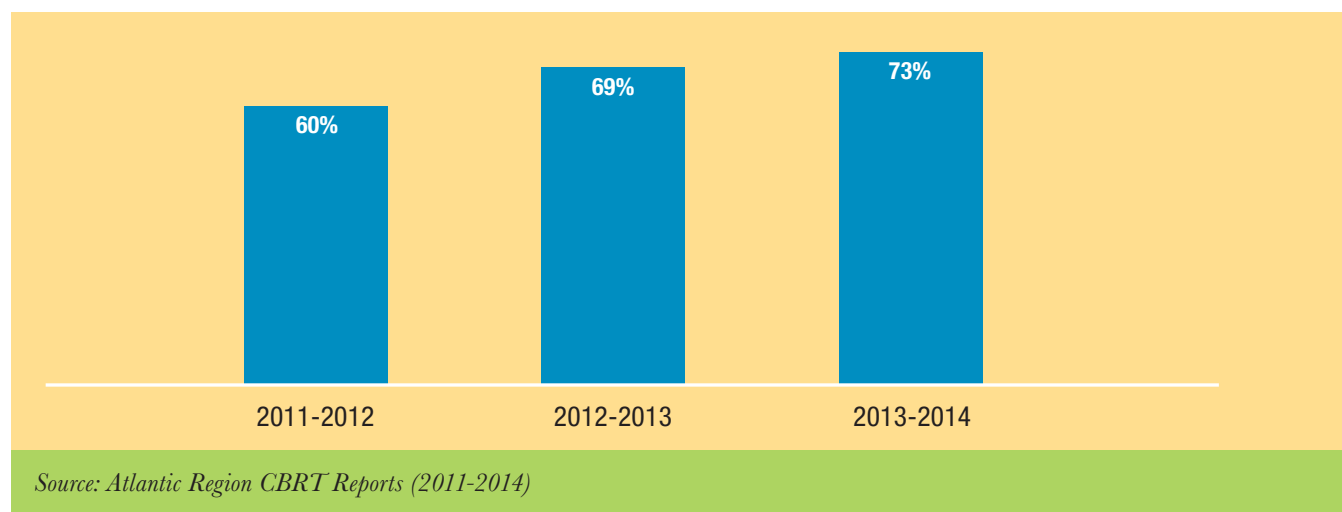


Source: Atlantic Region CBRT Reports (2011-2014)



Over the past three years, the percentage of mothers initiating breastfeeding has been increasing.

Figure 12.3 Percentage of Atlantic Region First Nation On Reserve Mothers that Initiated Breast Feeding (2011-2014)

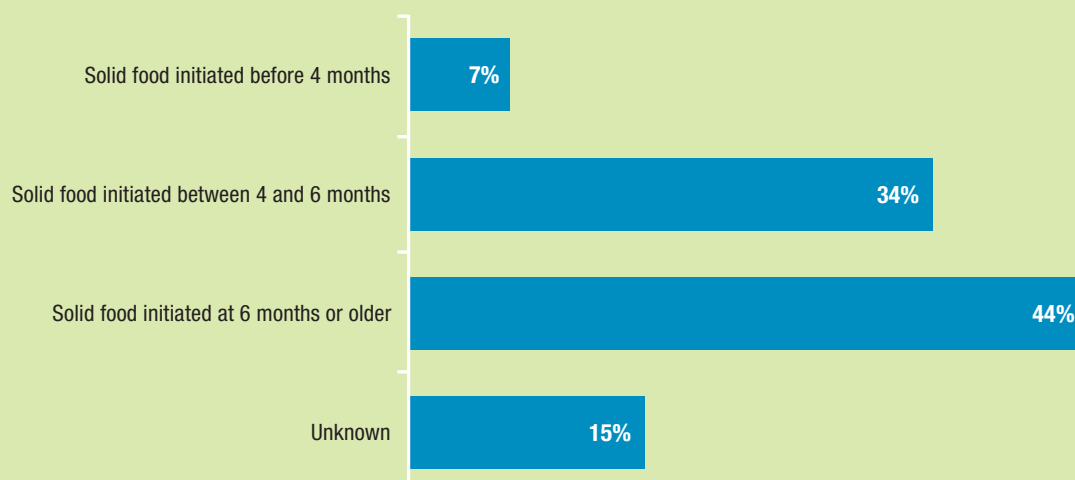


Due to the benefits for infants' growth, immunity, and cognitive development, breastfeeding is promoted by Health Canada (in alignment with the World Health Organization guidelines) and is recognized as the natural and preferred method of feeding infants^{37, 38}.

12.4 INTRODUCTION TO SOLID FOODS

Just under half of babies born in Atlantic Region First Nation communities initiated solid food at six months of age or older in 2013-2014.

Figure 12.4 Percentage of Atlantic Region First Nation On Reserve Babies Introduced to Solid Foods by Age (2013-2014)



Source: Atlantic Region CBRT Reports (2013-2014)

Over the past three years:

- The percentage of babies who initiated solid food before four months has decreased by approximately 25%.
- The percentage of babies who initiated solid foods between four and six months has more than doubled.
- There is no clear trend on the percentage who initiated solid food at six months or older.

Source: Atlantic Region CBRT Reports (2013-2014)

It is recommended that solid foods be introduced at six months of age with continued breastfeeding for two years and beyond^{37, 38}. If the child is formula-fed rather than breastfed, continue with formula feeding at six months along with solid foods. Delaying the introduction of solid food reduces the risk of a child being obese or overweight by age ten³⁹.



12.5 CHILDHOOD IMMUNIZATION RATES

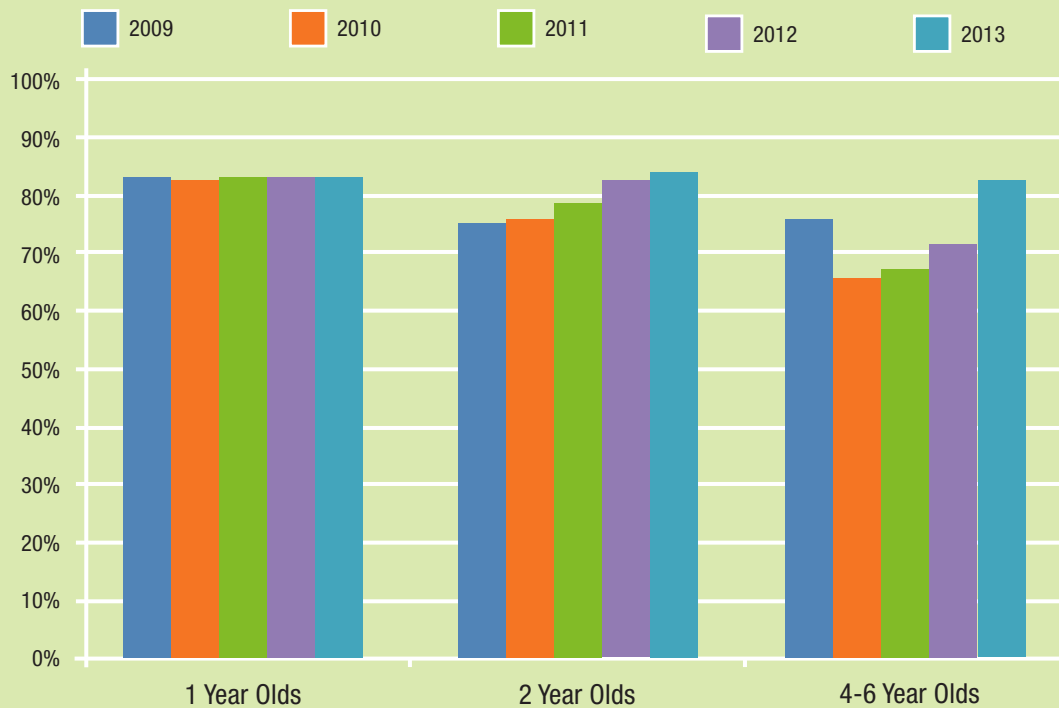
The overall childhood immunization coverage rate for Atlantic Region First Nation people living On Reserve in 2013 was 84%. This is an increase of seven percent over the previous five years; the immunization coverage rate for one-year-olds has remained constant while the rates for two-year-olds and four to six-year-olds have increased over time.

Table 12.1 Immunization Coverage Rates For Atlantic Region First Nations On Reserve by Age, 2013 and five year Trend

	Immunization Coverage Rate (2013)	Percentage Change (2009-2013)
1-year-olds	84%	No change
2-year-olds	84%	12% ↑
4-6-year-olds	83%	9% ↑

Source: Atlantic Region Community Immunization Coverage Rate Reports (2009-2013)

Figure 12.5 Immunization Coverage Rates for Atlantic Region First Nation Children On Reserve by Age and Year (2009-2013)



Source: Atlantic Region Community Immunization Coverage Rate Reports (2009-2013)

Dependent on the antigen, Canadian coverage rates are between 77% and 96% for two-year-olds, and 87% and 96% for seven-year-olds⁴⁰. As the Atlantic provinces have different immunization schedules, FNIHB does not report First Nation On Reserve immunization rates by antigen. Instead, we report the information as overall coverage by age. The overall coverage rate On Reserve in Atlantic Canada falls within the range for coverage by antigen for Canada for two-year-olds, and is only slightly lower than the Canadian range for seven-year-olds.

12.6 ABORIGINAL HEAD START ON RESERVE

There were 495 children age six and under reported to be enrolled in Aboriginal Health Start On Reserve (AHSOR) in 2013-2014; 15% of the eligible children age six and under. According to the 2008-2010 First Nation Regional Longitudinal Health Survey (RHS), approximately 36.4% of Canadian First Nation children On Reserve attended an Aboriginal Head Start program²³.

The Aboriginal Head Start On Reserve (AHSOR) program funds early intervention strategies to support the developmental needs of First Nations children and their families living On Reserve. The primary goal of the program is to provide First Nations preschool children from birth to age six, with a positive sense of themselves, a desire for learning, and opportunities to develop successfully.

AHSOR programming can be centre based, delivered through outreach/home visiting, or a combination of the two. AHSOR is sometimes integrated with the provision of daycare, which is funded through Employment and Social Development Canada. In addition, some AHSOR programs have become licensed and are integrated with some provincial funding to provide additional early childhood programming. The licensing processes and agreements vary by province.

Similar to previous years, 66% of participants are three to six years old. On-site programming for children two years and under puts different demands on the staff and physical space than programming for children who are older and toilet trained.

There were 38 children on the wait list for AHSOR in 2013-2014. This is a decrease of 50% since 2011-2012. The majority of those children on the waitlist (74%) are under three years of age.

Among children participating in AHSOR in Atlantic Region in 2013-2014:

- Twenty-one percent had been screened/assessed for special needs^{##};
- Six percent had been diagnosed with special needs^{##};
- Twenty percent had been referred to other resources;
- Two percent had been on a waitlist for diagnostic assessment.

Source: Atlantic Region CBRT Reports (2013-2014)

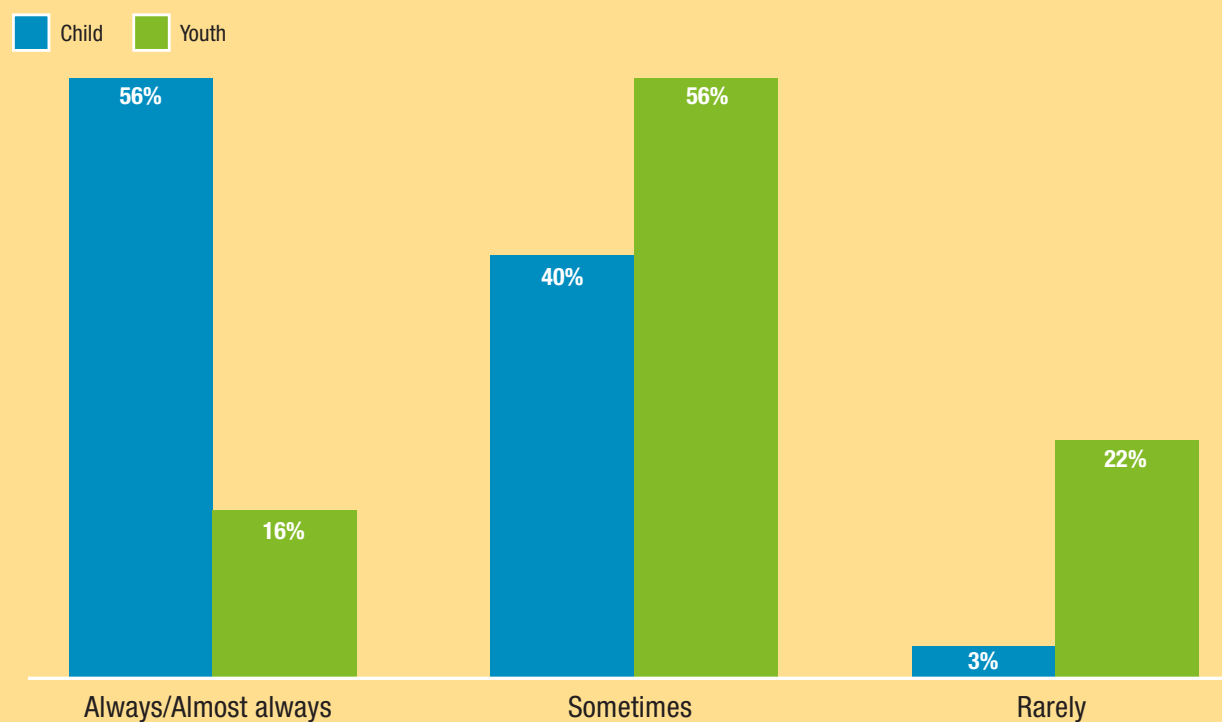
Overall in the Atlantic Region, three percent of children On Reserve are reported to have speech language difficulties and two percent are reported to have learning disabilities¹¹.

^{##} In the CBRT, special needs are defined as “children who require additional support(s) or service(s) for healthy development in order to interact with their peers in the day-to-day life of the community. Special needs may include physical, sensory, cognitive and learning challenges, mental health issues as well as problems due to societal, cultural, linguistic or family factors.”

12.7 NUTRITION

Fifty-six percent of First Nation children living On Reserve always or almost always eat a balanced diet. Forty percent of parents or guardians report that their child sometimes eats a balanced diet and three percent rarely eat a balanced diet. For youth On Reserve in Atlantic Canada, the rate of always or almost always eating a balanced diet is lower than the rate is for children. Nationally, a higher percentage of First Nation youth On Reserve than in Atlantic Canada reported they always or almost always ate a balanced diet²³.

Figure 12.6 Percentage of First Nation Children and Youth On Reserve Eating a Balanced Diet (2008-2010)



Source: Atlantic Roll-Up Regional Health Survey (2008-2010)

12.8 DENTAL HEALTH

Thirteen percent of First Nation children living On Reserve in Atlantic Canada have baby bottle tooth decay¹¹. Of those with baby bottle tooth decay, 78% have been treated for the condition.

FNIHB Atlantic funds the Children's Oral Health Initiative (COHI) for First Nations On Reserve. In 2013-2014:

- Seventy-eight percent of children age seven years and under were enrolled in COHI.
- Fifty-three percent of children enrolled in COHI were screened.

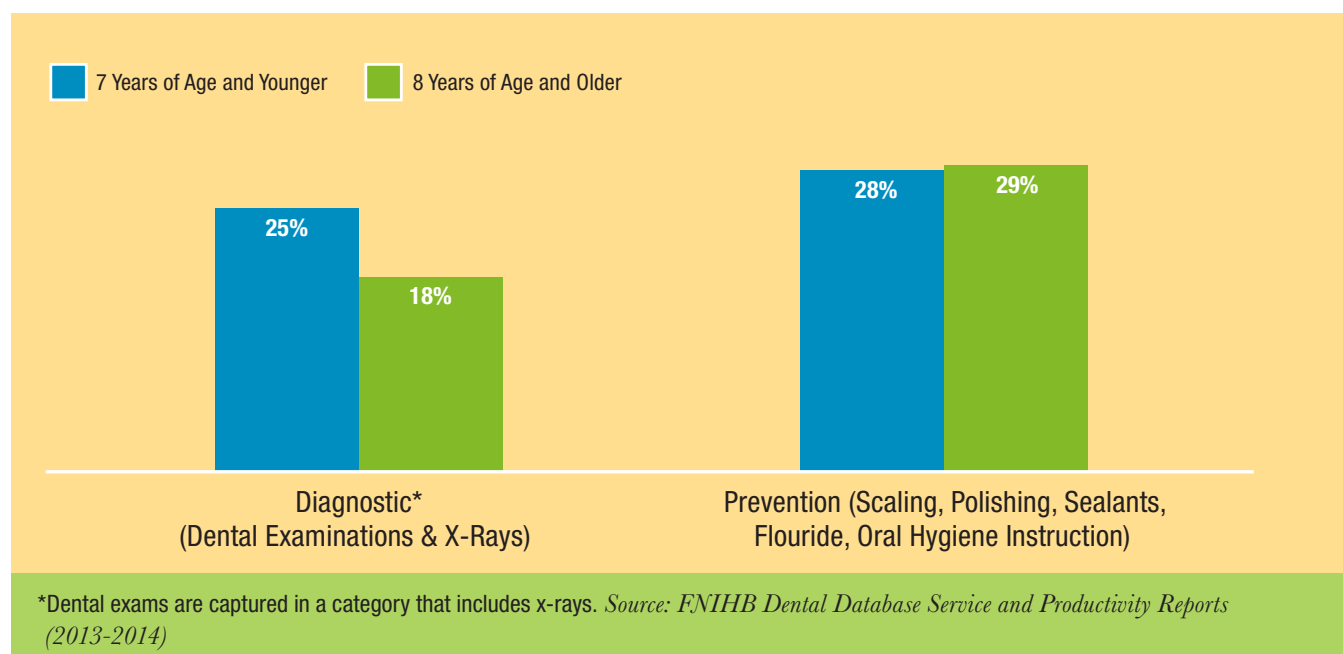
The program aims to screen 90% of enrolled children.

Over the past four years:

- The number of children enrolled in COHI has increased 62%.
- The percentage of those enrolled who were screened has decreased 21%.

FNIHB also provides dental therapy services On Reserve. It is recommended that all clients have an annual dental exam and prevention visit. In 2013-2014, less than 30% of First Nation people living On Reserve had either their annual exam or prevention visit.

Figure 12.7 Prevalence Of First Nation On Reserve by Dental Therapy Service (2013-2014)

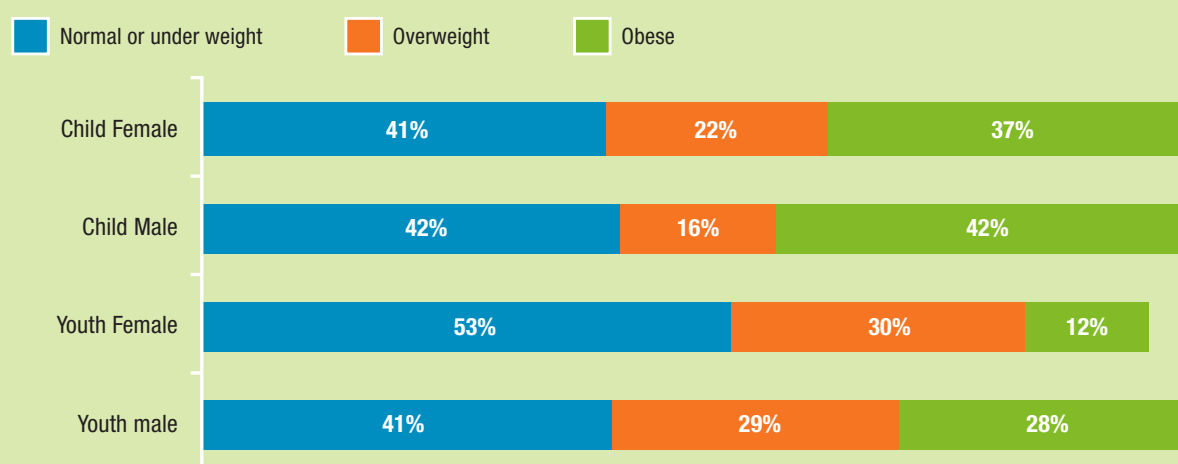


12.9 BODYWEIGHT

While a similar percentage of male and female children On Reserve in Atlantic Canada are normal weight or underweight, a greater percentage of males are obese. Nationally, a lower proportion of First Nations children are normal or underweight compared to Atlantic First Nation children²³.

Forty-seven percent of First Nation youth On Reserve in Atlantic Canada are normal or underweight. A higher percentage of Females are normal or underweight than males, and a higher proportion of males than females are obese. Nationally, fewer First Nation youth are obese (13%)²³.

Figure 12.8 Percentage First Nation Children and Youth On Reserve by Body Mass Index Category and Sex (2008-2010)

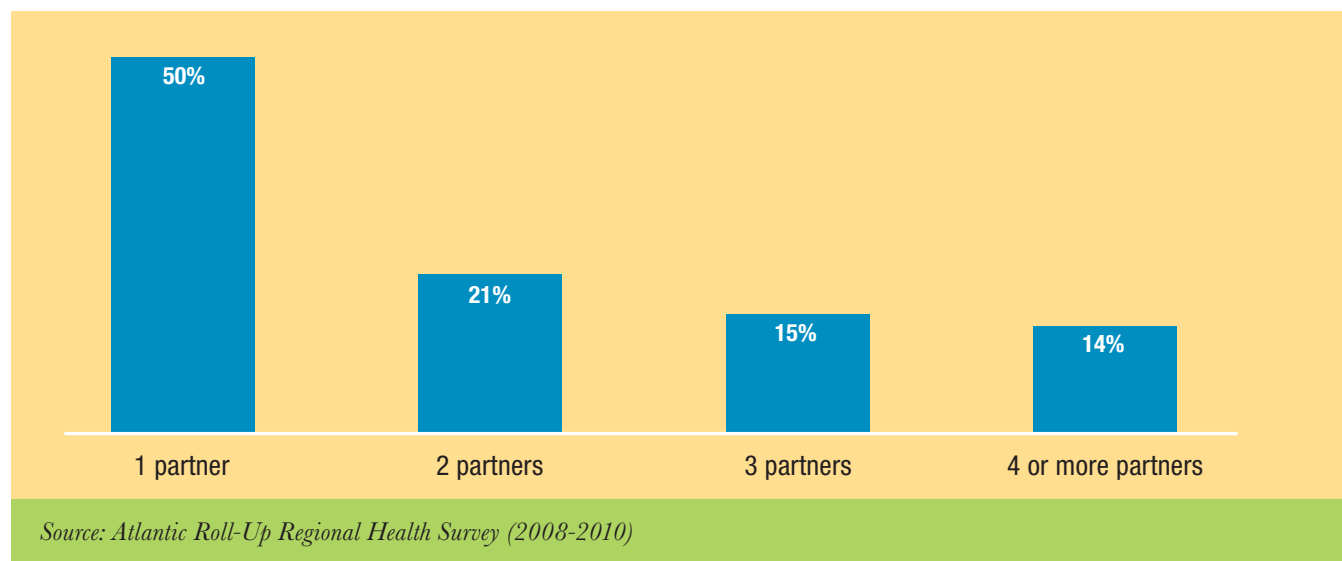


Source: Atlantic Roll-Up Regional Health Survey (2008-2010)

12.10 SEXUAL HEALTH

Of the First Nation youth living On Reserve in Atlantic Canada that reported being sexually active, almost half reported having only one sexual partner (Figure 12.9). One in five reported having two partners. Approximately three out of ten had three or more sexual partners.

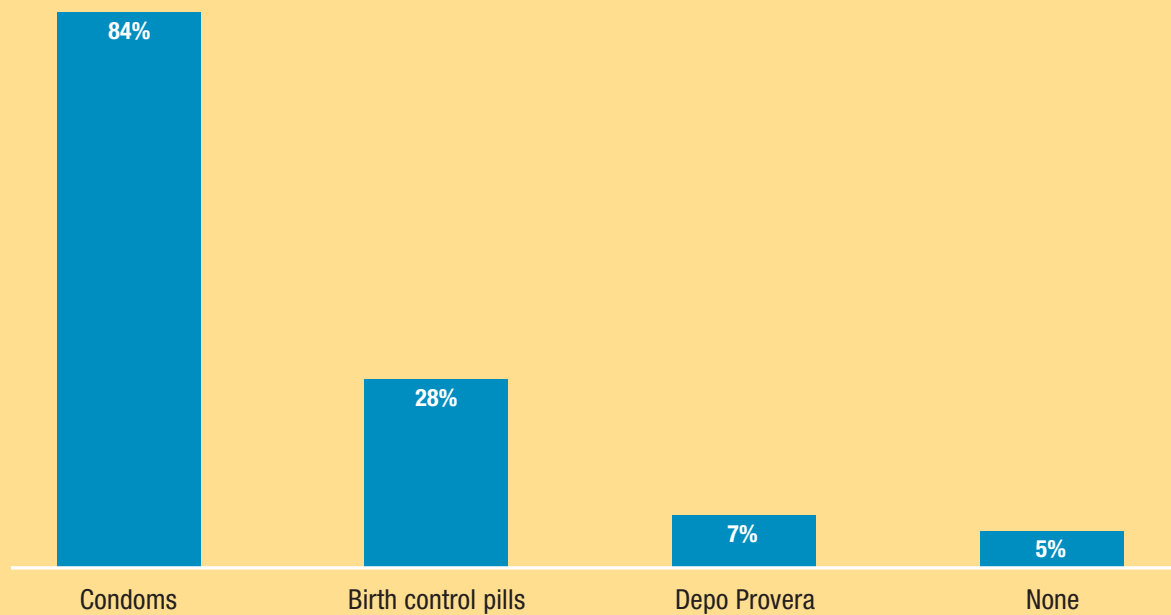
Figure 12.9 Percentage of First Nation Youth On Reserve in Atlantic Canada by Self-Reported Number of Sexual Partners (2008-2010)



Among sexually active First Nation youth living On Reserve, over four in five (84%) reported using condoms (Figure 12.10). Birth control pills were the second most common method of protection (28%). Fewer than five percent of those sexually active reported using no method of birth control/protection. Condoms were also the most common method of birth control/protection used by First Nation youth living On Reserve across Canada²³.



Figure 12.10 Percentage of Self-Reported Sexually Active First Nation Youth On Reserve in Atlantic Canada by Type of Birth Control (2008-2010)

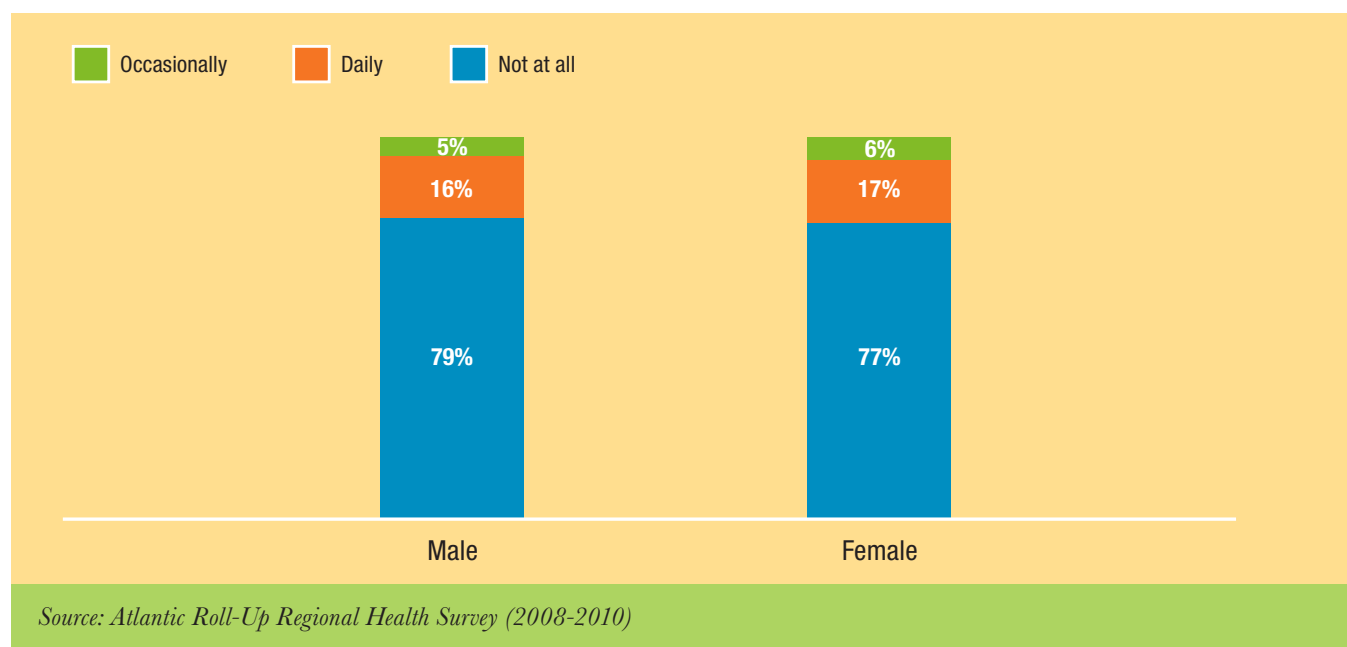


Source: Atlantic Roll-Up Regional Health Survey (2008-2010)

12.11 SMOKING

Overall, approximately one in five First Nation youth On Reserve in Atlantic Canada reported smoking either daily or occasionally. This is comparable to First Nation youth nationally^{11, 23}. Only eight percent of the general population of youth reported smoking either daily or occasionally⁴¹.

Figure 12.11 Percentage of First Nation Youth Living On Reserve in Atlantic Canada by Type of Smoker and Sex (2008-2010)



12.12 ALCOHOL

A higher percentage of female First Nation youth On Reserve in Atlantic Canada reported drinking alcohol in the past 12 months than males (41% vs. 34%).

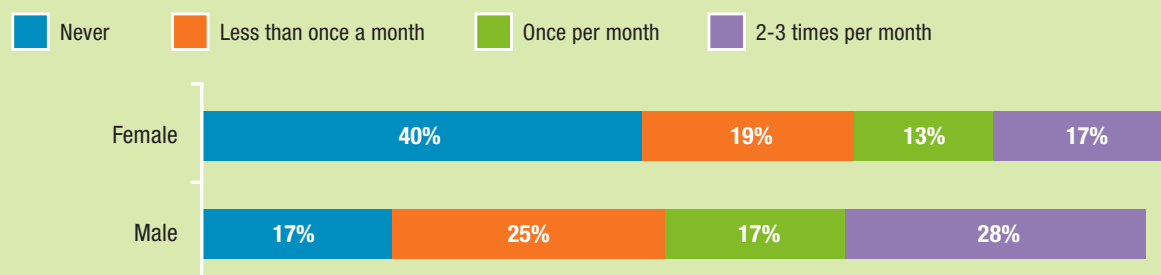
Figure 12.12 Percent of First Nation Youth On Reserve in Atlantic Canada who report consuming alcohol in the past 12 months by sex (2008-2010)



Source: Atlantic Roll-Up Regional Health Survey, (2008-2010)

Over 70% of First Nation youth who drank alcohol reported binge drinking (five or more drinks on at least one occasion) in the past year. More males than females reported binge drinking.

Figure 12.13 Percentage First Nation Youth On Reserve in Atlantic Canada by Frequency of Binge Drinking and Sex (2008-2010)



Source: Atlantic Roll-Up Regional Health Survey (2008-2010)

12.13 MATERNAL RISK BEHAVIOURS

Maternal cigarette smoking during pregnancy is associated with many negative health effects including: stillbirths, low birth weight, sudden infant death syndrome, attention deficit hyperactivity disorder, some childhood cancers, and increased risk of asthma³⁰.

Exposure to alcohol during pregnancy is linked with fetal alcohol spectrum disorder (FASD); which is a range of conditions that includes cognitive, behavioural, neurodevelopmental, physiological, or physical impairments that effect children over their lifespan³⁰. Currently, there is no evidence of a safe amount of alcohol consumption during pregnancy³¹. Therefore, the clinical guidelines advise women who are or may become pregnant to not drink at all. Use of illicit drugs during pregnancy can also have a variety of serious health consequences for pregnant women and their babies, which may affect them throughout their lifetime.

It is not known how many Canadians are living with FASD. FASD is difficult to diagnose and is often under-reported³². It is estimated that nine out of every 1,000 Canadian babies³², approximately one percent of the population³¹, are born with FASD each year.

Teenage pregnancies are associated with health risks to mothers and their babies, including anemia in the mother, poor maternal weight gain, low birth weight, pre-term birth, and higher mortality rates³⁰. Teenage mothers are also at risk of having poorer educational outcomes³⁰. In Canada in 2011, approximately four percent of live births were among females under the age of 20³³.

Gestational (or maternal) diabetes occurs during pregnancy. It increases the risk of a baby having a high birth weight and the associated health consequences. Having gestational diabetes also increases the risk of the mother developing type 2 diabetes after pregnancy³⁰.

From 2010-2014, the percentage of pregnant women On Reserve who drank alcohol while pregnant has decreased from 19% to five percent.

Over the past four years, other material risk factors have remained constant. Of pregnant women On Reserve in 2013-2014:

- **Forty percent smoked cigarettes.**
- **Thirteen percent used drugs and/or solvents.**
- **Seventeen percent were less than 20 years of age.**
- **Eight percent had gestational diabetes.**

Source: Atlantic Region CBRT Reports (2010-2014)



12.14 OTHER INDICATORS OF INTEREST TO CHILDREN AND YOUTH

The Child and Youth Strategic Plan identified indicators related to safer community environments and the quality and availability of a broader range of health programs and services. These indicators are reported elsewhere in the report. Specifically:

- Section 5.1.1: Diabetes
- Section 7: Addictions
- Section 8.1: Access to Care
- Section 9: Environmental Health

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- (1) Mi'kmaw Kina'matnewey (Education), Atlantic Canada's First Nation Help Desk. L'nui' suti app- Mi'kmaq Words and Phrases. 2015.
- (2) World Health Organization. Obesity. 2015.
- (3) Sproule B, Brands B, Li S, Catz-Biro L. Changing patterns in opioid addiction. *Can Fam Physician* 2009;55:68-69.
- (4) Canadian Pharmacists Association. e-CPS Compendium of Pharmaceuticals and Specialties. Canadian Pharmacists Association. 2013. 2012.
- (5) Centre for Addiction and Mental Health. Mental health and addiction information. Methadone. Centre for Addiction and Mental Health. 2012. 2012.
- (6) Hernandez SH, Nelson LS. Prescription drug abuse: Insight into the epidemic. *Clin Pharmacol Ther* 2010;88:307-317.
- (7) World Health Organization. World Health Organization lexicon of alcohol and drug terms. World Health Organization. 2010. 2010.
- (8) Hernandez SH, Nelson LS. Prescription drug abuse: Insight into the epidemic. *Clin Pharmacol Ther* 2010;88:307-317.
- (9) Centre for Addiction and Mental Health. Addiction Toolkit: Fundamentals of Addiction. Centre for Addiction and Mental Health. 2014. 2010.
- (10) Public Health Agency of Canada. Case definitions for communicable diseases under national surveillance. Canada Communicable Disease Report. Report. Public Health Agency of Canada; 2009.
- (11) Union of Nova Scotia Indians. Atlantic Roll-Up of Regional Health Survey Data (2008-2010). 2014.
- (12) Langlois S, Turner A. Aboriginal Languages and Selected Vitality Indicators in 2011. Report. Statistics Canada: Minister of Industry; 2014. Report No.: 89-655-X.
- (13) Tarasuk V, Mitchell A, Dachner N. Household Food Insecurity in Canada 2012. 2014.
- (14) Statistics Canada. Atlantic Roll-Up of Aboriginal Peoples Survey. 2012.
- (15) Public Health Agency of Canada. Obesity in Canada: A joint report from the Public Health Agency of Canada and the Canadian Institute for Health Information. 2011.
- (16) Statistics Canada CANS. Table 105-4042- Pap smear, females aged 18-69 years, Canada, provinces and territories, occasional. 2015.
- (17) Public Health Agency of Canada. 2009 Tracking Heart Disease and Stroke in Canada. Public Health Agency of Canada. 2009. 2014.
- (18) Public Health Agency of Canada. Diabetes in Canada: Facts and figures from a public health perspective. Public Health Agency of Canada. 2011. 2014.
- (19) Konrad S, Hossain A, Senthilselvan A, Dosman JA, Pahwa P. Chronic Bronchitis in Aboriginal People- Prevalence and Associated Factors. *Chronic Diseases and Injuries in Canada* 2013;33(4):218-225.
- (20) Statistics Canada CANS. Asthma, by Sex, Provinces and Territories (Percent)- Table 105-0501. Report. Statistics Canada; 2014. Report No.: 82-221-X.
- (21) Statistics Canada. Chronic Obstructive Pulmonary Disease 2009. Report. Statistics Canada; 2011. Report No.: 82-625-X.
- (22) Statistics Canada. Arthritis, 2010. 2015.
- (23) First Nations Information Governance Centre. First Nations Regional Health Survey (RHS) 2008/10: National Report on adults, youth, and children living in First Nations communities. 2012.

REFERENCE LIST *continued*

- (24) Bogunovic OJ, Greenfield SF. Use of benzodiazepines among elderly patients. *Practical Geriatrics* 2004;55:233-235.
- (25) Aparasu RR, Mort JR, Brandt H. Psychotropic prescription use by community-dwelling elderly in the United States. *J Am Geriatr Soc* 2003;51:671-677.
- (26) Tissaaratchy P. First Nations and Inuit Home and Community Care Program: 2014 Analytical Report. Report. First Nations and Inuit Health Branch; Health Canada; 2014.
- (27) Health Canada. Guidelines for Canadian Drinking Water Quality - Summary Table. Report. Health Canada; 2014.
- (28) Public Health Agency of Canada. What makes Canadians healthy or unhealthy? 2013.
- (29) Statistics Canada. National Household Survey. Report. 2011.
- (30) Public Health Agency, of Canada. Canadian perinatal health report. Report. Public Health Agency of Canada; 2008.
- (31) Carson G, Vitale L, Crane J, Croteau P, Graves L, Kluka S. Alcohol Use and pregnancy consensus clinical guidelines. *Journal of Obstetrics and Gynaecology Canada* 2010;32(8):S1.
- (32) Healthy, Child Manitoba. Position paper developing a national prevalence plan for FASD in Canada. Healthy Child Manitoba. 2012. 2012.
- (33) Statistics Canada. Table 102-4503: Live births, by age of mother, Canada, provinces and territories. Statistics Canada. 2013. 2014.
- (34) Statistics Canada. Table 102-4504- Crude birth rate, age-specific and total fertility rates (live births), Canada, provinces and territories, annual (rate) CANSIM (database). Statistics Canada. 2014. 2012.
- (35) Government, of Canada. The Well-Being of Canada's Young Children. Report. Human Resources and Skills Development Canada; Public Health Agency of Canada; Indian and Northern Affairs Canada; 2011.
- (36) Health Canada. Food and Nutrition: Breastfeeding Initiation in Canada: Key Statistics and Graphics (2009-2010). Health Canada . 2012. 2014.
- (37) Health Canada. Nutrition for Healthy Term Infants: Recommendations from Birth to Six Months. A joint statement of Health Canada, Canadian Pediatric Society, Dietitians of Canada, and Breastfeeding Committee for Canada. Health Canada. 2012. 2012.
- (38) World, Health Organization, UNICEF. Global Strategy for infant and young child feeding. World Health Organization and Unicef. 2012. 2012.
- (39) Seach KS, Dharmage SC, Lowe AJ, Dixon JB. Delayed introduction of solid feeding reduces child overweight and obesity at 10 years. *Int J Obes* 2010;34(10):1475-1479.
- (40) Public Health Agency of Canada. Vaccine Coverage in Canadian Children: Results from the 2011 Childhood National Immunization Coverage Survey. 1-30-2015.
- (41) Health Canada. It's your health. The effects of oral health on overall health. Report. 2009.

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LIST OF ACRONYMS

AANDC – Aboriginal Affairs and Northern Development Canada

AHSOR – Aboriginal Head Start On Reserve

APS – Aboriginal Peoples Survey

BMI – Body Mass Index

BWA – Boil Water Advisory

CA – Contribution Agreement

CBDHA – Cape Breton District Health Authority

CBRT – Community-Based Reporting Template

COHI – Children's Oral Health Initiative

DNC – Do Not Consume

EHIS – Environmental Health Information Systems

EHO – Environmental Health Officers

EMR – Electronic Medical Record

eSDRT – Electronic Service Delivery Reporting Template

FASD – Fetal Alcohol Spectrum Disorder

FNIGC – First Nations Information Governance Centre

FNIHB – First Nations and Inuit Health Branch

HIA & eHSD – Health Information Analysis & e-Health Solutions Directorate

IR – Indian Registry

MOA – Memorandum of Agreement

MOU – Memorandum of Understanding

MTRS – Medical Transportation Record System

NIHB – Non-Insured Health Benefits

NB – New Brunswick

NL – Newfoundland and Labrador

NLCHI – Newfoundland and Labrador Centre for Health Information

NNADAP – National Native Alcohol and Drug Abuse Program

NPHS – National Population Health Survey

NS – Nova Scotia

PHAC – Public Health Agency of Canada

PHSCD – Population Health Surveillance Capacity Development

PHRU – Population Health Research Unit

PE – Prince Edward Island

RHS – First Nation Regional Longitudinal Health Survey

SAIS – Substance Abuse Information System

WHO – World Health Organization

APENDIX

APPENDIX A: POPULATION HEALTH SURVEILLANCE CAPACITY DEVELOPMENT LOGIC MODEL





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