Healthy Children, Healthy Families, Healthy Communities

BC Provincial Report
2008-10 First Nations Regional Health Survey

First Nations Health Authority. (2012). Healthy children, healthy families, healthy communities: BC provincial results 2008-10 First Nations Regional Health Survey

Note:

In 2009, the First Nations Health Society was created as the operational arm of the First Nations Health Council. In December 2011, the First Nations Health Society became the *interim* First Nations Health Authority. In August 2012, the *interim* First Nations Health Authority became the First Nations Health Authority.

These name changes reflect the evolving nature of the organization as First Nations in BC move towards the creation of new health governance structure.

As a result of these name changes, citations attributed to the First Nations Health Authority throughout this document are attributed to the name the organization held at the time of the cited works were published.

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The First Nations Health Authority is pleased to introduce the British Columbia results of the 2008-10 Regional Health Survey: 'Healthy Children, Healthy Families, Healthy Communities'. There has been significant time, effort, planning, and hard work put into this report and I would like to personally thank all of the participating communities and many individuals who made this survey possible.

Information found in this survey comes directly from 36 of 203 BC First Nation communities and gives us a greater understanding of the progress we have made since the last Regional Health Survey in 2002-03. It is an opportunity for health professionals, policy makers, government, partners and scholars to get an important updated insight into how our communities feel about their wellness in a number of important areas directly related to the Social Determinants of Health.

This Regional Health Survey is one example of BC First Nations through the First Nations Health Authority taking governance over our own data and information. The information in this report will support our work moving forward in planning, policy and strategic efforts to bring to life our vision of healthy, self-determining and vibrant BC First Nations children, families and communities.

Sincerely,

Joe Gallagher
Chief Executive Officer
First Nations Health Authority

1.0 ACKNOWLEDGEMENTS

The First Nations Health Authority would like to acknowledge and thank all 2,476 participants and 36 communities for participating in the 2008-10 First Nations Regional Health Survey. By participating, you have contributed towards a better understanding of the health issues faced by First Nations people across British Columbia.

The First Nations Health Authority would also like to acknowledge the efforts of the data collectors, a.k.a "data warriors", who diligently collected the survey information from their fellow community members, as well as the reviewers who contributed their thoughts and ideas into this report, including Miranda Kelly, Joanne Nelson, Dr. Shannon Waters, Dr. Georgia Kyba, Dr. Isaac Sobol, Dr. Naomi Dove, Dr. Evan Adams, Dr. Sarah Williams, Michelle Degroot, Dr. Sean Mark, Lilly Lee, Mikelle Sasakamoose, and Dr. Charlotte Reading.

Last, but not least, the First Nations Health Authority would like to thank the First Nations RHS Steering Committee members for their oversight and guidance of the work of the RHS in BC.

Members of the RHS Steering Committee are:

Shirley Anderson (Adams Lake Band – Interior Representative)

Arlene Sampson (Sik-e-Dakh – Northern Representative)

Rose Adams (Sliammon – Vancouver Coastal Representative)

Leanne Kelly (Cowichan Tribes – Vancouver Island Representative)

Nene Kraneveldt (First Nations Social Development Society)

Jerry Potts / Mikelle Sasakamoose (Statistics Canada)

Sue Hanley (First Nations Technology Council)

Laurette Bloomquist (past member)

Gladys Arnouse (past member)

Section 2.0

Executive Summary

There are challenges in data interpretation and comparisons between the 2002-03 and 2008-10 RHS surveys. Please see Section 4.4 for more details. All differences mentioned in the executive summary are statistically significant. Children are ages 0-11, youth ages 12-17 and adults age 18+. Elders are age 55+. Primary caregivers responded on behalf of their children for all children's surveys.

Traditional Ways, Knowledge and Wellness

	What People Do	What People Know or Feel
Cultural Knowledge and Activities	• 44% of children and 31% of youth reported ever taking part in traditional singing, drumming or dancing groups or lessons outside of school. • 19% of youth reported always/almost always taking part in local community cultural events. • 20% of adults reported always taking part in local community cultural events. • Parents and grandparents are most often reported as being the teachers of culture to their children.	• 63% of children and 45% of youth reported that traditional cultural events are very important to them.
Language	• Elders (age 55+) were more likely to report being able to speak or understand a First Nations language fluently or to use a First Nations language as one of the languages that they use most in their daily lives than children, youth or adults age 18-54.	• 68% of children and 38% of youth reported that they believe that it is very important to learn a First Nations language.
Participation in Hunting and Trapping	• 9% of children, 15% of youth and 17% of adults reported hunting or trapping in the year prior to the 2008-10 RHS. • Among children and adults, this is a decrease from the 2002-03 RHS, when 18% of children and 31% of adults reported participating in hunting or trapping in the 12 months prior to the survey.	
Participation in Fishing	• 25% of children, 31% of youth and 34% of adults reported participating in fishing in the year prior to the 2008-10 RHS. • Among children and adults, this is a decrease from the 2002-03 RHS, when 43% of children and 52% of adults reported participating in fishing in the past 12 months.	
Life Balance		• 14% of youth and 16% of adults reported feeling balanced all or most of the time in all four aspects of their lives: physical, emotional, spiritual and mental.
Spirituality		• 48% of adults reported that traditional spirituality is very important to them. • 24% of adults reported that religion is very important to them.

	What People Do	What People Know or Feel
Traditional Medicines	• 40% of adults reported using traditional medicines.	• 76% of adults who reported using traditional medicines stated that they had no difficulties in accessing traditional medicines however, among those who did, not knowing where to get traditional medicines and not knowing enough about them were the most commonly reported barriers.
Traditional Healers	• 12% of youth and 28% of adults reported ever consulting a traditional healer. • Adults in communities with no year-round access to a service centre were less likely to report ever having consulted a traditional healer (14%) than adults in communities less than 50 km from a service centre (38%).	
Traditional Foods	• 61% of BC First Nations of all ages reported often eating one or more types of traditional foods in the year prior to the 2008-10 RHS. This is a significant decrease from the 2002-03 RHS, in which 74% of First Nations of all ages reported eating traditional foods in the year prior to the survey. • The percentage of individuals reporting often eating one or more types of traditional foods was higher amongst individuals living in communities that have no year-round access to a service centre (76%) than individuals in communities less than 50 km from a service centre (53%).	
Community Strengths and Community Issues	• Alcohol and drug abuse, lack of employment and job opportunities, housing, funding and lack of education and training opportunities were the most commonly reported community issues by FN adults.	

Social Determinants of Health

Income	• There was no change in the distribution of reported personal income levels between the 2002-03 and 2008-10 RHS.
	• 63% of adults reported struggling to meet basic food, transportation, utilities, clothing, shelter or childcare needs a few times a year or more. Individuals most commonly reported struggling to meet the basic requirements for food (21%), transportation (18%) and utilities (10%) once a month or more.
Food Security	• 19% of all households were categorized as being severely food insecure.
	• 29% of households with children were categorized as being severely food insecure.
	• There is no difference in the percentage of all households or households with children who were categorized as being severely food insecure by the remoteness of communities.
Housing Characteristics	• 76% of adults reported that their homes need either major (38%) or minor repairs (38%).
	• 51% of adults reported mold or mildew in their homes in the past 12 months.
Household Amenities	• The percentage of adults reporting computer and Internet access in their households rose significantly between the 2002-03 and 2008-10 RHS (from 42% to 59% and 29% to 53%, respectively).
Water	• 65% of adults reported that they consider their main water supply safe to drink year-round.
Outside-School activities	• 65% of children and 63% of youth reported spending more than an hour per day on average watching TV.
	• 12% of children and 34% of youth reported spending more than an hour per day on average working at the computer.
	• 42% of children are reported to read, or to be read to for fun every day.
	• 25% of children and 42% of youth reported participating in sports teams or lessons once a week or more.
	• The percentage of youth reporting participating in sports teams or lessons once a week or more has decreased between the 2002-03 and 2008-10 RHS from 57% to 42%.
Education	• 34% of youth reported liking school very much and 52% reported liking school somewhat.
	• 26% of youth reported that they would like to seek a high school diploma as their highest level of educational attainment, 20% reported that they would like to seek a college degree, and over 10% reported that they would like to seek a Master's, PhD or professional degree.
	• 42% of adults reported graduating from high school. This is not significantly different from the 2002-03 RHS (36.1%).
	• A higher per cent of adults age 18-54 reported graduating from high school (56%) than Elders age 55+ (20%).

Employment	• A higher percentage of female youth reported working after school than male youth (59% vs. 28%).
	• 48% of adults age 18-54 and 27% of Elders reported currently working for pay.
	• 28% of adults age 18-54 reported currently looking for work.
	• 20% of adults age 18-54 reported not looking for work, mostly due to parenting duties or poor health or disability.
	• 72% of working adults reported working in their own community, 5% reported working in another First Nations community and 20% reported working in a non-First Nations community.
Household Composition	• 50% of children were reported to live with both biological parents, 39% were reported to live with their biological mother only, 4% were reported to live with their biological father only and 7% of children were reported to live with neither biological parent.
	• 38% of youth reported living with both biological parents, 37% reported living with their biological mother only, 6% reported living with their biological father only and 20% of youth reported living with neither biological parent.
Crowded Housing	• 22% of children and 15% of adults were categorized as living in crowded housing.
	• There has been no significant change since the 2002-03 RHS in the percentage of children or adults categorized as living in crowded homes.
Migration	• 60% of adults reported ever having lived outside of their community.
	• 14% of adults reported moving on-and off-reserve more than once a year.
	• 25% of adults reported leaving their community for employment and 24% reported leaving their community for education.
	• 52% of adults reported wanting to receive services from their community (e.g. health, education) while living away and 37% of adults reported voting in their First Nations elections while living outside of their community.
	• 64% of adults returned to their communities because of family and 33% returned because of their connection to the community.

Lifestyle Factors

Nutrition	• 65% of children, 26% of youth and 36% of adults reported always or almost always eating a nutritious balanced diet.
	• 76% of children, 73% of youth and 56% of adults reported drinking juice once a day or more.
	• 11% of children, 43% of youth and 33% of adults reported drinking pop once a day or more.
	• 84% of children, 73% of youth and 57% of adults reported eating fruits once a day or more.
	• 75% of children, 63% of youth and 65% of adults reported eating vegetables once a day or more.
	• 7% of youth and 7% of adults reported consuming fast foods such as pizza, burgers, hot dogs or French Fries once a day or more.
	• 17% of children and 22% of youth reported consuming sweets such as candy, cookies or cake once a day or more.
Physical activity	• 80% of children, 84% of youth and 62% of adults were categorized as being moderately physically active.
	• A higher percentage of adult men (69%) were categorized as being moderately physically active than adult women (55%).
	• Walking is the most commonly reported physical activity among children, youth and adults.
Breastfeeding	• 79% of children were reported to have ever been breastfed. This is similar to the percentage of children reported to have ever been breastfed in the 2002-03 RHS (77%).
	• 72% of children were reported to have been breastfed for 6 months or longer. This is higher than the percentage of children reported to have been breastfed for 6 months or longer in the 2002-03 RHS (50%).
Tobacco Smoking	• 15% of youth reported smoking daily and 7% reported smoking occasionally.
	• The percentage of youth who reported smoking daily has decreased since the 2002-03 RHS (from 28%) and the percentage of youth who reported smoking occasionally has increased since the 2002-03 RHS (from 13%).
	• 28% of adults reported smoking daily and 17% of adults reported smoking occasionally. There has been no change in the per cent of reported daily or occasional adult smokers since the 2002-03 RHS.
Smoke Free Homes	• There has been an increase in the percentage of current non-smokers reporting that they live in smoke free homes between the 2002-03 and 2008-10 RHS (from 75% to 86%).

Trauma

Residential Schools	• 21% of adults reported attending residential school.
	• 74% of adults who attended residential school reported that they felt that their overall health and well-being was negatively impacted by their attendance at residential school.
	• Among adults who reported attending residential school and reported a negative impact on their overall health and well-being from their attendance at residential school, the three most commonly reported factors negatively impacting their overall health and well-being were loss of language (83%), isolation from family (80%) and loss of cultural identity (80%).
Racism	• 33% of adults reported personally experiencing an instance of racism in the 12 months prior to the survey. This is a decrease in the percentage of adults reporting personally experiencing an instance of racism in the 12 months prior to the 2002-03 RHS (49%).
Alcohol consumption	• 38% of youth and 63% of adults reported consuming an alcoholic drink in the 12 months prior to the survey. This is similar to the percentage of youth and adults who reported consuming an alcoholic drink in the past 12 months in the 2002-03 RHS (47% and 60%, respectively).
	• 7% of youth reported consuming alcohol two times a week or more frequently in the 12 months prior to the survey.
	• 7% of youth reported consuming more than five alcoholic drinks on one occasion once a week or more in the 12 months prior to the survey.
	• A higher percentage of female youth reported ever consuming five or more alcoholic drinks on one occasion than male youth (38% vs. 20%, respectively) in the year prior to the 2008-10 RHS.
	• 12% of adults reported consuming alcohol two or three times a week and 3% of adults reported consuming alcohol daily in the year prior to the 2008-10 RHS.
	• 10% of adults reported consuming five or more alcoholic drinks on one occasion once a week or more in the year prior to the 2008-10 RHS.
Drug use	• 31% of youth and 36% of adults reported using a non-prescription drug in the year prior to the survey.
	• The most commonly reported non-prescription drug was cannabis. 31% of youth 33% of adults reported using cannabis once or more in the year prior to the survey.
	• A higher percentage of male adults reported using a non-prescription drug in the year prior to the survey than female adults (44% vs. 29%, respectively).
Aggression	• The majority of adults reported that they had not experienced physical (73%) or verbal aggression (53%) in the 12 months prior to the survey.
	• There was no significant difference in the percentage of men or women who reported experiencing verbal (26% vs. 28%, respectively) or physical aggression (14% vs. 9%, respectively).
	• Among adults who did experience aggression, 32% reported that they did not seek any help to deal with the physical or verbal aggression they experienced and 56% preferred not to say whether they sought help.
	• 9% of youth reported that they are currently being bullied.
Gambling	• 70% of adults reported ever having gambled.

Mental Wellness

Mental Health	• 92% of youth reported that they would rate their mental health as being excellent, very good or good.
	• 8% of adults were categorized as being at high risk for depression.
	• A higher percentage of adult women were categorized as being at high risk for depression than adult men (12% vs. 4%, respectively).
Suicide Ideation and Attempts	• There has been no significant change in the percentage of youth or adults reporting that they have ever thought about committing suicide between the 2002-03 and 2008-10 RHS.
	• A higher percentage of female youth reported ever thinking about committing suicide than male youth (17% vs. 5%[E], respectively) in the 2008-10 RHS.
	• There has been no significant change in the percentage of youth or adults reporting that they have ever attempted suicide between the 2002-03 and 2008-10 RHS.
Personal Supports	• Youth reported that they would turn to their friends (59%), parents (48%), and other family members (42%) for emotional or mental health support.
Self-esteem	• 95% of youth were categorized as having good self-esteem.
Individual Self Determination	• 45% of youth and 55% of adults were categorized as having a high or very high personal sense of control over their lives.

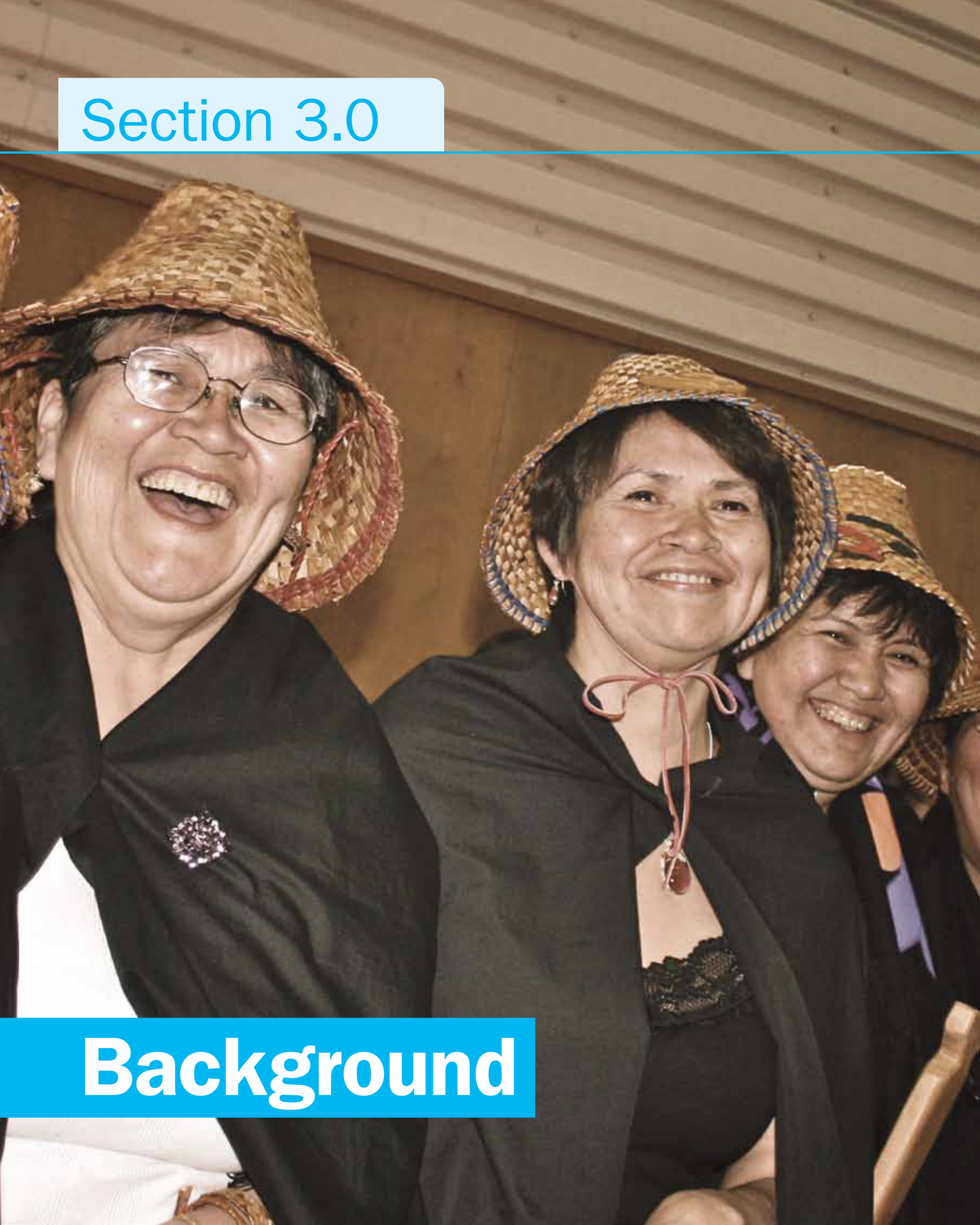
Health and Health Care Services

Self-Declared Health Status	• 87% of children, 67% of youth, 46% of adults age 18-54 and 20% of Elders age 55+ reported that they have excellent or very good health.
	• Among children, the percentage of caregivers reporting that their child had excellent or very good health rose between the 2002-03 and 2008-10 RHS (from 69% to 87%).
Disability and Home Care	• 12% of adults reported that they are often limited in the type or amount of activity that they can do at home, work or elsewhere because of a physical or mental condition or because of other health problems.
	• 53% of all First Nation adults were categorized as having good to full functional health.
Health Conditions	• The three most commonly reported health conditions among children were allergies (17%), asthma (12%) and dermatitis (8%).
	• The three most commonly reported health conditions among youth were allergies (16%), asthma (13%) and learning disabilities (6%).
	• The three most commonly reported health conditions among adults were arthritis (28%), chronic back pain (24%) and allergies (24%).
	• There has been no change in the percentage of children, youth or adults reporting any health condition since the 2002-03 RHS.
Obesity	• 36% of adults were categorized as being obese (BMI>30) and 37% are categorized as being overweight (BMI between 25-29.9).
	• 12% of youth were categorized as being obese.
	• 34% of children were categorized as being obese.
	• There has been no significant change in the percentage of children, youth or adults who were categorized as obese between the 2002-03 and 2008-10 RHS.
	• A higher percentage of adult females age 18+ were categorized as obese than males (42% versus 30%).
	• The highest percentage of categorized obesity was among Elder women (49%).
Diabetes	• 9% of adults reported being diabetic. The percentage of children and youth who reported being diabetic is too small to report.
	• 74% of self-reported diabetic adults reported controlling their illness using diet, 58% reported using exercise and 57% reported using pills to control their illness (multiple responses permitted).
	• 62% of self-reported diabetic adults reported one or more complication from their diabetes. The two most commonly reported complications were retinopathy (36%) and neuropathy (31%).

Injuries	• 10% of children, 35% of youth and 20% of adults reported being injured in the year prior to the 2008-10 RHS.
	• The most common place of injury for children, youth and adults was the home.
	• 24% of adults reported being injured while working at a job or business.
	• The most commonly reported cause of injury among adults, youth and children were falls.
	• 20% of injuries among youth and 27% of injuries among adults happened when the individual reported being under the influence of alcohol.
Dental Health	• 79% of children, 82% of youth and 54% of adults reported receiving dental care within the past year.
	• 21% of children were reported by their caregivers as having been affected by baby bottle tooth decay.
	• Elders were more likely to report receiving dental care more than five years ago or never receiving dental care than adults age 18-54.
	• There has been no change in reported barriers to dental care since the 2002-03 RHS. The three most commonly reported barriers were: waiting list being too long (27%), direct cost of care (26%) and service not covered by NIHB (24%).
Sexual Health	• 23% of youth reported being sexually active.
	• The most commonly reported birth control methods used among sexually active youth were condoms (56%) and birth control pills (25%).
	• 45% of sexually active youth reported always using a condom.
	• 85% of sexually active youth reported that they have ever been tested for STIs and 77% reported having ever been tested for HIV.
	• 74% of sexually active adults reported that they have ever been tested for STIs and 74% reported having ever been tested for HIV.
Preventative Health Care and Screening	• 77% of women aged 50-69 reported ever having a mammogram (38% within the year prior to the survey, 23% between one and three years prior to the survey and 16% more than three years prior to the survey).
	• 45% of women age 18+ reported having a pap smear less than a year prior to the survey.
	• Women age 55 or older were the most likely to report never having a pap smear or having a pap smear more than three years prior to the survey (55%) followed by women age 18-24 (31%).
	• 30% of men age 40-54 and 35% of men age 55+ reported ever having a prostate check.

Health Care Services Access	• 49% of adults reported that they feel that their level of access to health services is the same as compared to Canadians in general, 37% felt that their level of access to health services is better, 14% felt that their level of access is worse than other Canadians.
	• The three most commonly reported home care services required by adults were home maintenance (15%), light housekeeping (12%) and meals prepared or delivered (5%).
	• The five most commonly reported barriers to health care access by adults include: the waiting list being too long (33%), the service not being covered by NIHB (23%), not being able to afford the direct cost of care (23%), felt that the health care provided was inadequate (22%) and could not afford transportation costs (21%).
	• 69% of youth reported never having received counseling, psychological testing or other mental health services.
Barrier to Non-Insured Health Benefits	• 63% of adults reported not experiencing any barriers accessing Non-Insured Health Benefits.
	• For those who experienced barriers, the largest percentage of adults reported barriers to accessing dental care (17%), medication (15%), vision care (14%), transportation services or costs (11%) and escort travel (7%).

Section 3.0



Background

The First Nations Regional Health Survey (RHS) is the only First Nations-governed national health survey in Canada. It is a cross-sectional survey designed to assess the holistic health of First Nations individuals living in First Nations communities across Canada (on-reserve and in northern First Nations communities).

The RHS began as a pilot project in 1997. Subsequently, RHS Phase 1 was implemented in 2002-03. The second and most recent phase (RHS Phase 2), was conducted between June 2008 and November 2010.

The following 36 communities participated in the 2008-10 RHS. Communities in **bold** typeface are those that were selected and participated in both the 2002-03 and 2008-10 RHS.

Fraser Health Authority	Interior Health Authority	Northern Health Authority	Vancouver Coastal Health Authority	Vancouver Island Health Authority
• Chawathil First Nation • **Katzie First Nation** • **Soowahlie Band** • Sts'ailes (formerly Chehalis)	• **Adams Lake Band** • **Canim Lake Band** • **Okanagan Indian Band** • Splatsin (formerly Spallumcheen) • **T'exelcemc (Williams Lake Band)**	• **Fort Nelson First Nation** • Gitanyow • Gitsegukla Band • Gitwangak Band • Hagwilget Village • Kispiox Band • **Kwadacha Nation** • Lake Babine Nation • **Metlakatla First Nation** • Moricetown First Nation • **Nadleh Whut'en First Nation** • **Sik-e-Dakh (formerly Glen Vowell)** • **Takla Lake First Nation**	• **Heiltsuk Nation** • **Mount Currie Indian Band (Lil'wat First Nation)** • **Sechelt First Nation (shíshálh)** • Sliammon First Nation	• We Wai Kai Nation (Cape Mudge) • **Wei Wai Kum First Nation (Campbell River Indian Band)** • Chemainus First Nation • **Cowichan Tribes** • Hupacasath First Nation • **Nanoose First Nation** • Tla-o-qui-aht First Nations • **Tsartlip First Nation** • **Tseshaht First Nation** • Ucluelet First Nations

The 39 participating communities in the 2002-03 RHS included the following First Nations.

Fraser Health Authority	Interior Health Authority	Northern Health Authority	Vancouver Coastal Health Authority	Vancouver Island Health Authority
• Katzie First Nation • Leq'á:mel First Nation (formerly Lakahahmen First Nation) • Scowlitz First Nation • Seabird Island Band • Shxwhá:y Village (formerly Skway First Nation) • Soowahlie Band • Tzeachten	• ?Akisq'nuk First Nation (formerly Columbia Lake) • Adams Lake Band • Canim Lake Band • Okanagan Indian Band • Osoyoos Indian Band • Stone Indian Band (Yunesit'in Government) • Westbank First Nation • T'exelcemc (Williams Lake Band)	• Fort Nelson First Nation • Gitlaxt'aamiks (formerly New Aiyansh) • Kwadacha Nation • Laxgalts'ap Village Government • Metlakatla First Nation • Nadleh Whut'en First Nation • Nee-Tahi-Buhn Indian Band • Sik-e-Dakh (formerly Glen Vowell Band) • Takla Lake First Nation • Tl'azt'en Nation	• Heiltsuk Nation • Mount Currie Indian Band (Lil'wat First Nation) • Musqueam • N'Quatqua • Sechelt First Nation (shíshálh Nation)	• Wei Wai Kum First Nation (Campbell River Indian Band) • Cowichan Tribes • Ehattesaht First Nation • Gwa'sala-'Nakwaxda'xw Nations • Hesquiaht First Nations • Malahat First Nation • Nanoose First Nation • Tsartlip First Nation • Tseshaht First Nation

Overall, 2,476 First Nations children, youth, adults and Elders across BC participated in the 2008-10 RHS.

The mean age of the 2008-10 RHS sample population was 29.7. This is over eight years older than the average age of the 2002-03 RHS sample population (21.5). The reason for this eight-year age difference is not known.

When compared to the 2010 Aboriginal Affairs and Northern Development Canada (AANDC) on-reserve and Crown land population, the 2008-10 RHS sample population had slightly higher percentages of children, youth and Elders (26.1%, 17.6% and 19.7% versus 19.1%, 10.8% and 17.0%, respectively) (see Table 1).

TABLE 1: RHS 2008-10 SAMPLE POPULATION VERSUS 2010 AANDC ON-RESERVE AND CROWN LAND POPULATION

Age Group	2008-10 RHS Sample Population						2010 AANDC Reserve and Crown Land Population					
	Total		Male		Female		Total		Male		Female	
	#	%	#	%	#	%	#	%	#	%	#	%
Children (Age 0-11)	**646**	**26.1%**	317	26.8%	329	25.4%	**11,401**	**19.1%**	5,883	19.1%	5,518	19.1%
Youth (Age 12-17)	**437**	**17.6%**	234	19.8%	203	15.7%	**6,423**	**10.8%**	3,345	10.8%	3,078	10.7%
Adults (Age 18-54)	**905**	**36.6%**	405	34.2%	500	38.7%	**33,190**	**55.6%**	17,329	56.2%	15,861	55.0%
Elders (Age 55+)	**488**	**19.7%**	227	19.2%	261	20.2%	**10,133**	**17.0%**	5,060	16.4%	5,073	17.6%
Total	**2,476**		**1,183**		**1,293**		**61,147**		**31,617**		**29,530**	

The largest number of participants in the 2008-10 RHS were in the Northern Health Authority (38.7% of respondents), followed by Vancouver Island Health Authority (28.3% of respondents), Vancouver Coastal Health Authority (13.5% of respondents), Interior Health Authority (12.7% of respondents) and Fraser Health Authority (6.8% of respondents). See Figure 1 for health authority boundaries.

Table 2 groups respondents by the distance of their community from a service centre[1]. In the 2008-10 RHS, 17.6% of respondents were from communities with no year-round access to a service centre, 35.9% were from communities 50-350 kilometers from a service centre and 46.5% were from communities less than 50 kilometers from a service centre.

TABLE 2: RHS PARTICIPANT COUNTS, BY AGE GROUP, GENDER AND REMOTENESS OF COMMUNITIES, 2008-10 RHS

	Communities < 50 km from a Service Centre		Communities 50-350 km from a Service Centre		Communities With No Year-Round Access to a Service Centre	
	Male	Female	Male	Female	Male	Female
Children (Age 0-11)	146	138	124	124	47	67
Youth (Age 12-17)	117	106	80	62	37	35
Adults (Age 18-54)	178	221	156	191	71	88
Elders (Age 55+)	112	134	77	75	38	52
Total	**553**	**599**	**437**	**452**	**193**	**242**
	1,152 (46.5%)		**889 (35.9%)**		**435 (17.6%)**	

3.1 RHS Governance

Nationally, the RHS is governed by the First Nations Information Governance Centre (FNIGC). The Assembly of First Nations Chiefs Committee on Health passed a resolution in June 2009 to support the establishment of the FNIGC to provide national oversight and governance over the RHS. In December 2009, a resolution at the Special Chiefs Assembly was passed to support FNIGC as the organization that would house the RHS as well as other research, information management and surveillance initiatives (AFN, 2009).

The FNIGC is made up of a network of regionally-controlled centres supporting national, regional and local research. In BC, the RHS is administered and the RHS data is under the stewardship of the First Nations Health Authority (FNHA). All RHS reporting and data access is guided by the RHS Steering Committee, which is made up of representatives from communities that participated in the RHS from each health authority as well as representatives from other health organizations. Provincial analysis of BC RHS data is the exclusive responsibility of the FNHA.

Notes

1. Service centre is defined as the nearest community to which a First Nation can refer to gain access to government services, banks and suppliers. The nearest service centre would have the following services available: (a) Suppliers, material and equipment (i.e., for construction, office operation, etc.) (b) A pool of skilled and semi-skilled labour, and (c) At least one financial institution (i.e., bank, trust company, credit union, etc.) In addition, the following services would typically be available: (d) Provincial services (such as health services, community and social services, environmental services, etc.), and (e) Federal services (such as Canada Post, Service Canada, etc.)

Section 4.0

Methods

The following section outlines the sampling methodology, data collection and data analysis conducted for the 2008-10 RHS as well as important limitations to keep in mind when interpreting the results of the survey.

4.1 Survey Sampling

The RHS sample design incorporated a two-stage sampling strategy. The first stage involved the selection of communities to participate in the survey. First Nations communities were stratified by province, health authority and community size with large communities defined as having more than 1,500 people, medium communities as having 300-1,499 people and small communities as having less than 300 people. The health authorities in BC are displayed in Figure 1. All large communities were automatically invited to participate, while medium and small communities were randomly selected with equal probability within their respective strata. The sampling framework was based on Aboriginal Affairs and Northern Development Canada 2007 Indian Registry counts of those living on-reserve or on Crown Land. The sampling for the RHS was done nationally for the FNIGC by a statistical consulting company, Goss Gilroy.

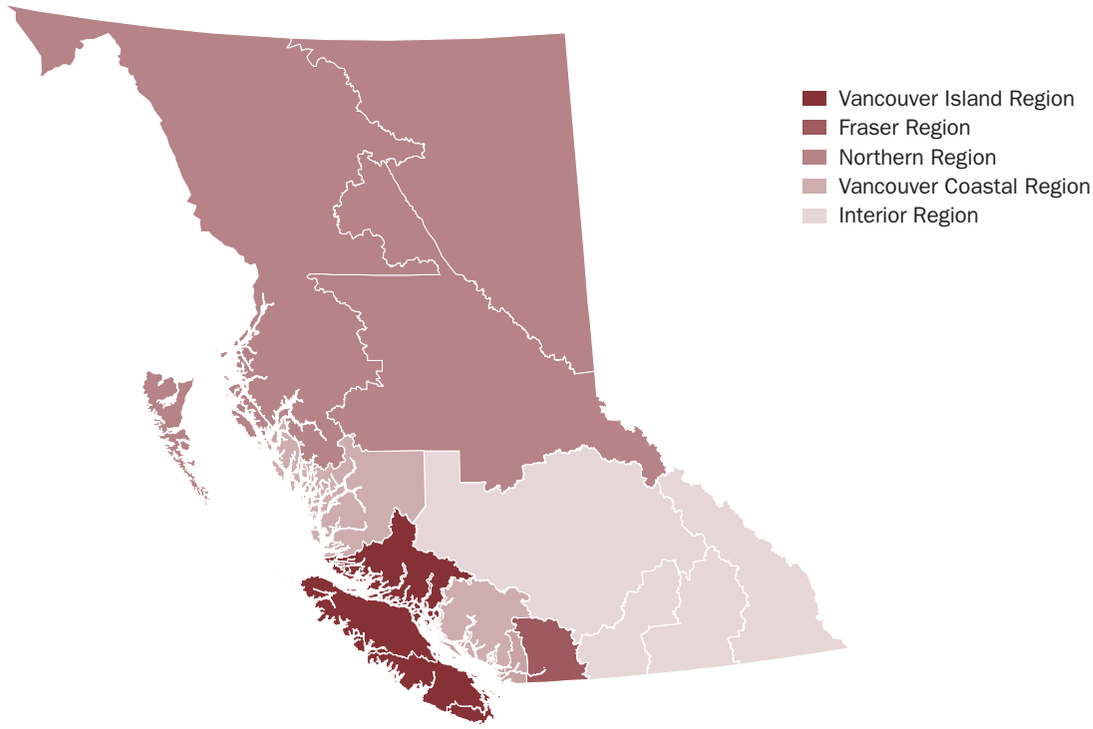


FIGURE 1: MAP OF BC HEALTH AUTHORITIES

The second stage of sampling pertained to the selection of individuals within each community sampled. Community members were randomly selected using band membership lists. A software program was used to calculate the size of the community sample required, given the size of the community. Each individual on the band list was grouped into their respective gender and age group categories: 0-11 years male/female, 12-17 years male/female, 18-54 years male/female and 55+ years male/female. The total sample required for the community was divided into each of the eight age and gender categories and individuals within each group were randomly selected and invited to participate in the survey. A randomly-selected replacement list was also developed to replace any community members who did not wish to participate in the survey.

4.2 Data Collection

Data collection was done by locally-hired data collectors. Surveys were typically conducted in respondents' homes. Data collectors received two days of training on topics such as interviewing techniques, laptop and data-collection software use, and Ownership, Control, Access and Possession (OCAP) principles.

Age-specific questionnaires were developed for children (0-11 years), youth (12-17 years) and adults (18+ years). Elders age 55+ responded to the adult questionnaire. Primary caregivers responded on behalf of their children for all children's surveys.

Surveys were carried out using paper surveys or on laptop computers using customized software (CAPI: Computer-Assisted Personal Interviewing). Approximately one-third of surveys were done on paper. The surveys carried out using laptops could either be read to respondents and entered by data collectors or the laptops could be given to respondents to enter directly themselves.

4.3 Data Analysis

Analysis of the RHS BC data was done by a FNHA epidemiologist. Analysis was conducted using SPSS v.19 with the complex samples add on.

Where missing values ("Don't Know" or "Refused") comprised less than 10% of responses, these categories were considered missing. When these categories comprised more than 10% of responses, they were reported along with other response categories.

Variables with coefficients of variation[1] between 0.16 and 0.33 are superscripted with an "E" in all graphs, tables and text. Variables with coefficients of variation of greater than 0.33 are not reported. Such variables are replaced in graphs, tables and text with an "F".

Confidence intervals are presented throughout the text in parenthesis. These confidence intervals are based on α=0.05.

Where a single question appears in a table or graph, the number of respondents answering the question is included in parenthesis (e.g. N=1,393). Where the table or graph includes multiple responses that include different number of respondents, the number of respondents is not reported.

Only differences that were statistically different are mentioned as differences in the text.

Some pie charts may not add to 100% because some elements have been suppressed due to a low number of responses or high variability.

The remoteness of communities was determined using the Geographic Zones assigned to communities by AANDC. Zone 1 refers to communities located within 50 kilometers of the nearest service centre[2] with year-round access (referred to in this report as "Communities <50 kilometers from a service centre"). Zone 2 refers to communities located between 50 and 350 kilometers of the nearest service centre with year-round access (referred to in this report as "Communities 50-350 kilometers from a service centre"). Zone 3 refers to communities located more than 350 kilometers from the nearest service with year-round access (no Zone 3 communities were included in the RHS) and Zone 4 refers to communities with no year-round access to a service centre (referred to in this report as "Communities with no year-round access to a service centre") (AANDC, 2005).

The results of the BC provincial analysis were reviewed with the RHS Steering Committee in April 2012. The comments provided by the RHS Steering Committee members were audio recorded, transcribed and, where relevant, included in this report to provide context and interpretation to the survey results.

Drafts of this report were reviewed by a series of reviewers who are acknowledged at the beginning of the report.

4.4 Limitations

The RHS is a cross-sectional survey and thus it estimates characteristics of the on-reserve First Nations population in BC over a certain period of time (2008-10). Because the survey is cross-sectional it is impossible to determine if relationships between variables are causal or associated.

There is some overlap in communities that participated in the 2002-03 and 2008-10 RHS. However, many communities were uniquely involved in either the 2002-03 or 2008-10 survey. As such, some of the differences between the two RHS surveys may be due to the different communities sampled as well as a different sample of individuals rather than being the result of trends over time.

The sampling of communities was conducted by dividing communities according to their population size into small, medium and large communities in each health authority. Although consistently applied for the RHS across Canada, these designations may not correspond to what, at a health authority level, are considered to be the "small", "medium" and "large" communities within the region.

The wording of some questions was changed between the 2002-03 RHS and 2008-10 RHS (e.g. questions relating to language use and injuries). This reduces the ability to compare results between the two surveys for these questions.

The RHS is a voluntary survey and it depends on consent at both the community and individual level. The differences between those communities and individuals who participated in the survey and those who chose not to participate in the survey is not known. There is no ability to calculate the participation rate of the RHS as the number of communities and individuals that were approached and refused to participate was not captured.

Because the RHS is a national survey, some of the questions are less relevant to the province of BC. For example, questions relating to consumption of traditional foods such as wild rice and corn soup are likely not as meaningful because these are not traditional foods typically consumed by BC First Nations.

An individual's response to survey questions depends on how the question was phrased and also on the respondent's interpretation of the question. For example, a question such as "Do you consume a balanced, nutritious diet?" does not define what a balanced, nutritious diet is: the interpretation is left open to the respondent. Responses to questions of a sensitive nature (e.g. mental health, sexual health, substance use, etc.) depend on the respondent's willingness to disclose information. Responses to medically-related questions (e.g. chronic disease, diabetes complications or management of diabetes, etc.) depend on the respondent's understanding and awareness of how these issues affect their health.

Measures of complex topics such as the consumption of a balanced, nutritious diet or food security are difficult to capture with the limited number of questions included in the RHS surveys.

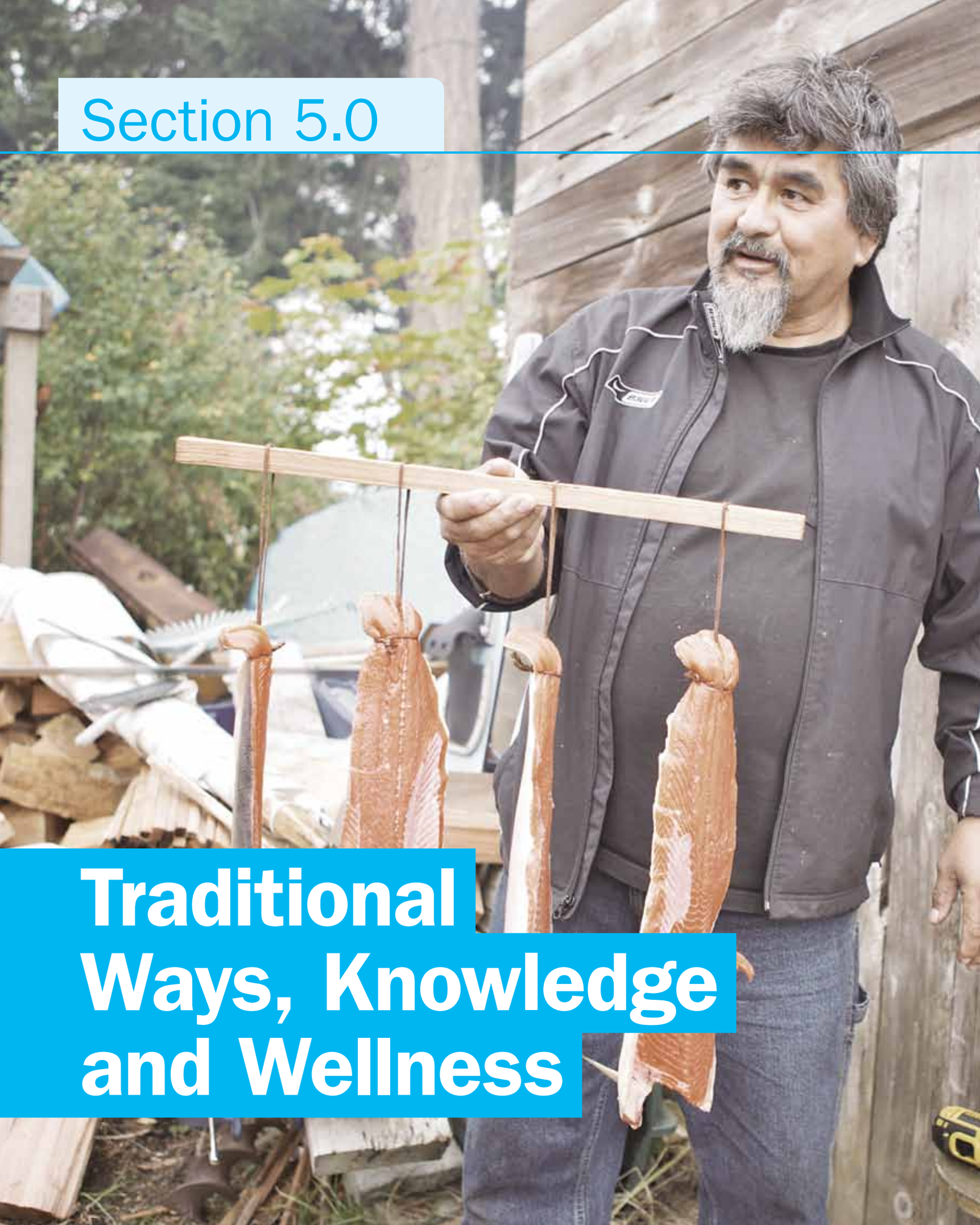
Finally, the RHS survey is based on self-reported data. Measures of obesity, physical activity or chronic health conditions based on self-reported information may not be as accurate as other, more objective forms of measurement.

Notes

1. A coefficient of variation is defined as the ratio of the standard error of an estimate to its mean. It denotes whether estimates should be suppressed ("F") or whether they should be published with some qualifiers depending on its precision ("E").
2. Service centre is defined as the nearest community to which a First Nation can refer to gain access to government services, banks and suppliers. The nearest service centre would have the following services available: (a) Suppliers, material and equipment (i.e., for construction, office operation, etc.) (b) A pool of skilled and semi-skilled labour, and (c) At least one financial institution (i.e., bank, trust company, credit union, etc.). In addition, the following services would typically be available: (d) Provincial services (such as health services, community and social services, environmental services, etc.), and (e) Federal services (such as Canada Post, Service Canada, etc.)

Section 5.0

Traditional Ways, Knowledge and Wellness



First Nations communities throughout BC value the passing on of traditional teachings and cultural values. Traditional ways can include language, cultural celebrations, ceremonies and spiritual understanding, as well as teachings related to food systems, natural diets and medicines.

5.1 Cultural Knowledge and Activities

Children

In the 2008-10 RHS, 63.3% (95% CI: 57.0-69.2%) of caregivers reported that traditional cultural events were very important in their child's life, 31.0% (95% CI: 25.7-37.0%) reported that traditional cultural events were somewhat important in their child's life and 5.6% (95% CI: 3.5-9.0%)[E,1], reported that traditional cultural events were not very important or not important in their child's life. There was no difference in the percentage of caregivers reporting that traditional cultural events were very important in the lives of their child by the gender of their child (67.6% [95% CI: 59.2-75.1%] of male children versus 59.3% [95% CI: 52.2-66.0%] of female children) or by the remoteness of their community (62.6% [95% CI: 52.8-71.5%] in communities less than 50 kilometers from a service centre, 63.5% [95% CI: 55.3-71.0%] in communities 50-350 kilometers from a service centre and 65.9% [95% CI: 50.5-78.5%] in communities with no year-round access to a service centre).

There has been no change in the percentage of children whose caregivers reported that the child finds traditional cultural events very important, somewhat important or not very important/not important since the 2002-03 RHS. In the 2002-03 RHS, 62.9% (95% CI: 55.4-69.7%) of caregivers reported that traditional cultural activities were very important to their child, 30.9% (95% CI: 24.9-37.6%) reported that traditional cultural activities were somewhat important to their child and 6.2% (95% CI: 4.2-9.2%)[E] reported that traditional cultural events were not very important/not important to their child.

As displayed in Table 3, the 2008-10 RHS found that 43.8% of BC on-reserve First Nations children age 0-11 were reported to have ever participated in traditional singing, drumming or dancing outside of school, and 18.1% of children were reported to participate more than once a week. There was no difference in the percentage of children taking part in traditional singing, drumming or dancing in the 2008-10 RHS by gender (18.8% [95% CI: 13.8-24.9%] of female children versus 16.7% [95% CI: 12.7-21.7%] of male children). There was no significant difference between the 2002-03 and 2008-10 RHS in the percentage of children who were reported to participate in traditional singing, drumming or dancing groups or lessons for any frequency of participation.

TABLE 3: FREQUENCY OF PARTICIPATION IN TRADITIONAL SINGING, DRUMMING OR DANCING GROUPS OR LESSONS OUTSIDE OF SCHOOL – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), 2008-10 RHS AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)	**2002-03 RHS** Per Cent (95% CI)
Never	44.2% (38.2-50.4%)	50.0% (45.2-54.7%)
Ever	43.8% (38.7-49.1%)	36.3% (31.3-41.7%)
Less than once a week	25.7% (22.4-29.4%)	18.8% (14.8-23.6%)
More than once a week	18.1% (14.4-22.5%)	17.4% (13.2-22.5%)
1-3 times per week	14.5% (11.3-18.6%)	15.0% (11.5-19.3%)
4 times per week	3.5% (2.0-6.1%)[E]	2.5% (1.4-4.6%)[E]
Self-reported not applicable	12.0% (9.2-15.5%)	13.7% (10.8-17.2%)

E – High sampling variability (CV>0.16). Interpret with caution.

As displayed in Table 4, the highest percentage of First Nations children cite their parents as being the major teachers of culture (70.2%), followed by grandparents (70.0%) and aunts and uncles (53.9%).

TABLE 4: WHO HELPS YOU UNDERSTAND CULTURE? – BC ON-RESERVE FIRST NATIONS HILDREN (AGE 0-11), 2008-10 RHS

	Per Cent (95% CI)
Parents (mother and/or father)	70.2% (64.6-75.2%)
Grandparents	70.0% (64.9-74.6%)
Aunts and uncles	53.9% (48.4-59.3%)
School teachers	52.4% (46.4-58.3%)
Other relatives (siblings, cousins)	44.1% (38.5-49.9%)
Community Elders	34.4% (27.4-42.1%)
Other community members	19.1% (15.2-23.8%)
Friends	18.1% (14.8-22.0%)
Other	1.8% (0.9-3.4%)[E]
No one	[F]
Don't Know	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Youth

In the 2008-10 RHS, 44.9% (95% CI: 39.0-51.0%) of BC on-reserve First Nations youth age 12-17 reported that traditional cultural events were very important to them, 44.7% (95% CI: 39.3-50.2%) reported that traditional cultural events were somewhat important to them and 10.4% (95% CI: 7.0-15.1%)[E] reported that traditional cultural events were not very important/not important to them. The percentage of youth who reported that traditional cultural events are very important to them (44.9%) is lower than the percentage of First Nations children who reportedly felt that traditional cultural events were very important to them (63.6%). There was no difference in the percentage of youth reporting that traditional cultural events were very important to them by gender (47.9% [95% CI: 39.2-56.6%] of female youth versus 42.1% [95% CI: 35.2-49.3%] of male youth).

There has been no change in the percentage of youth who reported that traditional cultural events are very important to them between the 2002-03 RHS and 2008-10 RHS (54.5% [95% CI: 48.2-60.6%] in 2002-03 versus 44.9% in 2008-10). There has been an increase in the percentage of youth who reported finding traditional cultural events somewhat important to them (from 2.7% [95% CI: 1.5-4.8%][E] in 2002-03 to 44.7% in 2008-10) and a decrease in the percentage of youth who reported that they find traditional cultural events not very important/not important to them (from 42.9% [95% CI: 37.1-48.8%] in 2002-03 to 10.4% [95% CI: 7.0-15.1%][E] in 2008-10).

According to the 2008-10 RHS, 30.8% of youth age 12-17 reported ever participating in traditional singing, drumming or dancing groups or lessons outside of school and 10.4% of youth reported participating more than once a week (see Table 5). The percentage of female and male youth who reported participating in traditional activities more than once a week is similar (10.1% [95% CI: 7.4-15.9%][E] among male youth versus 10.7% [95% CI: 6.7-16.8%][E] among female youth). There is no significant difference between the 2008-10 and 2002-03 RHS in the percentage of youth reporting taking part in traditional singing, drumming or dancing for any frequency of participation.

TABLE 5: FREQUENCY OF PARTICIPATION IN TRADITIONAL SINGING, DRUMMING OR DANCING GROUPS OR LESSONS OUTSIDE OF SCHOOL – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)	**2002-03 RHS** Per Cent (95% CI)
Never	65.1% (59.3-0.5%)	60.1% (54.8-65.3%)
Ever	30.8% (25.3-36.9%)	32.2% (27.6-37.3%)
Less than once a week	20.3% (15.7-25.9%)	18.6% (14.3-23.8%)
More than once a week	10.4% (7.4-14.4%)	13.6% (10.0-18.3%)
1-3 times per week	9.3% (6.6-13.0%)[E]	11.0% (7.6-15.8%)[E]
4 times per week	[F]	2.6% (1.4-4.7%)[E]
Self-reported not applicable	4.1% (2.8-5.9%)[E]	7.6% (4.8-11.9%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Figure 2 displays the percentage of children and youth who reported ever participating in traditional singing, drumming or dancing in both the 2002-03 and 2008-10 RHS. The percentage of individuals that reported ever participating in traditional singing, drumming or dancing in 2008-10 is lower among youth (30.8%) than among children (43.8%).

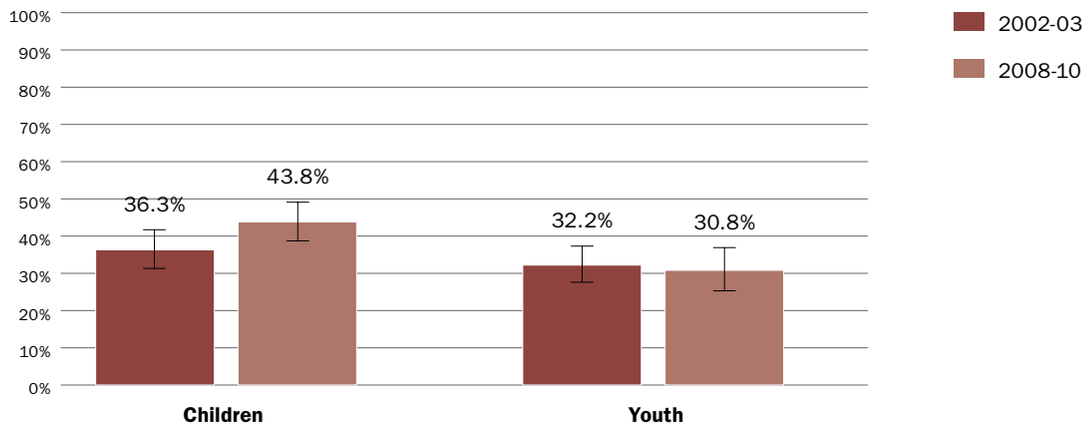


FIGURE 2: EVER PARTICIPATED IN TRADITIONAL SINGING, DRUMMING OR DANCING GROUPS OR LESSONS OUTSIDE OF SCHOOL – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11) AND YOUTH (AGE 12-17), 2002-03 RHS AND 2008-10 RHS

As displayed in Table 6, the highest percentage of First Nations youth cite their parents as being the major teachers of culture (54.4%), followed by grandparents (48.4%) and community Elders (28.6%).

TABLE 6: WHO HELPS YOU UNDERSTAND CULTURE? – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

	Per Cent (95% CI)
Parents (mother and/or father)	54.4% (48.2-60.4%)
Grandparents	48.4% (41.4-55.6%)
Community Elders	28.6% (23.3-34.5%)
Aunts and uncles	28.2% (22.7-34.4%)
Other relatives (siblings, cousins)	22.6% (17.5-28.7%)
School teachers	34.6% (27.7-42.2%)
Other community members	10.7% (7.4-15.2%)[E]
Friends	10.5% (6.0-17.7%)[E]
No one	3.0% (1.7-5.3%)[E]
Other	[F]
Don't know	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Nearly nineteen per cent (18.6% [95% CI: 14.1-24.2%]) of First Nations youth age 12-17 reported that they always/almost always take part in local community cultural events, 61.0% (95% CI: 55.0-66.7%) reported sometimes taking part, 14.7% (95% CI: 10.8-19.6%) reported rarely taking part, and 5.7% (95% CI: 3.7-8.7%)[E] reported never taking part in local community cultural events. As displayed in Table 7, there was no significant difference by gender in the percentage of youth reporting the frequency with which they participate in community cultural events.

TABLE 7: FREQUENCY OF PARTICIPATION IN COMMUNITY CULTURAL EVENTS BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

	Always/Almost Always/Sometimes Take Part Per Cent (95% CI)	**Rarely/Never Take Part** Per Cent (95% CI)
Total	**79.6% (73.7-84.5%)**	**20.4% (15.5-26.3%)**
Gender		
Female	83.1% (76.4-88.2%)	16.9% (11.8-23.6%)[E]
Male	76.3% (67.6-83.3%)	23.7% (16.7-32.4%)

E – High sampling variability (CV>0.16). Interpret with caution.

> "I've seen a lot of people that aren't connected to their culture and they just feel like they don't belong anywhere and I can see that they need it just as much as they need anything else. They need [culture] like they need food and shelter and water and clothing. It's something that makes you who you are and to have culture is to feel complete, to feel at ease with yourself."
>
> ***(Unified Aboriginal Youth Collective (UAYC) Forum on Indigenous and Child Rights, 2012)***

Adults

Among BC on-reserve First Nations adults age 18+, 19.5% (95% CI: 17.4-21.8%) reported always taking part in community cultural events, 50.6% (95% CI: 47.1-54.1%) reported sometimes taking part, 18.9% (95% CI: 15.6-22.7%) reported rarely taking part in community cultural events and 11.0% (95% CI: 8.6-13.9%) reported never participating in community cultural events (see Figure 3).

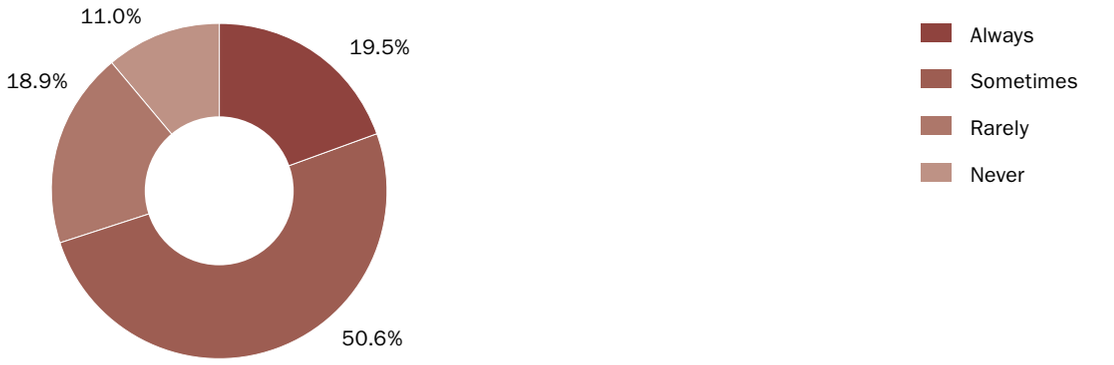


FIGURE 3: FREQUENCY OF PARTICIPATION IN COMMUNITY CULTURAL EVENTS – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

There was no significant difference between the percentage of youth and the percentage of adults who reported always, almost always or sometimes participating in community cultural events (79.6% versus 70.1%, respectively). There was no difference in the per cent of adults who reported participating in traditional cultural events by gender or adult age group (see Table 8).

TABLE 8: FREQUENCY OF PARTICIPATION IN COMMUNITY CULTURAL EVENTS BY GENDER AND AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS, 2008-10 RHS

	Always/Sometimes Take Part Per Cent (95% CI)	Rarely/Never Take Part Per Cent (95% CI)
Total	**70.1% (65.8-74.1%)**	**29.9% (25.9-34.2%)**
Gender		
Female	71.9% (67.3-76.1%)	28.1% (23.9-32.7%)
Male	68.4% (63.1-73.4%)	31.6% (26.6-36.9%)
Adult Age Group		
Adults (Age 18-54)	71.6% (66.6-76.1%)	28.4% (23.9-33.4%)
Elders (Age 55+)	65.4% (56.0-73.7%)	34.6% (26.3-44.0%)

5.2 Language

Traditional languages are an important piece of First Nations' cultural identity. Oral history is a cornerstone of First Nations history, teachings and community. BC is home to over half of all Aboriginal languages spoken in Canada, with over 30 languages currently in use. Loss of language can affect generational transmission of culture, sense of identity and connection to traditional knowledge.

English is one of the most common languages spoken by BC on-reserve First Nations across all age groups (see Figure 4). The 2008-10 RHS results indicate that 98.2% (95% CI: 97.2-98.8%) of all BC First Nations adults age 18+ reported using English as one of the most used languages in their daily lives[2]. This is an increase from the 2002-03 RHS, which found that indicated that 91.7% (95% CI: 88.6-94.0%) of First Nations adults use English as one of the most used languages in their daily lives. The percentage of First Nations adults age 18+ who reported using a First Nations language as one of the most used languages in their daily lives also increased from the 2002-03 RHS from 8.0% (95% CI: 5.8-11.0%) to 18.8% (95% CI: 14.6-24.0%) in the 2008-10 RHS.

As illustrated in Figure 4, a higher percentage of BC on-reserve First Nations Elders age 55+ reported using a First Nations language as one of the languages they used most in their daily lives (32.9% [95% CI: 26.0-40.5%]) compared to other age groups. This pattern was also observed in the national RHS sample: First Nations language comprehension and use was reported to be higher in older age groups (FNIGC, 2011).

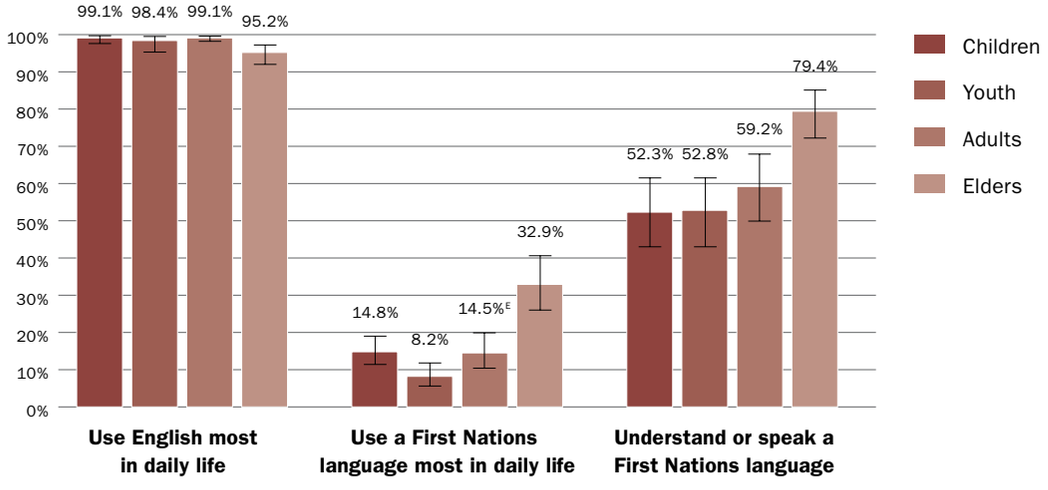
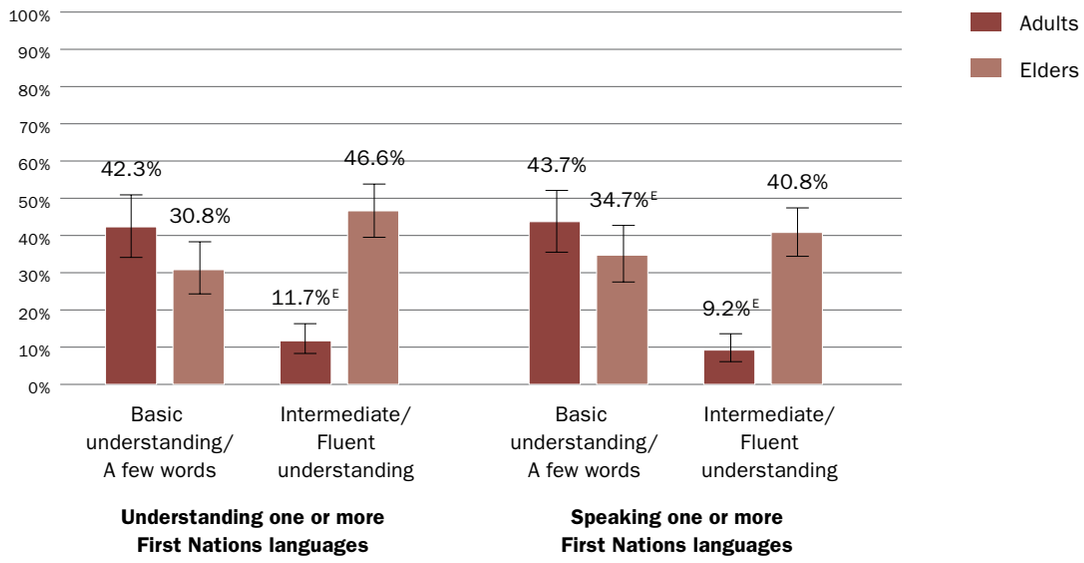


FIGURE 4: LANGUAGE USE† – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17), ADULTS (AGE 18-54) AND ELDERS (AGE 55+), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.

† This graph is based on two separate questions 1) Which language(s) do you use most in daily life? Check all that apply and 2) Can you understand or speak a First Nations language? The percentages do not add up to 100%.

Figure 5 illustrates that among adults who reported that they can understand or speak a First Nations language there is no significant difference in basic[3] understanding or speech by adult age group. For intermediate[3] or fluent[3] understanding and speech however, First Nations Elders 55+ were more likely to report intermediate or fluent understanding and speech of First Nations languages than adults age 18-54.



E – High sampling variability (CV>0.16). Interpret with caution.
A few words: understand or can speak a few words (hello, goodbye, etc). **Basic:** understand basic phrases, ask simple questions ("Where am I?", and write basic sentences. **Intermediate:** understand main idea of everyday speech (TV, radio), engaged in conversations, write paragraphs/text. **Fluent:** no difficulty understanding spoken word, carrying on complex conversations, writing complex reports/letters/etc.

FIGURE 5: ABLE TO UNDERSTAND OR SPEAK ONE OR MORE FIRST NATIONS LANGUAGES AT A BASIC, INTERMEDIATE OR FLUENT LEVEL – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18-54) AND ELDERS (AGE 55+) WHO CAN SPEAK OR UNDERSTAND A FIRST NATIONS LANGUAGE, 2008-10 RHS

There was no significant difference in the percentage of BC on-reserve First Nations of all ages (children, youth and adults) who reported speaking or understanding a First Nations language by the remoteness of their community: 59.6% (95% CI: 54.2-64.7%) of individuals in communities less than 50 kilometers from a service centre, 68.7% (95% CI: 58.5-77.4%) of individuals in communities 50-350 kilometers from a service centre and 40.2% (95% CI: 22.1-61.4%)[E] of individuals in communities with no year-round access to a service centre reported speaking or understanding a First Nations language.

Having a parent who attended a residential school was not associated with any significant differences in the per cent of adults reporting that they could understand or speak a First Nations language or that they use a First Nations language as one of the languages used most in daily life (see Table 9). Having a grandparent who attended a residential school was associated with a lower percentage of adults using a First Nations language as one of the languages used most in daily life than adults who did not have any grandparents who attended residential school (13.0% vs. 25.0%).

TABLE 9: UNDERSTAND OR SPEAK A FIRST NATIONS LANGUAGE OR USE A FIRST NATIONS LANGUAGE MOST IN DAILY LIFE BY PARENTS' AND GRANDPARENTS' ATTENDANCE AT RESIDENTIAL SCHOOL – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Understand or Speak a First Nations Language Per Cent (95% CI)	First Nations Language One of the Most Used Languages in Daily Life Per Cent (95% CI)
Parents' Residential School Attendance		
No parents attended residential school	62.3% (53.8-70.0%)	22.3% (16.3-29.8%)
One or more parents attended residential school	65.5% (56.6-73.4%)	15.2% (11.1-20.4%)
Grandparents' Residential School Attendance		
No grandparents attended residential school	69.5% (61.3-76.7%)	25.0% (18.2-33.3%)
One or more grandparents attended residential school	65.3% (58.6-71.4%)	13.0% (9.3-17.8%)

Importance of learning a First Nations Language

"Since the per cent of youth who feel that learning a First Nations language is lower than among children how do we keep youth engaged in their culture and teachings?"

RHS Steering Committee member

According to the 2008-10 RHS, 67.8% (95% CI: 62.3-73.0%) of caregivers reported that learning a First Nations language is very important for their child, 27.3% (95% CI: 22.8-32.3%) reported that learning a First Nations language is somewhat important to their child, 3.6% (95% CI: 2.3-5.4%)[E] reported that learning a First Nations language is not very important to their child and 1.3% (95% CI: 0.8-2.4%)[E] reported that learning a First Nations language is not important to their child. A higher percentage of children age 0-11 were reported to feel that learning a First Nations language was very important to them than among youth age 12-17 (67.8% versus 38.1%, respectively). This higher percentage might reflect the fact that children's questionnaires were answered by their parent or guardian.

There was no significant difference in the percentage of caregivers reporting that it is very important for their child to learn a First Nations language by the gender of their child (71.5% [95% CI: 64.0-78.0%] of female children versus 64.5% [95% CI: 57.9-70.5%] of male children), or by the remoteness of their community (64.8% [95% CI: 57.3-71.6%] of children in communities less than 50 kilometers from a service centre, 73.0% [95% CI: 65.2-79.7%] of children in communities 50-350 kilometers from a service centre and 65.6% [95% CI: 54.5-75.6%] of children in communities with no year-round access to a service centre).

Among BC on-reserve First Nations youth, 38.1% reported that learning a First Nations language was very important to them, 48.0% reported that learning a First Nations language was somewhat important to them, and 13.9% reported that learning a First Nations language was not very important/not important to them (see Table 10). This is comparable to the percentage of BC youth reporting the importance of learning a First Nations language to them in the 2002-03 RHS. There was no difference in the percentage of youth who reported that learning a First Nations language is very important to them by gender in the 2008-10 RHS (40.5% [95% CI: 31.6-50.2%] of female youth versus 35.9% [95% CI: 28.5-44.1%] of male youth).

TABLE 10: IMPORTANCE OF LEARNING A FIRST NATIONS LANGUAGE – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)	**2002-03 RHS** Per Cent (95% CI)
Very important to them	38.1% (32.3-44.3%)	42.8% (35.4-50.6%)
Somewhat important to them	48.0% (42.7-53.4%)	40.1% (33.1-47.6%)
Not very important/Not important	13.9% (9.8-19.2%)	17.0% (13.2-21.7%)

Chatting in Indigenous Languages

FirstVoices Chat is an Indigenous language texting app. The regular keypad on mobile devices is not capable of generating many of the special characters of Indigenous languages, making texting in these languages impossible for most First Nations people. FirstVoices Chat provides custom keypads capable of texting in over 100 Indigenous languages in Canada, Australia, New Zealand and the USA.

FirstVoices Chat was developed by the First Peoples' Cultural Council with funding from the First Nations Technology Council. The development of the keyboarding technology at the core of FirstVoices Chat was funded by the Department of Canadian Heritage's Aboriginal Languages Initiative.

5.3 Participation in Hunting, Trapping and Fishing

Hunting, trapping and fishing are important cultural activities that foster an attachment to the land and promote the teaching of traditional cultural practices in families and communities. The gathering of traditional foods is also beneficial as it involves physical activity.

> "We know from community participation in a number of studies that active participation in hunting, gathering and using traditional foods helps prevent chronic disease. Traditional food activities keep us physically active and spiritually grounded, and the nutrients offered by the plants and animals that we eat from our territory keep us strong. Many of us are faced with barriers in carrying out our traditional activities including lack of access to good hunting/harvesting areas, high costs for fuel and equipment, time, and concerns about contaminants."
> ***(iFNHA, 2009)***

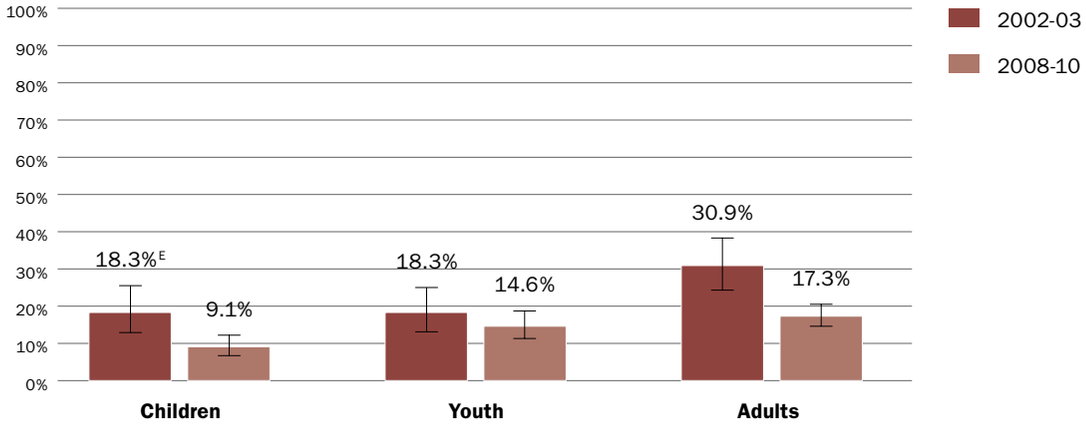
> "Participating in harvesting activities, such as gathering berries and roots, hunting, harvesting shellfish or fishing brings many rewards. Our bodies are energized and the stress we can carry is lessened by the physical activity necessary for harvesting and processing our foods. Harvesting activities also brings with it the pleasure of socializing, exchanging news and stories, and respecting and connecting with the spirit of the land. After the work is all done, we have food to put away in our cupboards to share with our families."
> ***(iFNHA, 2009)***

Hunting or Trapping

According to the 2008-10 RHS, 9.1% (95% CI: 6.7-12.2%) of BC on-reserve First Nations children were reported to have participated in hunting or trapping in the year prior to the survey (see Figure 6). This is a decrease since the 2002-03 RHS, in which 18.3% (95% CI: 12.9-25.5%)[E] of children were reported to have participated in hunting or trapping in the year prior to the survey. As with all comparisons between the 2002-03 RHS and 2008-10 RHS, differences observed may be due to the different First Nation communities and individuals included in the survey.

Among BC on-reserve First Nations youth, 14.6% (95% CI: 11.3-18.7%) reported participating in hunting or trapping in the year prior to the 2008-10 RHS (see Figure 6). This is not significantly different from the percentage of adults in the 2008-10 RHS who reported hunting or trapping in the year prior to the 2008-10 RHS (17.3%). There has been no significant change in the percentage of youth who reported hunting or trapping in the year prior to the 2008-10 RHS versus the year prior to the 2002-03 RHS (in which 18.3% [95% CI: 13.1-25.0%] of youth reported hunting or trapping in the year prior to the survey.)

Just over seventeen per cent, (17.3% [95% CI: 14.6-20.5%]) of adults reported participating in hunting or trapping in the year prior to the 2008-10 RHS (see Figure 6). Just over thirty per cent (30.9% [95% CI: 24.3-38.3%]) of First Nations adults reported that they participated in hunting or trapping in the year prior to the 2002-03 RHS. This represents a significant decrease in the percentage of adults reporting hunting or trapping in the year prior to the 2002-03 versus 2008-10 RHS.



E – High sampling variability (CV>0.16). Interpret with caution.

FIGURE 6: PARTICIPATED IN HUNTING OR TRAPPING IN THE YEAR PRIOR TO THE 2008-10 RHS – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2002-03 RHS AND 2008-10 RHS

There was no difference in the percentage of children who were reported to have participated in hunting or trapping in the year prior to the 2008-10 RHS by gender (11.7% [95% CI: 8.6-15.8%] of male children versus 6.3% [95% CI: 3.9-9.9%][E] of female children), or by the remoteness of their community (11.4% [95% CI: 8.3-15.4%] of children in communities less than 50 kilometers from a service centre and 5.1% [95% CI: 2.6-9.6%][E] of children in communities between 50 and 350 kilometers from a service centre. The percentage of children in communities with no year-round access to a service centre that were reported to have participated in hunting or trapping in the year prior to the 2008-10 RHS was too small to report).

There was no difference in the percentage of youth who reported hunting or trapping in the year prior to the 2008-10 RHS by gender (19.4% [95% CI: 13.9-26.4%] of male youth versus 9.4% [95% CI: 5.9-14.6%][E] of female youth) or by the remoteness of their community (14.9% [95% CI: 11.0-19.47%] of youth in communities less than 50 km from a service centre and 12.1% [95% CI: 6.3-22.2%][E] of youth in communities between 50 and 350 kilometers from a service centre. The percentage of youth in communities with no year-round access who reported participating in hunting or trapping in the year prior to the 2008-10 RHS was too small to report).

Among adults, a higher percentage of male adults reported hunting or trapping in the year prior to the 2008-10 RHS than female adults (27.1% versus 6.9%[E] respectively) (see Table 11). There was no significant difference in the percentage of adults who reported hunting or trapping in the year prior to the 2008-10 RHS by adult age group, nor in the percentage of adults participating in hunting or trapping in the year prior to the 2008-10 RHS by the remoteness of their community.

TABLE 11: PARTICIPATION IN HUNTING OR TRAPPING IN THE YEAR PRIOR TO THE 2008-10 RHS BY GENDER, AGE GROUP AND REMOTENESS OF COMMUNITIES – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), RHS 2008-10

	Per Cent (95% CI)
Gender	
Female	6.9% (4.5-10.5%)[E]
Male	27.1% (23.2-31.5%)
Age Group	
Adults (Age 18-24)	19.0% (12.6-27.5%)[E]
Adults (Age 25-39)	18.5% (13.0-25.7%)[E]
Adults (Age 40-54)	18.5% (14.3-23.5%)
Elders (Age 55+)	13.3% (9.6-18.1%)
Remoteness	
Communities less than 50 km from a service centre	17.0% (14.0-20.5%)
Communities between 50 and 350 km from a service centre	17.1% (12.5-23.0%)
Communities with no year-round access to a service centre	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Fishing

Among BC on-reserve First Nations children age 0-11, 24.5% (95% CI: 19.8-29.8%) were reported to have participated in fishing in the year prior to the 2008-10 RHS (see Figure 7). This is a decrease from the 2002-03 RHS, in which 42.6% (95% CI: 35.0-50.7%) of children were reported to have participated in fishing in the year prior to the survey.

In the 2008-10 RHS, 30.6% (95% CI: 25.4-36.2%) of BC on-reserve First Nations youth reported participating in fishing in the year prior to the survey (see Figure 7). This is not significantly different from the percentage of youth who reported fishing in the year prior to the 2002-03 RHS (41.2% [95% CI: 35.2-47.6%]).

Just over thirty-four per cent (34.4% [95% CI: 31.0-38.0%]) of adults reported participating in fishing in the year prior to the 2008-10 RHS (see Figure 7). This is lower than the 51.4% (95% CI: 45.1-57.8%) of adults who reported fishing in the year prior to the 2002-03 RHS.

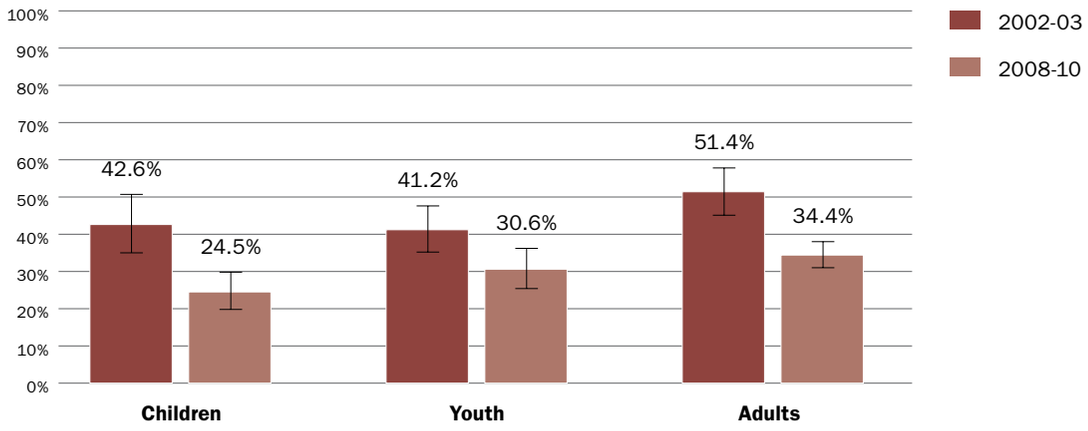


FIGURE 7: PARTICIPATED IN FISHING IN THE YEAR PRIOR TO THE 2008-10 RHS – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2002-03 RHS AND 2008-10 RHS

There was no difference in the percentage of BC on-reserve First Nations children who were reported fishing in the year prior to the 2008-10 RHS by gender (29.8% [95% CI: 23.8-36.5%] of male children versus 18.8% [95% CI: 13.9-24.7%] of female children), or by the remoteness of their community (22.6% [95% CI: 17.6-28.5%] of children in communities less than 50 kilometers from a service centre, 27.9% [95% CI: 19.1-38.9%][E] of children in communities 50-350 kilometers from a service centre and 22.6% [95% CI: 11.6-39.5%][E] of children in communities with no year-round access to a service centre were reported fishing in the year prior to the 2008-10 RHS).

There was no difference in the percentage of BC on-reserve First Nations youth who reported fishing in the year prior to the 2008-10 RHS by gender (34.3% [95% CI: 27.6-41.6%] of male youth versus 26.5% [95% CI: 19.2-35.5%] of female youth), or by the remoteness of their community (24.9% [95% CI: 19.8-30.9%] of youth in communities less than 50 kilometers from a service centre, 32.3% [95% CI: 23.0-43.2%] of youth in communities 50-350 kilometers from a service centre and 50.9% [95% CI: 29.4-72.0%][E] of youth in communities with no year-round access to a service centre reported fishing in the year prior to the 2008-10 RHS).

A higher percentage of male adults reported participating in fishing in the year prior to the 2008-10 RHS than females (47.5% versus 20.5% respectively) (see Table 12). By adult age group, Elders age 55+ were less likely to report fishing in the year prior to the 2008-10 RHS (24.2%) than adults age 18-24 (40.7%) and 40-54 (38.1%). There was no difference in the percentage of adults reporting fishing in the year prior to the 2008-10 RHS by the remoteness of their community.

TABLE 12: PARTICIPATION IN FISHING IN THE YEAR PRIOR TO THE 2008-10 RHS BY GENDER, AGE GROUP AND REMOTENESS OF COMMUNITIES – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Per Cent (95% CI)
Gender	
Female	20.5% (16.6-25.0%)
Male	47.5% (42.0-53.0%)
Age Group	
Adults (Age 18-24)	40.7% (32.1-49.9%)[E]
Adults (Age 25-39)	34.8% (28.5-41.6%)
Adults (Age 40-54)	38.1% (32.4-44.1%)
Elders (Age 55+)	24.2% (19.7-29.3%)
Remoteness	
Communities less than 50 km from a service centre	32.7% (28.0-37.9%)
Communities between 50 and 350 km from a service centre	35.1% (30.2-40.3%)
Communities with no year-round access to a service centre	39.6% (30.8-49.2%)

E – High sampling variability (CV>0.16). Interpret with caution.

5.4 Life Balance

Living a balanced, healthy life is important to First Nations. An integral part of First Nations' traditional approaches to health and healing are the inter-relationships of the physical, mental, emotional and spiritual aspects of a well-being.

> "First Nations people have always had an incredible understanding of themselves, their health and their place in the world. Living wisely with good health is something we have always done, and we are often reaching back into our ancestral knowledge – our traditional ways of being and knowing – to reaffirm how we can live healthier lives today and tomorrow. The generation before us hardly interacted with the health care system – often only just near the end of life. If the entire health care system disappeared today, we would still be taking care of each other, and we are taking care of each other."
>
> ***Dr. Evan Adams – Deputy Provincial Health Officer (iFNHA, 2011)***

Children

According to the 2008-10 RHS, 52.3% (95% CI: 46.3-58.2%) of First Nations children age 0-11 reportedly got along well with other family members in the six months prior to the survey. Just over forty per cent (41.8% [95% CI: 36.1-47.8%]) of children reportedly had a few difficulties getting along with the rest of the family during the six months prior to the survey. A low percentage of children were reported to have a lot of difficulties or constant difficulties getting along with the rest of the family over the six months prior to the survey (5.9% [95% CI: 4.4-7.8%]). There was no difference by gender in the percentage of children who were reported getting along well with family members in the six months prior to the survey (44.9% [95% CI: 37.4-52.7%] of boys versus 38.6% [95% CI: 31.1-46.5%] of girls), or who were reported having a lot of difficulties or constant difficulties with getting along with the rest of the family (7.0% [95% CI: 4.5-10.6%][E] for girls versus 4.9% [95% CI: 2.9-81%][E] for boys).

Although 85.4% (95% CI: 81.4-88.3%) of caregivers reported that did not believe their children had more emotional or behavioural problems than other children, 14.8% (95% CI: 11.7-18.6%) reported that they did believe that their children had more emotional or behavioural problems than other children. The percentage of guardians who believed their children had more emotional or behavioural problems than other children did not differ by the gender of the child (18.4% [95% CI: 13.3-24.8%] of boys versus 11.1% [95% CI: 8.1-15.1%] of girls).

Youth

Overall, 14.4% (95% CI: 10.3-19.7%) of BC on-reserve First Nations youth reported feeling balanced all of the time in all four aspects of their lives (physical, emotional, mental and spiritual).

Among BC on-reserve First Nations youth age 12-17, the majority reported feeling balanced in the four aspects of their lives most or all of the time (see Figure 8). Of these four aspects, more First Nations youth reported feeling physically balanced all of the time (35.1% [95% CI: 29.8-40.8%]), followed by mentally balanced all of the time (25.6% [95% CI: 20.6-31.5%]), emotionally balanced all of the time (22.6% [95% CI: 17.8-28.3%]) and spiritually balanced all of the time (20.8% [95% CI: 16.2-26.1%]). A small percentage of First Nations youth reported almost never feeling physically balanced (3.3% [95% CI: 1.9-5.7%][E]), while 11.6% (95% CI: 8.0-16.7%)[E] reported almost never feeling emotionally balanced, 15.5% (95% CI: 10.7-22.0%)[E] reported almost never feeling mentally balanced, and 14.6% (95% CI: 10.8-19.6%) reported almost never feeling spiritually balanced. As an RHS Steering Committee member pointed out, trying to quantify how you see your life balance is a complicated measure[4]. These responses, though informative, are only four questions aiming at measuring a very complicated and complex concept.

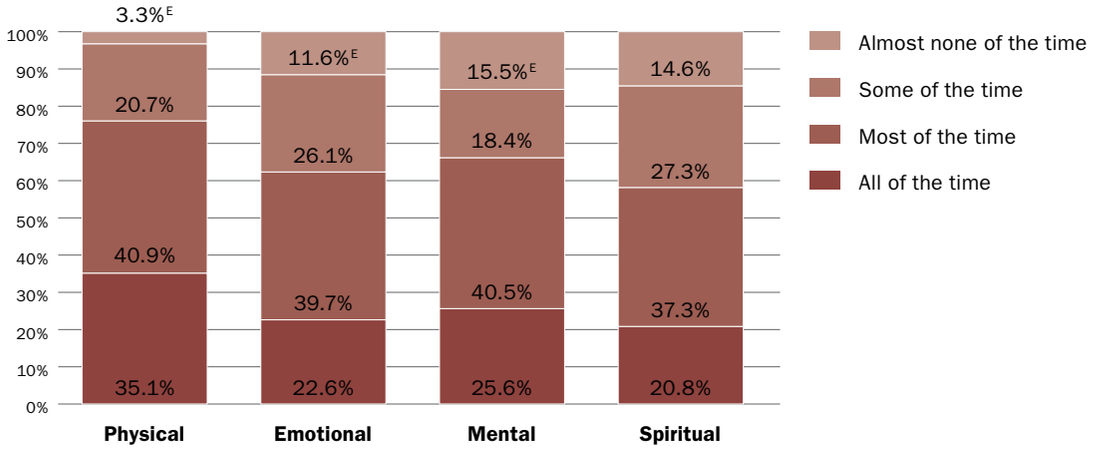


FIGURE 8: FEEL BALANCE IN THE FOUR ASPECTS OF LIFE – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.

There were no significant differences in the percentage of youth reporting being in balance all or most of the time physically, emotionally, mentally and spiritually by gender (see Table 13).

TABLE 13: IN BALANCE ALL OR MOST OF THE TIME BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

	Male Per Cent (95% CI)	**Female** Per Cent (95% CI)
Physical balance	77.3% (70.8-82.7%)	74.6% (65.6-81.8%)
Emotional balance	59.8% (50.4-68.6%)	64.8% (55.3-73.1%)
Mental balance	67.0% (57.4-75.4%)	65.1% (54.7-74.3%)
Spiritual balance	57.8% (49.6-65.6%)	58.4% (48.5-67.8%)

There has been no significant change in the percentage of youth reporting balance all or most of the time in each of the four aspects of their lives (physical, emotional, mental and spiritual) between the 2002-03 and 2008-10 RHS (see Table 14).

TABLE 14: IN BALANCE ALL OR MOST OF THE TIME – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)	2002-03 RHS Per Cent (95% CI)
Physical balance	76.0% (70.9-80.4%)	74.3% (69.8-78.3%)
Emotional balance	62.2% (55.3-68.6%)	52.7% (43.8-61.4%)
Mental balance	66.1% (59.8-71.9%)	65.0% (58.3-71.1%)
Spiritual balance	58.1% (51.7-64.2%)	55.9% (50.8-60.8%)

Adults

The majority of BC on-reserve First Nations adults reported feeling in balance all or most of the time in the four areas of their lives. Overall, 15.6% (95% CI: 13.1-18.5%) of adults reported feeling balanced all of the time in all four aspects of their lives (physical, emotional, mental and spiritual) all at once. In contrast to youth, adults age 18+ had lower percentages of individuals reporting almost never being balanced emotionally, mentally and spiritually. There was no significant difference in the percentage of youth and adults who reported feeling physically balanced all of the time.

The highest percentages of adults reported feeling mentally balanced all of the time (29.2% [95% CI: 26.5-31.9%]), while 28.1% (95% CI: 25.0-31.5%) reported feeling spiritually balanced, 26.7% (95% CI: 23.8-29.8%) felt physically balanced and 23.5% (95% CI: 21.1-26.2%) reported feeling emotionally balanced (see Figure 9).

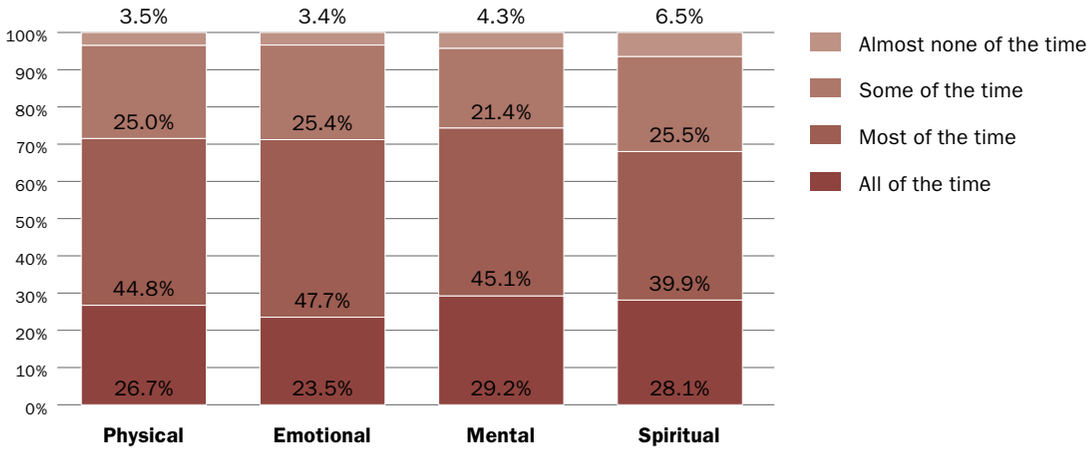


FIGURE 9: FEEL BALANCE IN THE FOUR ASPECTS OF LIFE – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

There was no significant difference across adult age groups (ages 18-24, 25-39, 40-54 and 55+) in the percentage of adults who reported feeling balanced in any of the four aspects of life. By gender, adult females age 18+ reported lower levels of physical balance all or most of the time compared to men (66.5% [95% CI: 61.0-71.6%] versus 76.2% [95% CI: 71.7-80.3%], respectively).

There has been no significant change in the percentage of adults age 18+ who reported feeling balanced all or most of the time the four areas of balance (physical, emotional, mental and spiritual aspects) between the 2002-03 and 2008-10 RHS (see Table 15).

TABLE 15: IN BALANCE ALL OR MOST OF THE TIME – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)	2002-03 RHS Per Cent (95% CI)
Physical balance	71.5% (67.8-74.9%)	69.8% (65.4-73.9%)
Emotional balance	71.2% (68.0-74.2%)	69.6% (64.3-74.5%)
Mental balance	74.3% (71.1-77.3%)	72.7% (67.7-77.3%)
Spiritual balance	68.1% (64.9-71.1%)	68.5% (63.8-72.8%)

5.5 Spirituality

First Nations have an understanding of spiritual well-being as "nurturing the spirit," whether it be through spirituality and culture, or through creative activities such as dancing, writing, drumming, carving, etc.

As displayed in Figure 10, 47.6% (95% CI: 43.2-5.1%) of BC on-reserve First Nations adults age 18+ reported that traditional spirituality was very important in their lives and 23.5% (95% CI: 17.6-30.6%) of First Nations adults reported that religion was very important in their lives.

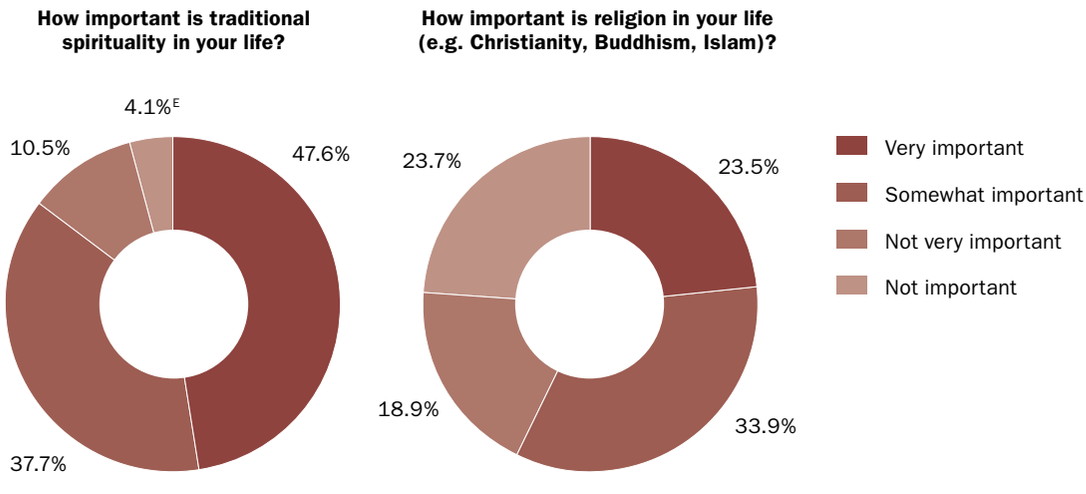


FIGURE 10: HOW IMPORTANT IS TRADITIONAL SPIRITUALITY AND RELIGION IN YOUR LIFE? – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.

The percentage of adults who stated that traditional spirituality was very or somewhat important did not vary significantly by gender (see Table 16). The percentage of BC on-reserve First Nations adults 18+ who reported that traditional spirituality was very or somewhat important to them was very similar between the 2002-03 RHS (85.5% [95% CI: 81.1-89.0%]) and 2008-10 RHS (85.3%).

The majority (57.4%) of adults age 18+ reported that religion was very or somewhat important to them. There was no significant difference by gender. Elders age 55+ were more likely to state that religion was very or somewhat important to them (68.8%) than adults age 18-24 (40.9%). There has been no significant change in the percentage of adults age 18+ who feel that religion is very or somewhat important to their lives between the 2002-03 RHS (64.4% [95% CI: 57.0-71.1%]) and 2008-10 RHS (57.4%).

TABLE 16: IMPORTANCE OF TRADITIONAL SPIRITUALITY AND RELIGION BY GENDER AND ADULT AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Total Per Cent (95% CI)	**Gender** Per Cent (95% CI)		**Age Group** Per Cent (95% CI)			
		Male	Female	Age 18-24	Age 25-39	Age 40-54	Age 55+
Traditional Spirituality							
Very or somewhat important	**85.3% (81.8-88.3%)**	85.5% (81.1-89.0%)	85.2% (81.1-88.5%)	77.9% (66.1-86.4%)	86.2% (81.1-90.1%)	87.2% (81.4-91.3%)	88.0% (84.0-91.1%)
Not very important/ Not important	**14.7% (11.7-18.2%)**	14.5% (11.0-18.9%)	14.8% (11.5-18.9%)	22.1% (13.6-33.9%)[E]	13.8% (9.9-18.9%)	12.8% (8.7-18.6%)[E]	12.0% (8.9-16.0%)
Religion							
Very or somewhat important	**57.4% (51.2-63.4%)**	53.7% (46.6-60.6%)	61.3% (54.8-67.3%)	40.9% (32.4-50.0%)	55.5% (46.0-64.5%)	60.2% (51.7-68.2%)	68.8% (63.0-74.2%)
Not very important/ Not important	**42.6% (36.6-48.8%)**	46.3% (39.4-53.4%)	38.7% (32.7-45.2%)	59.1% (50.0-67.6%)	44.5% (35.5-54.0%)	39.8% (31.8-48.3%)	31.2% (25.8-37.0%)

E – High sampling variability (CV>0.16). Interpret with caution.

5.6 Traditional Medicines

First Nations historically used traditional medicines to maintain the health of their communities. Traditional medicines make use of native plants and represent a philosophy and spiritual practice surrounding health and well-being. Traditional medicines are often sustainable, affordable and readily available. A reintroduction and strengthening of education around First Nations traditional medicines, while recognizing the benefits of Western medicines, is taking place in a number of First Nations communities.

Over forty per cent (40.3% [95% CI: 35.9-44.9%]) of BC on-reserve First Nations adults age 18+ reported using traditional medicines. There was no difference in the percentage of adults reporting using traditional medicine by gender (42.9% [95% CI: 36.7-49.3%] of male adults versus 37.6% [95% CI: 33.1-42.3%] of

female adults), nor by adult age group (38.4% [95% CI: 33.3-43.8%] of adults age 18-54 versus 46.3% [95% CI: 39.1-53.7%] of Elders 55+).

Most BC on-reserve First Nations adults who reported using traditional medicines stated that they have had no difficulties accessing traditional medicines (76.2% [95% CI: 70.5-81.2%]). However, among those who did have difficulties, the four most commonly reported reasons for this are outlined in Table 17: not knowing where to get them (9.3%), not knowing enough about them (8.2%), having to travel too far to get them (7.8%), not being available through their health centre (6.2%), and not being covered by Non-Insured Health Benefits (NIHB) (4.8%).

TABLE 17: REPORTED DIFFICULTIES ACCESSING TRADITIONAL MEDICINES – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=509)

	Per Cent (95% CI)
No difficulties	76.2% (70.5-81.2%)
Do not know where to get them	9.3% (6.6-12.9%)
Do not know enough about them	8.2% (5.3-12.5%)[E]
Too far to travel	7.8% (5.4-11.1%)[E]
Not available through health centre	6.2% (3.7-10.2%)[E]
Not covered by Non-Insured Health Benefits	4.8% (3.0-7.4%)[E]
Can't afford it	3.5% (2.1-5.6%)[E]
Concerned about effects	2.8% (1.5-5.2%)[E]
Other	1.6% (0.9-2.7%)[E]
Don't know	[F]
Not interested	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

5.7 Traditional Healers

Traditional healers have been defined as knowledge-keepers who are gifted and spiritual. Balancing these aspects of well-being may include the use of native plants, ceremonies, spiritual practices and cultural teachings. They have knowledge of traditional ways and practices, and express these in the community. Traditional healers are good role models in that they are alcohol-, drug- and smoke-free and live a healthy lifestyle. They often speak their native language, are in touch with the land and environment and are well respected in the community (First Nations Health Society, 2010).

A Traditional Healers' Gathering held in Musqueam in 2011 asked the 131 attendees, including 68 traditional healers and knowledge-keepers from across BC, what supports traditional healers needed in the community and in the health care system. The responses included:

- Increase awareness of healers, traditional medicines, practices and protocols
- Increase the understanding and cultural competency of the medical system with regard to Aboriginal healing and knowledge
- Integrate traditional practices within the medical system through policy support and involvement of Elders and healers
- Support for healers and healer gatherings from communities and leadership
- Promoting the networking and screening of healers, and
- Enabling sufficient funding and cultural spaces for healers to do their work (iFNHA, 2011)

Traditional healers play important roles in BC First Nations communities as people to turn to for advice on physical, emotional, mental and spiritual issues.

A 2009/10 *Environmental Scan on Traditional Models of Wellness* conducted among 91 out of 123 First Nation health centres in BC found that approximately one-third of health centres offer traditional medicines and over half of communities include traditional practices in their health programs.

Health centres integrate traditional practices in various ways, including sweat lodges, medicine wheel teachings and bathing ceremonies, and through funding healers and Elders to attend important meetings or gatherings, opening and closing prayers, and holding traditional feasts and ceremonies. Addictions, mental health and Elders programs were the three health programs that incorporated traditional medicine most frequently.

Over 90% of respondents believed that there should be more use of traditional medicines or practices in their community. To do so, respondents recognized that they would need community support, and "start with introducing and rebuilding awareness of the forms of traditional medicines, so later the people will come to participate in comfort".
(First Nations Health Society, 2010)

Youth

Among BC on-reserve First Nations youth age 12-17, 11.9% (95% CI: 8.9-15.7%) reported having ever[5] consulted a traditional healer (see Figure 11).

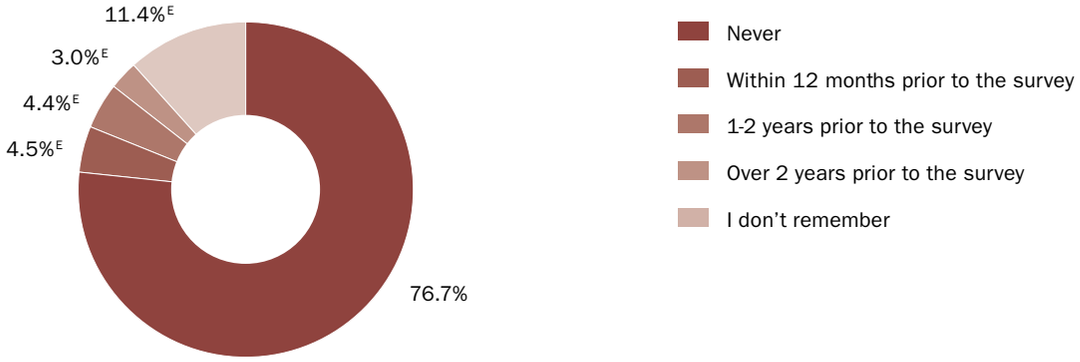


FIGURE 11: EVER CONSULTED A TRADITIONAL HEALER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.

There was no difference in the percentage of youth reporting ever consulting a traditional healer by gender (13.7% [95% CI: 9.2-20.0%] of male youth versus 9.9% [95% CI: 6.6-14.5%] of female youth).

Adults

According to the 2008-10 RHS, 27.6% (95% CI: 23.9-31.6%) of First Nations adults reported ever[6] having consulted a traditional healer (see Figure 12).

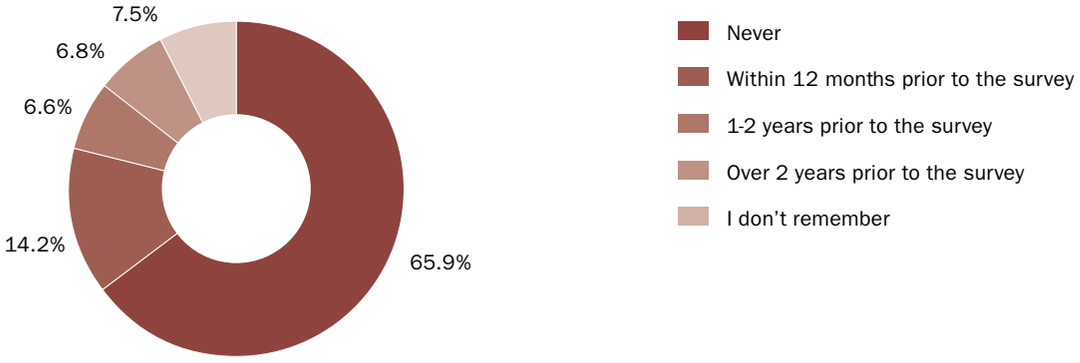


FIGURE 12: LAST CONSULTED A TRADITIONAL HEALER – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

There was no difference in the percentage of adults who reported ever having seen a traditional healer by gender (28.8% of men versus 26.3% of women), or by adult age group (20.2% of adults age 18-24 reported ever seeing a traditional healer, compared to 29.0% of adults age 25-39, 30.0% of adults 40-54, and 29.0% of Elders age 55+) (see Table 18). By remoteness of communities, adults in communities with no year-round access to a service centre (14.1%[E]) and individuals in communities between 50 and 350 kilometers from a service centre (17.3%) were less likely to report having ever consulted a traditional healer than adults in communities less than 50 kilometers from a service centre (38.1%).

TABLE 18: EVER SEEN A TRADITIONAL HEALER BY GENDER, AGE GROUP AND REMOTENESS OF COMMUNITIES – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Per Cent (95% CI)
Gender	
Female	26.3% (21.7-31.4%)
Male	28.8% (24.0-34.2%)
Age Group	
Adults (Age 18-24)	20.2% (13.8-28.4%)[E]
Adults (Age 25-39)	29.0% (22.3-36.8%)
Adults (Age 40-54)	30.0% (23.2-37.8%)
Elders (Age 55+)	29.0% (22.9-35.9%)
Remoteness of the community	
Communities less than 50 km from a service centre	38.1% (33.5-42.9%)
Communities between 50 and 350 km from a service centre	17.3% (14.2-20.9%)
Communities with no year-round access to a service centre	14.1% (7.3-25.7%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

5.8 Traditional Foods

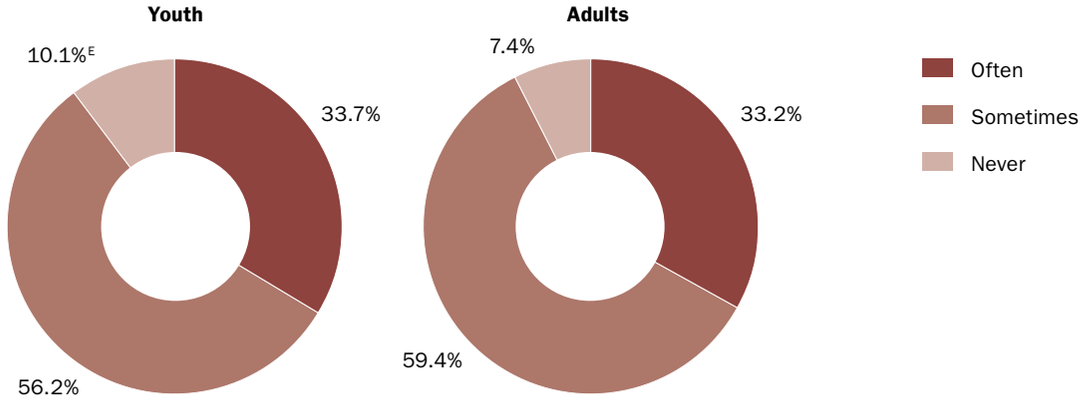
"Our traditional foods have nourished us well since the time of our creation and have been of fundamental importance to our culture. We developed sophisticated techniques to preserve a variety of foods year-round to keep our bodies strong and this knowledge has carried us well into our current place. Many challenges now exist for First Nations who wish to access traditional foods. The land and water have experienced changes that now limit the ability to access adequate amounts of our traditional foods. At the same time, our lives have been widely influenced by an abundance of processed, commercially-influenced food sources and lack of access to nutritious whole foods.

> Each year we affirm our identity and reinforce our ties to our indigenous food system and territories by harvesting and eating our traditional foods. Our traditional food remains an important aspect of social and cultural events, all of which center traditional food as an important aspect of being who we are. We thank the salmon, eulachon, clams, moose, deer, elk, beaver, birds, seaweed, berries, roots and medicines and they in turn nourish our bodies and spirits and help protect our body from illness and remind us of our past and help us think about our future.
>
> Protecting, restoring and relying on our traditional foods more can provide greater food security to our community and healthier food choices."
> ***(iFNHA, 2009)***

Among BC on-reserve First Nations youth age 12-17, 33.7% (95% CI: 28.2-39.7%) reported that someone had often shared traditional food with their household in the year prior to the 2008-10 RHS, 56.2% (95% CI: 49.7-62.6%) reported that someone sometimes[7] shared traditional foods with their household and 10.1% (95% CI: 6.6-15.1%)[E] reported that they never had traditional food shared with their household in the year prior to the 2008-10 RHS (see Figure 13).

Among BC on-reserve First Nations adults age 18+, 33.2% (95% CI: 30.1-36.4%) reported that someone had often shared traditional food with their household in the year prior to the 2008-10 RHS, 59.4% (95% CI: 55.5-63.3%) reported that someone sometimes[7] shared traditional foods with them, and 7.4% (95% CI: 5.7-9.5%) reported that no one shared traditional foods with their household in the year prior to the 2008-10 RHS (see Figure 13).

FIGURE 13: FREQUENCY THAT SOMEONE SHARED TRADITIONAL FOODS WITH YOUR HOUSEHOLD IN THE 12 MONTHS PRIOR TO THE 2008-10 RHS – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17) (N=405) AND ADULTS (AGE 18+) (N=1,351), 2008-10 RHS



E – High sampling variability (CV>0.16). Interpret with caution.

There was no difference in the per cent of adults reporting that someone often shared traditional food with their household in the year prior to the 2008-10 RHS by the remoteness of their community: 33.8% (95% CI: 29.2-38.8%) of adults in communities less than 50 kilometers from a service centre, 31.3% (95% CI: 26.5-36.6%) of adults in communities 50-350 kilometers from a service centre and 36.3% (95% CI: 28.9-44.4%) of adults in communities with no year-round access to a service centre often had traditional foods shared with their household in the 12 months prior to the 2008-10 RHS.

In the 2008-10 RHS, 60.5% (95% CI: 56.8-64.1%) of BC on-reserve First Nations individuals (all ages) reported often eating one or more types of traditional foods in the year prior to the survey. This is a decrease from the 2002-03 RHS, in which 73.7% (95% CI: 69.6-77.5%) of individuals (all ages) reported often eating one or more types of traditional foods in the year prior to the survey. Table 19 outlines the differences in traditional food consumption across age groups and the remoteness of communities. There is no difference in the consumption of one or more types of traditional foods among children, youth, adults or Elders. A higher percentage of individuals in communities with no year-round access to a service centre reported consuming one or more traditional foods often in the year prior to the survey (76.4%) than individuals in communities less than 50 kilometers from a service centre (52.6%).

TABLE 19: REPORTED OFTEN EATING ONE OR MORE TYPES OF TRADITIONAL FOODS IN THE YEAR PRIOR TO THE 2008-10 RHS BY AGE GROUP AND REMOTENESS OF COMMUNITIES – BC ON-RESERVE FIRST NATIONS (ALL AGES), 2008-10 RHS

	Per Cent (95% CI)
Age Group	
All ages	60.5% (56.8-64.1%)
Children	57.7% (52.8-62.5%)
Youth	58.7% (50.8-66.1%)
Adults (Age 18-54)	60.6% (55.9-65.1%)
Elders (Age 55+)	64.5% (56.0-72.2%)
Remoteness of the community	
Communities less than 50 km from a service centre	52.6% (48.7-56.5%)
Communities 50-350 km from a service centre	66.5% (61.4-71.2%)
Communities with no year-round access to a service centre	76.4% (67.8-83.2%)

Figure 14 displays the types and frequency of traditional foods reportedly consumed by First Nations children age 0-11 in the past 12 months. The most commonly consumed traditional foods reportedly eaten a few times or often in the past year included bannock (89.8% [95% CI: 86.0-92.6%]), berries or other wild vegetation[8] (84.0% [95% CI: 80.0-87.3%]), freshwater fish (70.9% [95% CI: 62.6-77.9%]), land-based animals such as moose, caribou, bear, deer or bison (69.9% [95% CI: 64.4-74.9%]) and saltwater fish (47.8% [95% CI: 39.7-56.0%]).

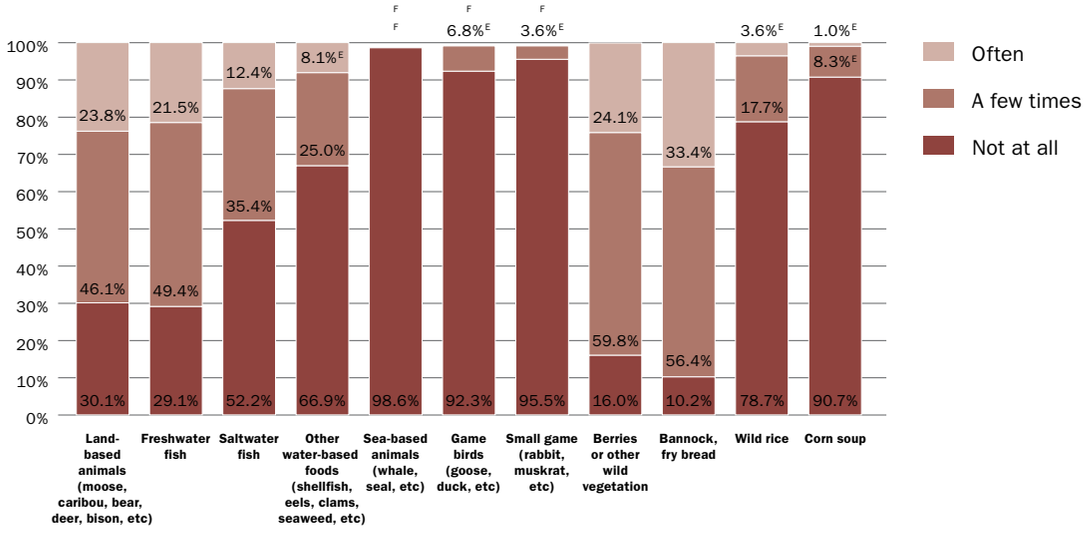


FIGURE 14: FREQUENCY OF CONSUMPTION OF TRADITIONAL FOODS IN THE 12 MONTHS PRIOR TO THE 2008-10 RHS – BC ON-RESERVE CHILDREN (AGE 0-11), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme samplig variability (CV>0.33) or small sample size (n≤5).

Figure 15 displays the types and frequency of traditional foods reportedly consumed by First Nations youth age 12-17 in the 12 months prior to the 2008-10 RHS. Traditional foods that the highest percentage of youth reportedly consumed a few times or often in the year prior to the 2008-10 RHS included bannock (92.5% [95% CI: 88.2-95.3%]), berries or other wild vegetation[8] (83.1% [95% CI: 77.4-87.7%]), freshwater fish (74.8% [95% CI: 65.4-82.4%]), land-based animals such as moose, caribou, bear, deer or bison (73.1% [95% CI: 66.6-78.8%]), and saltwater fish (44.6% [95% CI: 37.0-52.5%]).

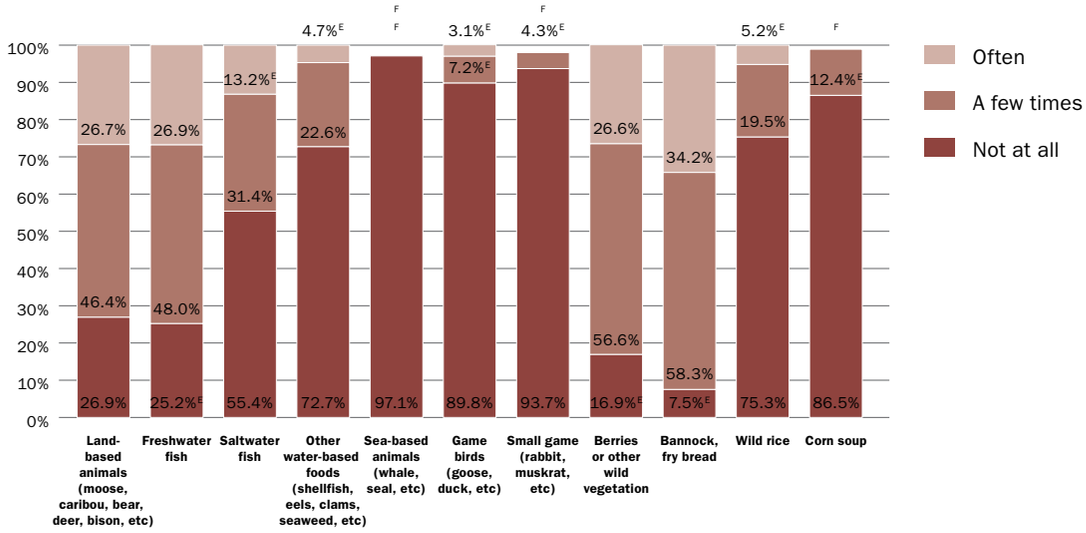
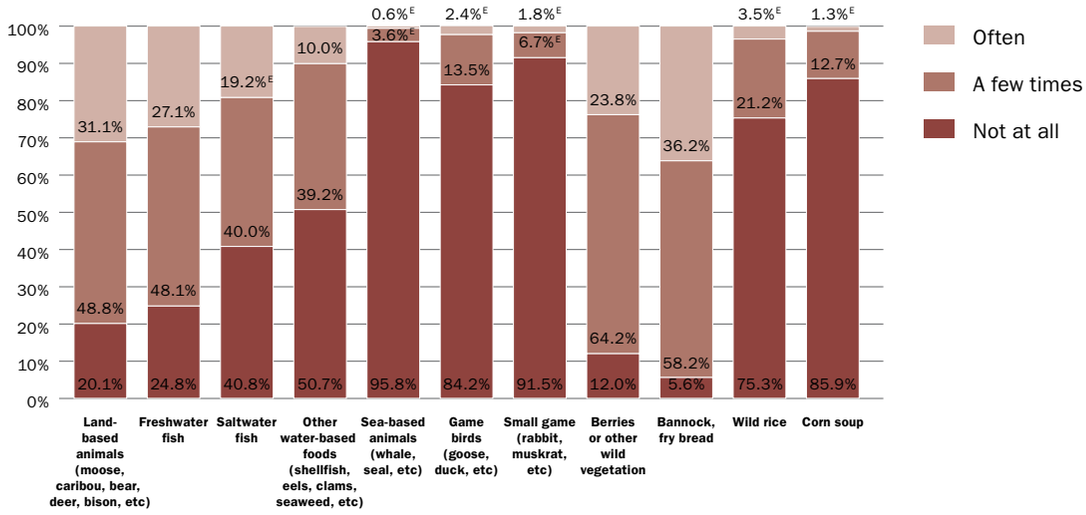


FIGURE 15: FREQUENCY OF CONSUMPTION OF TRADITIONAL FOODS IN THE 12 MONTHS PRIOR TO THE 2008-10 RHS – BC ON-RESERVE YOUTH (AGE 12-17), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme samplig variability (CV>0.33) or small sample size (n≤5).

Figure 16 displays the types and frequency of traditional foods reportedly consumed by BC on-reserve First Nations adults age 18+ in the 12 months prior to the 2008-10 RHS. The most commonly consumed foods reportedly eaten a few times or often in the year prior to the 2008-10 RHS included bannock (94.4% [95% CI: 92.4-95.9%]), berries or other wild vegetation[8] (88.0% [95% CI: 85.0-90.5%]), land-based animals such as moose, caribou, bear, deer or bison (79.9% [95% CI: 75.3-83.8%]), freshwater fish (75.2% [95% CI: 68.7-80.6%]), and saltwater fish (59.2% [95% CI: 51.8-66.1%]). Because the RHS is a national survey, some of the traditional foods listed were less relevant to the province of BC, e.g. corn soup.

> "In terms of health, traditional foods are one piece of the puzzle that speaks to your connection to your culture and the land, however you could eat traditional foods once in a while and then eat fast food the rest of the time, which isn't healthy either."
> ***RHS Reviewer***



E – High sampling variability (CV>0.16). Interpret with caution.

FIGURE 16: FREQUENCY OF CONSUMPTION OF TRADITIONAL FOODS IN THE 12 MONTHS PRIOR TO THE 2008-10 RHS – BC ON-RESERVE ADULTS (AGE 18+), 2008-10 RHS

5.9 Community Strengths and Community Issues

Table 20 outlines the self-perceived strengths that BC on-reserve First Nations adults 18+ reported in their community. The four most commonly cited strengths were the family values in their community (64.4%), followed by their community Elders (46.3%), traditional ceremonial activities (35.7%) and social connections (33.9%).

TABLE 20: REPORTED COMMUNITY STRENGTHS[9] – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Per Cent (95% CI)
Family values	64.4% (59.1-69.5%)
Elders	46.3% (40.7-52.0%)
Traditional ceremonial activities (e.g. powwow)	35.7% (29.6-42.3%)
Social connections (community working together)	33.9% (28.6-39.6%)
Community/health programs	32.1% (26.0-38.9%)
Use of First Nations language	29.7% (24.2-35.9%)
Awareness of First Nations culture	29.5% (24.1-35.5%)
Education and training opportunities	25.9% (19.7-33.4%)
Good leisure/recreation facilities	24.1% (19.3-29.7%)
Strong leadership	22.7% (18.4-27.8%)
Natural environment	18.0% (14.2-22.4%)
Low rates of suicide/crime/drug abuse	14.2% (11.3-17.6%)
Strong economy	7.3% (5.1-10.2%)[E]
Other	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Table 21 outlines what BC on-reserve First Nations adults perceive to be issues in their communities. The largest percentage of adults reported that alcohol and drug abuse is a community issue (82.0%), followed by a lack of employment and job opportunities (73.7%), housing (72.2%), funding (59.9%) and lack of education and training opportunities (54.2%).

The First Nations Health Authority has produced a series of nutritional booklets for traditional foods in BC including fish, salmon, eulachon, herring, moose, deer, small mammals, seaweed, roots, birds, berries and seafood.

These resources were developed in response to community requests for culturally relevant nutrition information. The fact sheets are being used by BC First Nations to re-introduce traditional foods into community health programs. For more information see: *http://www.fnhc.ca/pdf/Traditional_Food_Facts_Sheets.pdf*.

TABLE 21: REPORTED COMMUNITY ISSUES[9] – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Per Cent (95% CI)
Alcohol and drug abuse	82.0% (78.3-85.2%)
Employment/Number of jobs	73.7% (68.9-78.1%)
Housing	72.2% (67.0-76.8%)
Funding	59.9% (54.1-65.4%)
Education and training opportunities	54.2% (49.2-59.1%)
Culture	45.1% (41.0-49.2%)
Health	43.3% (37.6-49.2%)
Control over decisions	38.4% (34.3-42.8%)
Natural environment/Resources	31.6% (27.5-36.0%)
Gang activity	15.4% (11.8-19.7%)
Other	6.1% (4.2-8.7%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

"It is self-reported data. It is only reflective of a perception. If we were to break down and actually get a count of the number of youth involved in gang activity [for example] it would probably look very different than what the graph is because there's a continuum of gang attachment – there's posturing, there's the playing, then there's the exiting but the perception never changes. People may think 'oh, you know, these gangs they're always around' and actually the number's decreased. It's got its limitations."
RHS Steering Committee member

"Some of these things are obviously within the community but others might be dependent on factors not under community control, for instance job opportunities."
RHS Reviewer

As displayed in Figure 17, BC on-reserve First Nations adults see the most progress in their communities in the twelve months prior to the 2008-10 RHS in the area of culture, with 7.6% (95% CI: 5.2-10.9%) of adults reporting that they see good progress in their community culture and 32.1% (95% CI: 26.2-38.6%) of adults reporting that they see some progress in their community culture.

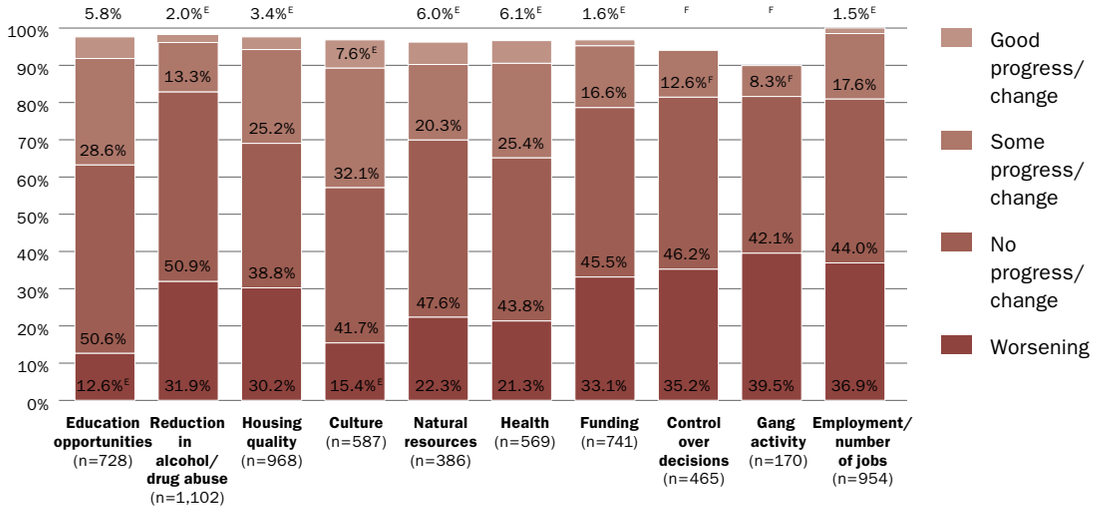


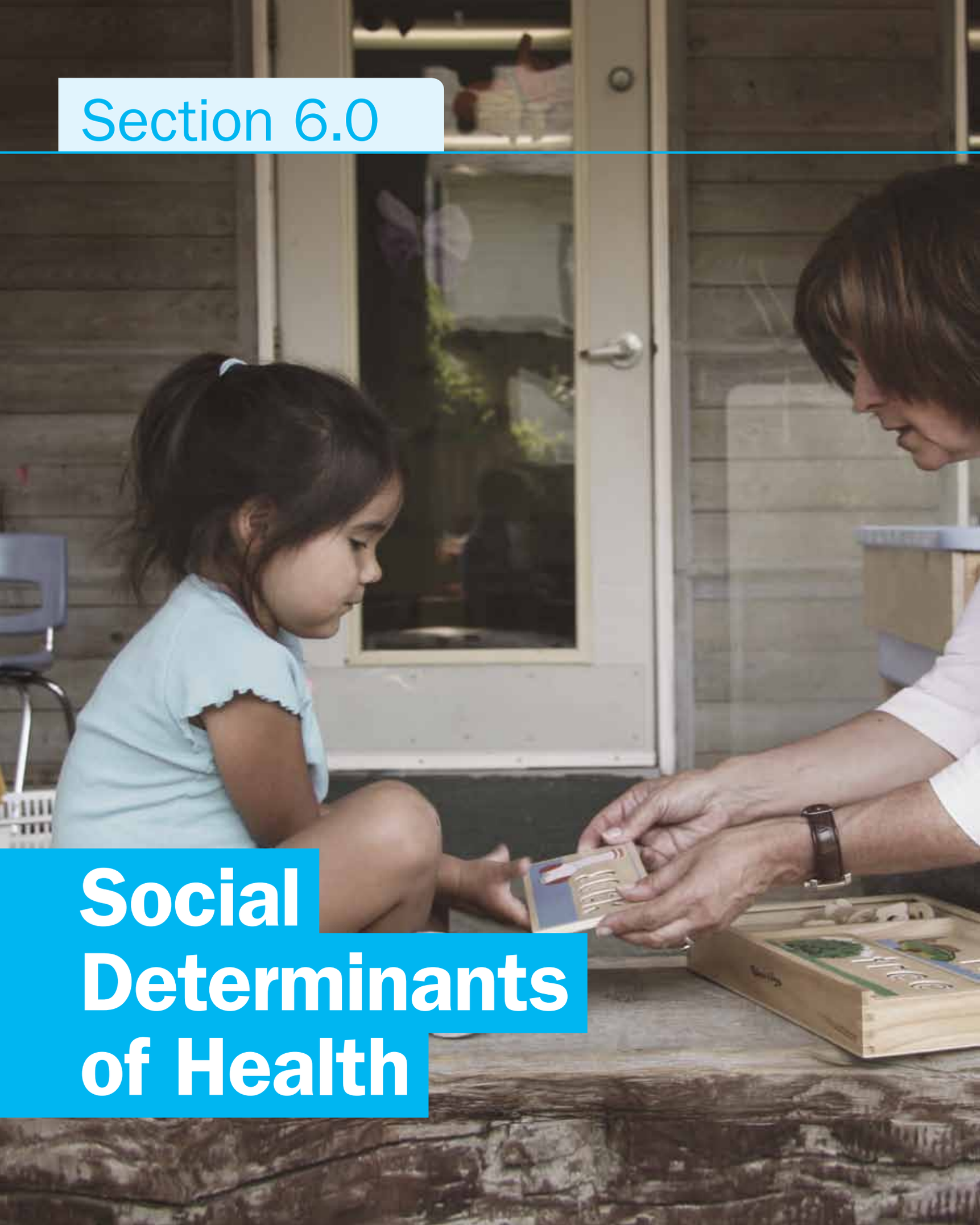
FIGURE 17: REPORTED COMMUNITY PROGRESS IN DIFFERENT AREAS – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Notes

1. Coefficient of variation >0.16. Interpret with caution.
2. The question asks "Which language(s) do you use most in daily life? Check all that apply."
3. *A few words:* understand or can speak a few words (hello, goodbye, etc). *Basic:* understand basic phrases, ask simple questions ("Where am I?"), and write basic sentences. *Intermediate:* understand main idea of everyday speech (TV, radio), engage in conversations, write paragraphs/text. *Fluent:* no difficulty understanding spoken word, carrying on complex conversations, writing complex reports/letters/etc.
4. The question asks "How often do you feel that you are in balance in the four aspects of your life (physical, emotional, mental and spiritual)?".
5. A combination of "Within the past 12 months", "1-2 years ago", and "Over 2 years ago".
6. A combination of "Within the past 12 months", "1-2 years ago", and "Over 2 years ago".
7. The interpretation of "Sometimes" is up to the survey respondent. It may be interpreted that the traditional food is only seasonally available, or that the traditional food is only occasionally shared with their household.
8. The question asks "How often, in the past twelve months, have you eaten the following traditional foods: berries or other wild vegetation." It is unknown which kinds of berries respondents would have considered for their response.
9. Multiple responses possible.

Section 6.0



Social Determinants of Health

Physical, emotional, mental and spiritual health is influenced by a broad range of external environmental, social, political and economic factors. Some of these social determinants of health can influence our lives as much or more than lifestyle decisions. Social determinants influence health and the resources available to deal with health issues (Reading, 2009). The social determinants can affect those at a community level by influencing the type of infrastructure and resources available. Other social determinants affect individuals differently across their life course.

COMMUNITY FACTORS

Community risk factors can have an impact on health at multiple life stages.

6.1 Income

The level of income for First Nations people is dependent on the availability of economic, employment and educational opportunities. Income can affect self-confidence, social status, independence and quality of health (2007 PHO Report) and has a direct effect on an individual's ability to meet basic necessities to acquire food, shelter, clothing and transportation.

There was no change in the distribution of personal income levels between the 2002-03 RHS and 2008-10 RHS[1] (see Table 22). For household incomes, however, there was an increase in the percentage of households with an income of less than $9,999 per year between the 2002-03 RHS and 2008-10 RHS (from 11.7% to 24.5%).

According to the 2006 Census, 29.6% of non-Aboriginal British Columbians age 15+ made more than $40,000 per year in personal income in 2005 (Statistics Canada, 2006), compared to the 9.3% of BC on-reserve First Nations adults age 18+ reporting an income greater than $40,000 in 2007[2] in the 2008-10 RHS.

TABLE 22: PERSONAL AND HOUSEHOLD GROSS INCOME IN 2007 AND 2001 – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 AND 2002-03 RHS, NON-ABORIGINAL BRITISH COLUMBIANS EMPLOYMENT INCOME IN 2005 (AGE 15+), 2006 CANADA CENSUS

	2008-10 RHS Per Cent (95% CI)		2002-03 RHS Per Cent (95% CI)		2006 Census
	Income in 2007[2]		Income in 2001[3]		Income in 2005
	Personal Income[4]	Household Income[5]	Personal Income	Household Income	Non-Aboriginal British Columbians Employment Income
<$9,999[6]	38.9% (33.7-44.4%)	24.5% (19.7-30.1%)	36.0% (29.6-43.0%)	11.7% (7.7-17.5%)[E]	24.4%
$10,000-$19,999	27.5% (23.9-31.5%)	22.4% (18.6-26.8%)	26.3% (20.6-33.0%)	21.4% (16.6-27.2%)	20.1%
$20,000-$39,999	24.3% (20.2-28.8%)	30.0% (24.4-36.3%)	28.2% (23.0-34.1%)	37.1% (30.4-44.3%)	26.0%
>$40,000	9.3% (7.1-12.2%)	23.1% (19.4-27.2%)	9.4% (6.4-13.7%)[E]	29.8% (24.0-36.4%)	29.6%

E – High sampling variability (CV>0.16). Interpret with caution.

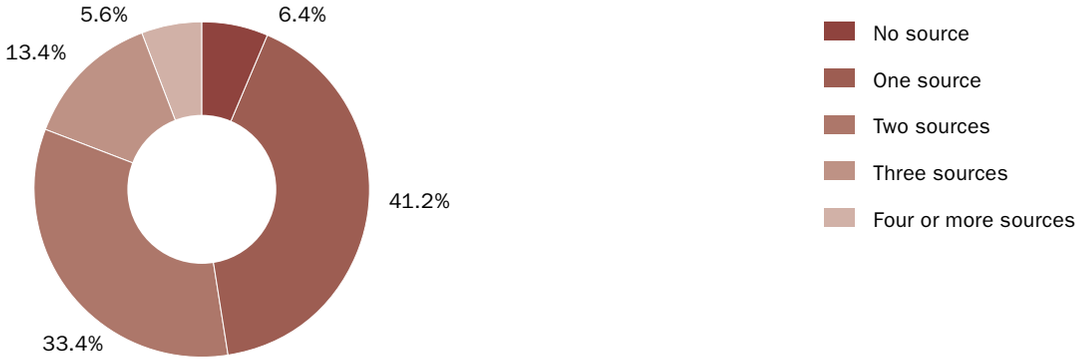
The top three sources of income for BC on-reserve First Nations according to the 2008-10 RHS were paid employment (49.4%), social assistance (35.4%) and child tax benefits (22.8%) (see Table 23).

TABLE 23: SOURCES OF INCOME IN 2007 – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Per Cent (95% CI)
Paid employment	49.4% (44.3-54.5%)
Social assistance	35.4% (31.7-39.2%)
Canada Child Tax Benefit	22.8% (20.1-25.8%)
Employment Insurance	12.9% (10.4-15.8%)
Self-employment	7.8% (5.7-10.7%)
Basic Old Age Security	7.4% (6.4-8.6%)
Canada Pension	7.2% (5.8-9.1%)
Education or training allowance	6.6% (4.9-8.8%)
Disability allowance	5.8% (4.3-7.8%)
Retirement, pensions, superannuation or annuities	4.6% (3.2-6.4%)[E]
Child support or alimony	3.4% (2.3-4.8%)[E]
Guaranteed income supplement or spousal allowance	3.1% (2.1-4.4%)[E]
Royalties, trusts or land claim payments	1.1% (0.6-2.0%)[E]
Maternity/paternity leave	1.1% (0.7-1.8%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

As illustrated in Figure 18, 6.4% of BC First Nations adults age 18+ reported no source of income in 2007[7], while 41.2% of adults reported having one source of income, 33.4% reported having two sources of income and 19.0% reported having three or more sources of income.



† is based on a composite variance which depends on individuals not reporting any of the sources of income in table 23.

FIGURE 18: NUMBER OF SOURCES OF INCOME IN 2007† – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=1,372)

More than sixty per cent (62.8% [95% CI: 57.5-67.9%]) of BC First Nations adults age 18+ reported struggling to meet basic requirements for food, transportation, utilities, clothing, shelter or childcare a few times a year or more in the 2008-10 RHS. Food was the most common area that 21.0% (95% CI: 17.7-24.7%) of First Nations adults reported struggling once a month or more to meet the basic requirements for, followed by transportation (17.7% [95% CI: 14.9-20.8%]), utilities (10.4% [95% CI: 8.1-13.3%]), clothing (8.3% [95% CI: 6.1-11.2%]), shelter (7.4% [95% CI: 5.6-9.7%]) and childcare (5.1% [95% CI: 3.7-6.8%]) (see Figure 19).

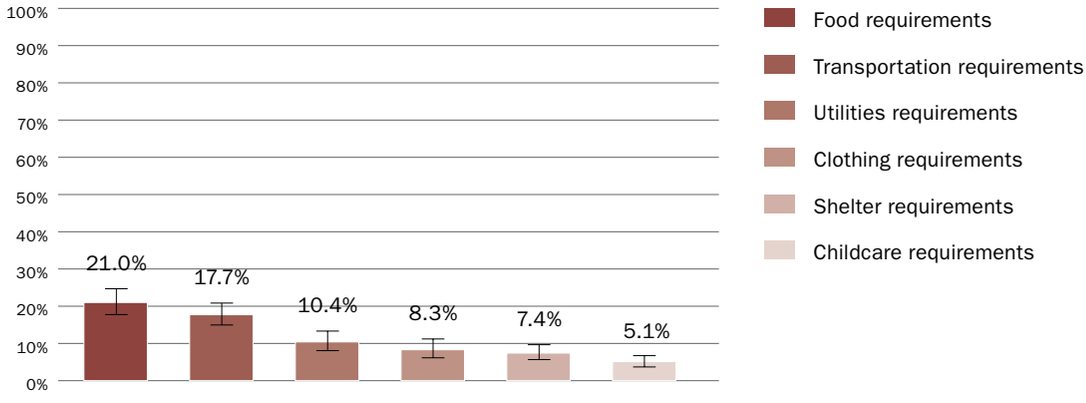


FIGURE 19: STRUGGLE TO MEET BASIC LIVING REQUIREMENTS MORE THAN ONCE A MONTH – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

There was no difference in the percentage of adults who struggled to meet basic requirements for food, transportation, utilities, clothing, shelter or childcare a few times a year of more by the remoteness of their community.

6.2 Food Security

"There are other issues besides the lack of money to buy food in food security – it's about the quality of food. That's not really mentioned here."

RHS Steering Committee member

Food security exists when "people at all times have access to sufficient, safe, nutritious food to maintain a healthy and active life" (FAO, 1996). Food security is built on three pillars: food availability (on a consistent basis); access (sufficient resources to obtain nutritious and affordable food); and use (appropriate use of foods backed by knowledge of nutrition and safe food handling, as well as adequate water and sanitation) (WHO, 2012).

Over forty-three per cent (43.5% [95% CI: 38.2-48.9%]) of BC on-reserve First Nations adults were categorized as living in households that were food secure[8], while 37.7% (95% CI: 33.7-42.0%) of adults were categorized as living in households that were moderately food insecure and 18.8% (95% CI: 16.1-21.8%) of adults were categorized as living in households that were severely food insecure.

Across the province, there were no differences in the percentages of households that were categorized as being food secure by remoteness of communities (see Table 24). This may be due to the smaller number of respondents in communities with no year-round access to a service centre or perhaps due to traditional food gathering that supplements food supplies. Communities with no year-round access to a service centre did have the highest percentage of individuals of all ages reporting that they often consumed one or more types of traditional foods in the past year (See Section 5.8 Traditional Foods).

TABLE 24: HOUSEHOLD FOOD INSECURITY BY REMOTENESS OF COMMUNITIES – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=1,393)

Remoteness of the community	**Food Secure** Per Cent (95% CI)	**Moderately Food Insecure** Per Cent (95% CI)	**Severely Food Insecure** Per Cent (95% CI)
Communities less than 50 km from a service centre	43.3% (37.1-49.8%)	36.5% (32.1-41.1%)	20.2% (16.5-24.4%)
Communities 50-350 km from a service centre	39.5% (33.3-45.9%)	41.8% (35.7-48.1%)	18.8% (15.3-22.8%)
Communities with no year-round access to a service centre	56.8% (32.2-78.4%)[E]	30.3% (15.6-50.5%)[E]	12.9% (7.0-22.5%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

Households with children were asked a second set of food security questions[9]. Among First Nations households with children, 59.3% (95% CI: 53.0-65.2%) were categorized as being food secure, 12.0% (95% CI: 9.5-15.1%) were categorized as being moderately food insecure and 28.7% (95% CI: 23.6-34.4%) were categorized as being severely food insecure. Across the province, there was no variation in the percentage of households with children who were categorized as being food secure by the remoteness of communities (see Table 25).

TABLE 25: FOOD INSECURITY AMONG HOUSEHOLDS WITH CHILDREN BY REMOTENESS OF COMMUNITIES – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=741)

Remoteness of the community	Food Secure Per Cent (95% CI)	Moderately Food Insecure Per Cent (95% CI)	Severely Food Insecure Per Cent (95% CI)
Communities less than 50 km from a service centre	58.1% (49.5-66.1%)	13.4% (10.0-17.7%)	28.6% (21.1-37.4%)
Communities 50-350 km from a service centre	58.6% (47.3-68.9%)	12.6% (8.2-19.1%)[E]	28.8% (21.3-37.6%)
Communities with no year-round access to a service centre	66.1% (48.1-80.4%)	5.1% (2.6-9.6%)[E]	28.8% (15.6-47.0%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

6.3 Housing Characteristics

First Nations have traditionally had large extended families living together. Changes associated with the colonization process, combined with complex jurisdictional issues, have contributed to sub-standard housing situations in some communities that include a lack of safe, secure and affordable housing and overcrowding (NCCAH, 2009).

Home Ownership

Among BC on-reserve First Nations adults age 18+, 57.9% (95% CI: 50.1-65.2%) reported living in band-owned housing. There was no difference between the percentage of males and females reporting living in band-owned housing.

Home Repairs

Over three-quarters (75.7%) of First Nations adults reported that their homes needed either major repairs (38.1% [95% CI: 33.2-43.3%]) or minor repairs (37.6% [95% CI: 34.2-41.1%]) in the 2008-10 RHS. Major repairs included defective plumbing or electrical wiring, and structural repairs to walls, floors or ceilings. Minor repairs included missing or loose floor tiles, bricks, shingles, defective steps, railings or siding. Just over twenty-four per cent (24.3% [95% CI: 20.2-29.0%]) reported that their homes required regular maintenance (e.g. painting, furnace maintenance).

According to the 2006 Census, 32.5% of on-reserve First Nations reported that their houses needed minor repairs and 36.5% needed major repairs, compared to 24.5% of non-Aboriginal people reporting minor repairs were needed for their homes and 6.8% of non-Aboriginal people reporting that major repairs were required for their homes (BC Stats, 2006).

Mould and Mildew

Among adults age 18+, 50.8% reported mould or mildew in their home in the 12 months prior to the survey.

Health Canada has produced a number of resources on mould for First Nations community members. Mould is a fungus that can grow on food or damp materials. Indoor mould is associated with increased eye, nose and throat irritation, coughing, shortness of breath, symptoms of asthma and allergic reactions.

The *Mould & Your Health* brochure includes information on how to recognize mould, common sources of mould and places to look for mould, how to prevent it and what to do if you find mould, how to clean up small areas and who to contact if there is a lot of mould.

The key to preventing and stopping mould growth is controlling moisture and keeping homes dry.

For more information see:
http://www.hc-sc-gc.ca/fniah-spnia/promotion/public-publique/home-maison/mould-moisissure-eng.php.

Household Amenities

The vast majority of BC on-reserve First Nations adults reported having most household amenities, such as running water, electricity and telephone service (see Table 26). Only 13.3% of First Nations adults age 18+ reported having a carbon monoxide detector in the 2008-10 RHS. Between the 2002-03 RHS and 2008-10 RHS there was a significant increase in the percentage of adults reporting computer access in their homes, rising from 42.2% to 59.1%, as well as Internet access, which rose from 29.4% to 52.8%.

TABLE 26: HOUSEHOLD AMENITIES – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)	2002-03 RHS Per Cent (95% CI)
Cold, running water	98.9% (97.2-99.6%)	98.8% (92.9-99.8%)
Electricity	98.9% (97.2-99.6%)	99.7% (99.0-99.9%)
Stove for cooking	98.9% (97.9-99.4%)	98.7% (95.1-99.7%)
Refrigerator (fridge)	98.6% (96.8-99.4%)	99.2% (97.6-99.8%)
Flush toilet	98.4% (96.2-99.3%)	98.8% (92.9-99.8%)
Hot, running water	98.3% (96.8-99.1%)	98.6% (93.3-99.7%)
Septic tank or sewage service	92.4% (88.6-95.0%)	97.0% (93.0-98.8%)
Garbage collection services	86.7% (83.2-89.7%)	89.6% (83.3-93.8%)
Telephone with service	83.5% (79.7-86.8%)	82.3% (74.7-88.0%)
Working smoke detector	77.3% (73.8-80.5%)	77.7% (72.6-82.1%)
Computer	59.1% (54.7-63.4%)	42.2% (36.1-48.6%)
Fire extinguisher	54.0% (47.0-60.9%)	55.3% (46.1-64.2%)
Connection to the Internet	52.8% (48.0-57.5%)	29.4% (24.4-35.1%)
Carbon monoxide detector	13.3% (10.0-17.3%)	12.7% (9.2-17.3%)

6.4 Water

Access to clean potable water has been a challenge for some BC First Nations communities.

The majority of BC on-reserve First Nations adults age 18+ reported having piped-in water (91.1% [95% CI: 86.7-94.2%]), with just 5.4% (95% CI: 3.4-8.5%)[E] reporting using well water[10]. Almost twenty-three per cent (22.9% [95% CI: 19.7-26.6%]) of adults reported using no other sources of drinking water, however 69.3% (95% CI: 64.5-73.8%) reported using bottled water, 10.7% (95% CI: 8.0-14.3%) reported using boiled tap water, 4.0% (95% CI: 2.3-6.7%)[E] reported using water from another house, and 3.8% (95% CI: 2.1-6.9%)[E] reported using water from a lake, river or stream as additional water sources.

Over sixty-four per cent (64.9% [95% CI: 58.7-70.6%]) of First Nations adults age 18+ reported considering their main water supply safe to drink year-round. The 2002-03 RHS found that 76.0% (95% CI: 67.7-82.7%) of adults reported that they considered the main water supply in their homes safe for drinking. This is not significantly different from the 2008-10 RHS.

Water Quality

In First Nations communities, the Government of Canada and First Nations share the responsibility for ensuring clean, secure water is available and for providing effective wastewater services on-reserve (AANDC, 2005).

Aboriginal Affairs and Northern Development Canada provide funding to First Nations communities for construction, upgrades, operations and maintenance of on-reserve water and wastewater systems. Health Canada publishes *Guidelines for Canadian Drinking Water Quality* and helps First Nations ensure monitoring programs are in place. First Nations Chiefs and Councils play a key role in ensuring water and wastewater facilities are designed, constructed, maintained and operated in accordance with federal or provincial standards (AANDC, 2005).

In BC, First Nations are taking measures to ensure their drinking water is safe and reliable. In 2010-11, approximately 40,000 water samples were collected and analyzed through Health Canada's Drinking Water Safety Program (FNIHB – BC Region, 2011).

The key to ensuring clean, safe and reliable drinking water is to understand the factors that impact the drinking water supply, from the source all the way to the consumer's tap. This knowledge includes understanding the general characteristics of the water and the land surrounding the water source, as well as mapping all the real and potential threats to the water quality. These threats can be natural, such as seasonal droughts or flooding, or created by human activity, such as agriculture, industrial practices or

FACTORS ACROSS THE LIFE COURSE

Throughout the course of life people are exposed to factors that individually and collectively affect their overall well-being and disease risk. This section looks at some of the factors and the social contexts that affect people at specific life stages.

6.5 Childcare

According to the 2008-10 RHS, more than thirty per cent (32.5% (95% CI: 27.36-37.9%]) of BC on-reserve First Nations children age 0-11 were reported to be receiving childcare. Of these children, 33.1% (95% CI: 25.2-42.1%) were reported to be receiving care in someone else's home by a family member or relative, 31.5% (95% CI: 24.4-39.7%) were reported to be receiving care in a daycare centre, and 16.1% (95% CI: 10.6-23.8%)[E] were reported to be receiving care in the child's home by a relative other than their brother or sister[11]. In many First Nations communities, childcare is provided or financially supported by the community.

According to the 2008-10 RHS over forty-nine per cent (49.4% [95% CI: 40.0-58.8%]) of children had attended a Head Start program at some point in their lives.

recreational activities in the watershed. Threats can also arise in the treatment plant or distribution system due to operational breakdowns or aging infrastructure. The multi-barrier approach takes all of these threats into account and makes sure there are preventative barriers in place to either eliminate threats or minimize their impact. It includes selecting the best available source (e.g., lake, river, aquifer, etc.) and protecting it from contamination using effective water treatment, and preventing water quality deterioration in the distribution system. The approach recognises that while each individual barrier may not be able to completely remove or prevent contamination, and therefore protect public health, together the barriers work to provide greater assurance that the water will be safe to drink over the long term (Health Canada, 2010).

What is Health Canada doing to ensure safe drinking water in First Nations communities? Through the Drinking Water Safety Program, Health Canada works in partnership with more than 600 First Nations communities in Canada to ensure drinking water is monitored as per the *Guidelines for Canadian Drinking Water Quality*. Health Canada works together with First Nations communities and provides funding to Chief and Councils for drinking water monitoring through its Community-based Water Monitor program. A key benefit of the program is that it enables First Nations communities to sample and test their drinking water for microbiological contamination where it is difficult or impossible to do so on a regular basis and/or to get the samples to a laboratory in a timely manner. Health Canada trains Community-based Drinking Water Quality Monitor to sample and test the drinking water for potential bacteriological contaminants as a final check on the overall safety of the drinking water (Health Canada, 2012).

6.6 Outside-School Activities

What children do at home, outside of school and in childcare can help foster social skills and provide important cultural, educational and outdoor experiences that contribute to optimal childhood development. An increase of technology in the home, and the amount of time spent playing video games, watching TV or on the computer is a concerning trend among children and youth.

Children

Table 27 shows the percentage of BC on-reserve First Nations children age 0-11 who were reported to spend more than an hour on average per day on activities including watching television (65%), playing video games (18.9%), reading (16.5%) and working at a computer (11.6%). There were no differences in time spent on activities by gender except for playing video games, which more boys (28.7%) were reported playing for an hour or more per day than girls (8.3%).

Aboriginal Head Start On Reserve Program

The Aboriginal Head Start On Reserve (AHSOR) Program funds activities that support early intervention strategies to address the learning and developmental needs of young children living in First Nations communities. The goal is to support early child development strategies that are designed and controlled by communities.

AHSOR Programming is centered around six components: education, health promotion, culture and language, nutrition, social support, and parental/family involvement.

Children in the Aboriginal Head Start On Reserve Program gain opportunities to develop self-confidence, a greater desire for learning, and an excellent start in their journey towards becoming successful people.

The vast majority of AHSOR sites have staff with Early Childhood Education Certificates, and are licensed. Many staff have training related to children with special needs, food safety, first aid, speech and language, etc.

Investments in early childhood education provide double the return in investment on the cost of the programs in terms of increased educational attainment, employment, decreased health care costs and criminal justice costs (Cleveland, 1998).

Source: *http://www.hc-sc.gc.ca/fniah-spnia/famil/develop/ahsor-papa_intro-eng.php*

TABLE 27: SPENDS MORE THAN ONE HOUR PER DAY ON ACTIVITY BY GENDER – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), 2008-10 RHS

Activity	Total Per Cent (95% CI)	Male Per Cent (95% CI)	Female Per Cent (95% CI)
Watching TV	**65.0% (59.5-70.1%)**	67.1% (61.0-72.7%)	62.7% (54.2-70.4%)
Playing video games	**18.9% (14.6-24.2%)**	28.7% (21.9-36.6%)	8.3% (5.4-12.7%)[E]
Reading	**16.5% (12.8-21.1%)**	14.2% (10.0-19.7%)	19.0% (14.0-25.4%)
Working at a computer	**11.6% (9.0-14.7%)**	12.4% (9.4-16.2%)	10.7% (7.3-15.3%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

Table 28 shows the activities that BC on-reserve First Nations children were reported participating in. In the 2008-10 RHS, 24.9% of children were reported to participate in a sports team or lessons more than once a week, and 9.7% were reported to participate in art or music groups or lessons more than once a week. There was no difference between boys and girls in their participation in activities in the 2008-10 RHS. There was a drop in the percentage of First Nations children who were reported participating in art or music groups or lessons from 16.1% in the 2002-03 RHS to 9.7% in the 2008-10 RHS.

TABLE 28: PARTICIPATES IN ACTIVITY MORE THAN ONCE A WEEK BY GENDER – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), 2008-10 RHS AND 2002-03 RHS

Activity	2008-10 RHS Per Cent (95% CI)			2002-03 RHS Per Cent (95% CI)		
	Total	Male	Female	Total	Male	Female
Take part in sports team or lessons more than once a week	**24.9% (20.1-30.4%)**	29.3% (23.4-36.1%)	20.2% (15.3-26.0%)	**32.5% (27.0-38.5%)**	40.7% (34.1-47.8%)	23.7% (17.4-31.3%)
Take part in art or music groups or lessons more than once a week	**9.7% (7.4-12.5%)**	8.2% (5.5-12.0%)[E]	11.3% (8.3-15.1%)	**16.1% (12.8-20.2%)**	14.9% (10.8-20.3%)	17.3% (12.7-230%)

Over eighty-two per cent (82.6% [95% CI: 76.8-87.3%]) of BC First Nations children were reported to read for fun or be read to more than once a week, and 42.1% (95% CI: 36.0-48.4%) of children were reported to read for fun or be read to every day. There was no difference in the percentage of children reported to read or be read to once a week or more by gender (86.2% [95% CI: 78.4-91.5%] of female children versus 75.2% [95% CI: 67.2-81.8%] of male children). There was no difference in the percentage of children who were reported to read or were read to everyday between the 2002-03 RHS and 2008-10 RHS (42.8% [95% CI: 36.7-49.1%] versus 42.1% [95% CI: 36.0-48.4%], respectively).

Youth

Table 29 shows the percentage of BC on-reserve First Nations youth age 12-17 who reported spending more than an hour on average per day on activities including watching television (63.1%), playing video games (40.1%), working at a computer (34.4%) and reading (21.6%). The percentage of BC youth age 12-17 who reported watching TV more than one hour on average a day (63.1%) is similar to the percentage of First Nations children age 0-11 who reportedly watched more than one hour of TV a day (65.0%). First Nations youth age 12-17 were more likely to report working at a computer (34.4%) and playing video games (40.1%) than children age 0-11 (11.6% and 18.9%, respectively). There were no differences in the percentage of youth participating in different activities by gender except for playing video games, which 61.9% of boys reported playing for an hour or more per day, versus 16.5%[E] of girls.

TABLE 29: SPENDS MORE THAN ONE HOUR PER DAY ON ACTIVITY BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

Activity	Total Per Cent (95% CI)	Male Per Cent (95% CI)	Female Per Cent (95% CI)
Watching TV	**63.1% (54.5-71.0%)**	65.1% (55.8-73.3%)	61.0% (51.6-69.7%)
Playing video games	**40.1% (36.1-44.3%)**	61.9% (54.4-69.0%)	16.5% (10.6-24.8%)[E]
Working at a computer	**34.4% (29.2-39.9%)**	31.4% (25.5-37.9%)	37.6% (30.3-45.4%)
Reading	**21.6% (15.6-29.2%)**	18.6% (11.4-28.8%)[E]	24.9% (17.7-33.9%)

E – High sampling variability (CV>0.16). Interpret with caution.

Among BC on-reserve First Nations youth age 12-17, 41.5% reported taking part in sports teams or lessons more than once a week and 10.0% reported taking part in art or music groups or lessons more than once a week (see Table 30). Higher percentages of male youth reported taking part in sports compared to female youth in the 2008-10 RHS. Between the 2002-03 and 2008-10 RHS, there has been a decrease in the percentage of youth reporting participating in sports teams more than once a week (from 56.9% to 41.5%).

TABLE 30: PARTICIPATES IN ACTIVITY MORE THAN ONCE A WEEK – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS AND 2002-03 RHS

Activity	2008-10 RHS Per Cent (95% CI)			2002-03 RHS Per Cent (95% CI)		
	Total	Male	Female	Total	Male	Female
Take part in sports teams or lessons more than once a week	**41.5% (35.8-47.4%)**	51.8% (43.9-59.6%)	30.4% (23.7-38.0%)	**56.9% (49.4-64.1%)**	68.0% (58.6-76.1%)	44.5% (36.2-53.1%)
Take part in art or music groups or lessons more than once a week	**10.0% (7.0-14.0%)[E]**	10.7% (6.5-17.0%)[E]	9.2% (5.8-14.3%)[E]	**15.1% (10.7-20.9%)[E]**	14.1% (8.2-23.2%)[E]	16.2% (12.1-21.3%)

E – High sampling variability (CV>0.16). Interpret with caution.

The percentage of children and youth who reported participating in sports or art/music lessons in the 2002-03 RHS and 2008-10 RHS is displayed in Figure 20. Sports teams have the highest percentage of participation for both children and youth once a week or more.

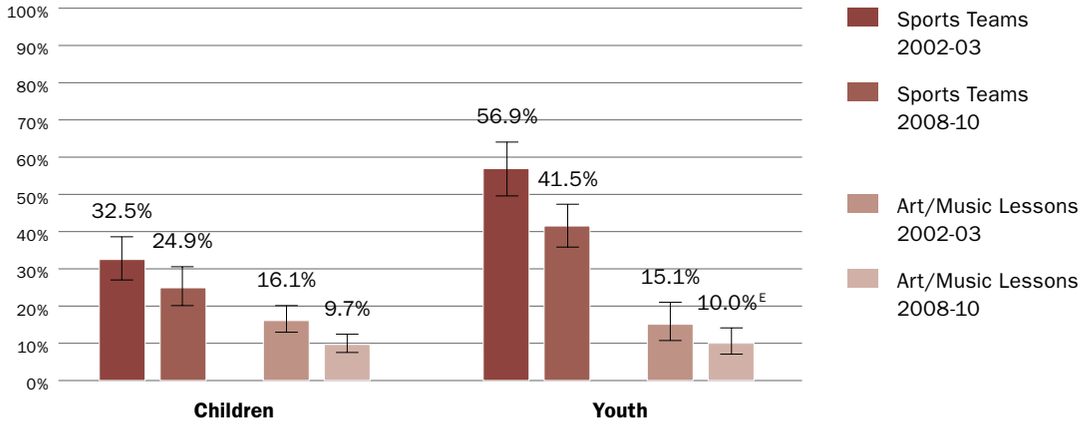


FIGURE 20: PARTICIPATION IN SPORTS TEAMS OR LESSONS, OR ART OR MUSIC GROUPS OR LESSONS MORE THAN ONCE A WEEK – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11) AND YOUTH (AGE 12-17), 2002-03 RHS AND 2008-10 RHS

6.7 Education

Educational attainment has a direct link to health in many ways, including employment, a higher income, increased independence, better decision-making abilities and a generally higher quality of life (National Collaborating Centre for Aboriginal Health, 2009).

Children

Among children attending school, 3.8% (95% CI: 2.4-6.0%)[E] were reported to have ever repeated a grade. This is similar to the 2002-03 RHS, which found that 6.8% (95% CI: 4.1-11.1%) of children attending school were reported to have repeated a grade.

Youth

In the 2008-10 RHS, 93.6% (95% CI: 88.6-96.5%) of BC First Nations youth age 12-17 reported currently attending school. This is unchanged since the 2002-03 RHS, which found that 91.7% (95% CI: 86.2-95.1%) of youth reported attending school.

In terms of school satisfaction results, 34.4% (95% CI: 28.3-41.0%) of BC First Nations youth reported that they liked school very much and 52.1% (95% CI: 45.5-58.6%) of youth reported that they liked school somewhat. There was no difference by gender in the percentage of male and female youth who reported that they liked school very much or somewhat.

According to the BC Ministry of Education's Student Satisfaction Survey, fewer self-declared Aboriginal students reported liking school than their non-Aboriginal counterparts (Ministry of Education, 2010, p. 36) (see Table 31). All students in BC public schools are invited to participate in the Student Satisfaction Survey. This survey population may not capture all the children and youth that are captured through the RHS. Response rates or the Student Satisfaction Survey were around 90% for elementary school students and 60-85% for secondary grades. It is important to investigate what factors in the school system are barriers to Aboriginal children's enjoyment of school as there may be some that are unique to Aboriginal children.

TABLE 31: BC STUDENT SATISFACTION SURVEY, PER CENT OF STUDENTS IN GRADES 3/4, 7, 10 AND 12 ANSWERING "YES" TO SELECT QUESTIONS – SELF-DECLARED ABORIGINAL AND NON-ABORIGINAL STUDENTS, BC MINISTRY OF EDUCATION 2009/10

	Grade 3/4		Grade 7		Grade 10		Grade 12	
	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal	Aboriginal	Non-Aboriginal
Do you like school?	55%	58%	39%	49%	33%	39%	39%	44%

The highest level of education that BC on-reserve First Nations youth reported that they would like to complete is summarized in Table 32. The greatest percentage of youth (26.1%) reported that they were seeking a high school diploma as their highest level of educational achievement, followed by college degree (19.5%) and university degree (16.7%). Twelve per cent (12.3%) of First Nations youth were not sure what the highest level of educational attainment they were seeking. More than 10% of youth reported seeking a Master's, PhD or a professional degree as their highest level of educational attainment.

TABLE 32: HIGHEST LEVEL OF EDUCATION SOUGHT – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS (N=437)

Highest Level of Education	2008-10 RHS Per Cent (95% CI)
High school diploma	26.1% (20.7-32.3%)
College diploma	19.5% (15.3-24.5%)
University degree	16.7% (12.1-22.7%)[E]
Not sure	12.3% (9.4-15.9%)
Trade or technical vocation	9.3% (6.7-12.8%)[E]
Master's/PhD	5.3% (3.5%-7.9%)[E]
Professional degree	4.9% (2.8-8.3%)[E]
Other, Don't Know, Refused	5.9% (3.6-9.6%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

According to the BC Ministry of Education, a higher percentage of self-declared Aboriginal Grade 12 graduates entered community college in the four years following graduation than non-Aboriginal graduates (17.0% in the first year [2005/06] versus 14.7% of non-Aboriginal graduates, respectively). A smaller percentage of self-declared Aboriginal 2004/05 Grade 12 graduates entered research-intensive universities in the year following graduation (4.4%) compared to 18.0% of non-Aboriginal Grade 12 graduates (Ministry of Education, 2010, pp. 34, 35).

Among BC on-reserve First Nations youth age 12-17, 22.8% (95% CI: 17.5-29.0%) reported repeating a grade and 38.3% (95% CI: 31.0-46.1%) reported having problems learning in school. Among those youth who reported having problems learning at school the largest percentage of youth reported having difficulty with math (17.6%) (see Table 33). There was no difference in the percentage of youth reporting problems learning at school by gender.

TABLE 33: PROBLEMS LEARNING AT SCHOOL BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS (N=157)

	Total Per Cent (95% CI)	Male Per Cent (95% CI)	Female Per Cent (95% CI)
Math	**17.6% (13.8-22.2%)**	17.3% (12.3-23.8%)	18.0% (12.4-25.2%)[E]
Too many distractions	**14.4% (9.8-20.5%)[E]**	17.0% (10.4-26.5%)[E]	[F]
Reading	**13.2% (8.9-19.1%)[E]**	18.9% (12.8-27.1%)[E]	6.9% (3.6-13.1%)[E]
Writing	**11.7% (8.0-16.8%)[E]**	16.4% (10.7-24.4%)[E]	[F]
Difficulty understanding the teacher	**10.3% (6.6-15.8%)[E]**	10.4% (5.9-17.9%)[E]	10.3% (6.1-16.8%)[E]
Short attention span	**8.7% (5.5-13.6%)[E]**	11.5% (6.4-19.8%)[E]	5.7% (2.9-10.8%)[E]

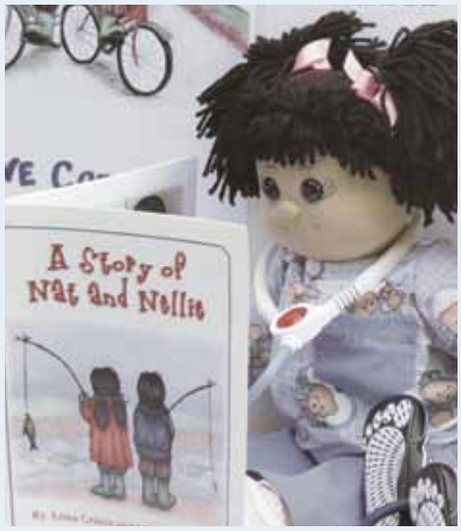
E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Nat & Nellie: The Traveling Nurses' Show

Developed to promote the recruitment and retention of Aboriginal and non-Aboriginal nurses in remote and underserved communities in BC, Nat & Nellie: The Traveling Nurses' Show is a hands-on storytelling initiative including two First Nations nurse dolls named Nat and Nellie. Nursing students have travelled to rural and remote First Nations communities to facilitate interactive learning experiences about the nursing profession with students in kindergarten, and grades 1, 2 and 3 using the Nat & Nellie Travelling Nurses' Show.

The program began out of the Vancouver Island University with funding from the BC Ministry of Health and First Nations and Inuit Health Branch, and informed by discussions with First Nations communities. These discussions identified the power of play and positive role models to ensure that First Nations children have a positive vision of their future, and are supported and encouraged from an early age to accomplish that vision.

The program travelled to over 40 communities across BC between 2003 and 2006.



Adults

The results of the 2008-10 RHS indicate that 41.8% (95% CI: 37.3- 46.5%) of BC on-reserve First Nations adults age 18+ reported having graduated from high school[12]. This is unchanged from the 2002-03 RHS, which found that 36.1% (95% CI: 30.6-42.0%) of adults reported having graduated from high school.

Evident in Table 34 is a pattern of fewer older First Nations adults reporting having graduated from high school than younger adults. Among Elders age 55+, 20.2% of individuals reported graduating from high school compared with 55.9% of adults age 18-34. Options for completing secondary school may have been less available 20 or 30 years ago when Elders were in school. According to the 2006 Census, this pattern of greater high school graduation among younger adults is consistent with that of the general population (Statistics Canada, 2008). There is no difference in the percentage of individuals that reported graduating from high school by gender in any adult age group.

TABLE 34: HIGH SCHOOL GRADUATION BY AGE GROUP AND GENDER – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Total Per Cent (95% CI)	Male Per Cent (95% CI)	Female Per Cent (95% CI)
Adults (Age 18-34)	**55.9% (47.9-63.6%)**	53.5% (43.3-63.5%)	58.2% (47.3-68.3%)
Adults (Age 35-54)	**41.6% (36.1-47.3%)**	39.2% (31.0-48.1%)	44.4% (37.6-51.4%)
Elders (Age 55+)	**20.2% (16.3-24.7%)**	18.3% (13.0-25.3%)	22.1% (17.0-28.1%)
Total	**41.8% (37.3-46.5%)**	**38.5% (32.6-44.8%)**	**43.3% (38.4-48.4%)**

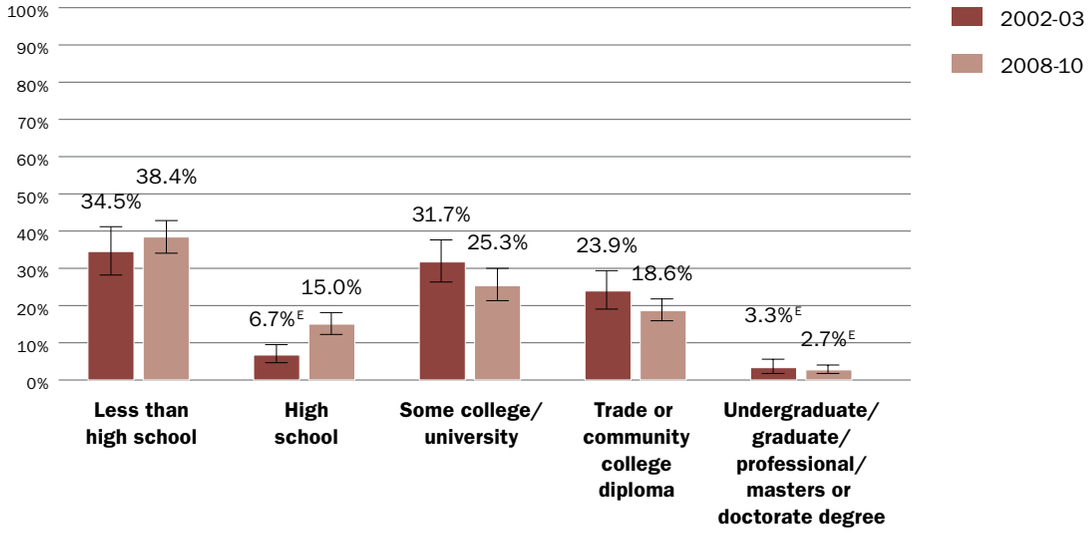
Figure 21 illustrates the highest level of educational attainment reported among First Nations adults. In the 2008-10 RHS, 38.4% of on-reserve First Nations adults reported obtaining less than high school as their highest level of educational attainment.

Nationally, 51.5% of First Nations adults reported less than high school as their highest level of educational attainment (FNIGC, 2011). According to the 2006 Census, 52% of BC First Nations adults age 15+ living on-reserve reported having less than high school as their highest level of education attainment[13], compared to 19% of the non-Aboriginal population age 15+ in BC (Statistics Canada, 2006).

The per cent of BC on-reserve First Nations adults reporting high school as their highest level of educational attainment increased from 6.7% (95% CI: 4.7-9.4)[E] to 15.0% (95% CI: 12.3-18.2%) between the 2002-03 RHS and 2008-10 RHS. According to the 2006 Census, high school was the highest level of educational attainment for 28.0% of non-Aboriginal BC adults age 15+, compared to 19.9% of BC First Nations adults age 15+ living on reserve (Statistics Canada, 2006). Nationally, the 2008-10 RHS found that 20.1% of on-reserve First Nations adults 18+ reported high school as their highest level of educational attainment (FNIGC, 2011, p. 10).

There was no significant change between the 2002-03 and 2008-10 RHS in the percentage of adults reporting having some college or university, or the percentage of adults reporting having a trade or community college diploma or the percentage of adults reporting having a post-secondary/graduate degree. According to the 2006 Census, an apprenticeship, trade, college or other non-university certificate was the highest level of educational attainment for 27.5% of non-Aboriginal BC adults compared to 22.5% of BC First Nations adults age 15+ living on-reserve (Statistics Canada, 2006). Trades and college diplomas represented 34% of all certificates, diplomas and degrees among non-Aboriginal BC adults and 46.5% of all certificates, diplomas and degrees among First Nations adults age 15+ living on reserve in BC (Statistics Canada, 2006).

The 2008-10 RHS and the 2006 Census both show that 2.7% of First Nations adults living on-reserve had a university degree (bachelor degree and above) as their highest level of educational attainment. This was lower than the general non-Aboriginal population. The 2006 Census found that 19.9% of non-Aboriginal adults age 15+ living in BC had a university degree (Statistics Canada, 2006). The relatively small percentage of First Nation adults living on-reserve with university degrees may be impacted by employment options on-reserve and/or due to increased urbanization of individuals following university attendance.



E – High sampling variability (CV>0.16). Interpret with caution.

FIGURE 21: HIGHEST LEVEL OF EDUCATIONAL ATTAINMENT RECEIVED – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2002-03 AND 2008-10 RHS

Health Care Education

Increasing the number of trained, practising First Nations health professionals is a goal outlined in the *Transformative Change Accord: First Nations Health Plan* (British Columbia Assembly of First Nations, First Nations Summit, Union of British Columbia Indian Chiefs, and the Government of BC, 2006). There is a lack of data on the number of practising First Nations health professionals; however the 2008-10 RHS included a question on this subject. According to the 2008-10 RHS, 13.1% (95% CI: 10.4-16.4%) of BC on-reserve First Nation adults age 18+ adults had some level of health care training[14].

6.8 Employment

Youth

According to the 2008-10 RHS, 42.7% (95% CI: 36.5-49.25) of BC on-reserve First Nations youth age 12-17 reported having a job such as babysitting, working at a store or tutoring after school. Among these youth, 19.5% (95% CI: 15.8-23.9%) reported working at their job less than once per week, 15.5% (95% CI: 12.0-19.9%) reported working one to three times per week, and 7.6% (95% CI: 4.4-12.8%)[E] reported working four times a week or more. A higher percentage of female youth reported working after school than males (58.9% [95% CI: 50.0-67.3%] versus 27.9% [95% CI: 21.2-35.7%], respectively).

Adults

According to the 2008-10 RHS 43.6% (95% CI: 40.2-47.0%) of adults age 18+ reported working for pay. This is comparable to the percentage of First Nations adults nationally in the 2008-10 RHS who reported working for pay (47.2% [95% CI: 45.2-49.2%]) (FNIGC, 2012) and the 49.2% (95% CI: 44.0-54.3%) of BC First Nations adults who reported working for pay during the 2002-03 RHS.

The 2008-10 RHS found that 48.0% (95% CI: 43.9-52.2%) of adults 18-54 reported currently working for pay compared to 27.3% (95% CI: 22.0-33.3%) of Elders age 55+. There was no difference in the percentage of male or female adults working for pay among adults age 18-54 or Elders age 55+.

As displayed in Figure 22, of the 47.6% of BC First Nations adults age 18-54 who reported not working in the 2008-10 RHS, 19.9% (95% CI: 16.4-23.9%) reported that they were not looking for work and 27.7% (95% CI: 24.1-31.7%) reported that they were currently looking for work. Among Elders age 55+, 27.3% (95% CI: 22.0-33.3%) reported that they were currently working and, of the 71.6% who reported not working, 49.8% (95% CI: 40.5-59.1%) reported that they were not looking for work, 11.7% (95% CI: 7.8-17.1%)[E] reported that they were looking for work and 10.2% (95% CI: 5.2-19.0%)[E] self-reported not applicable.

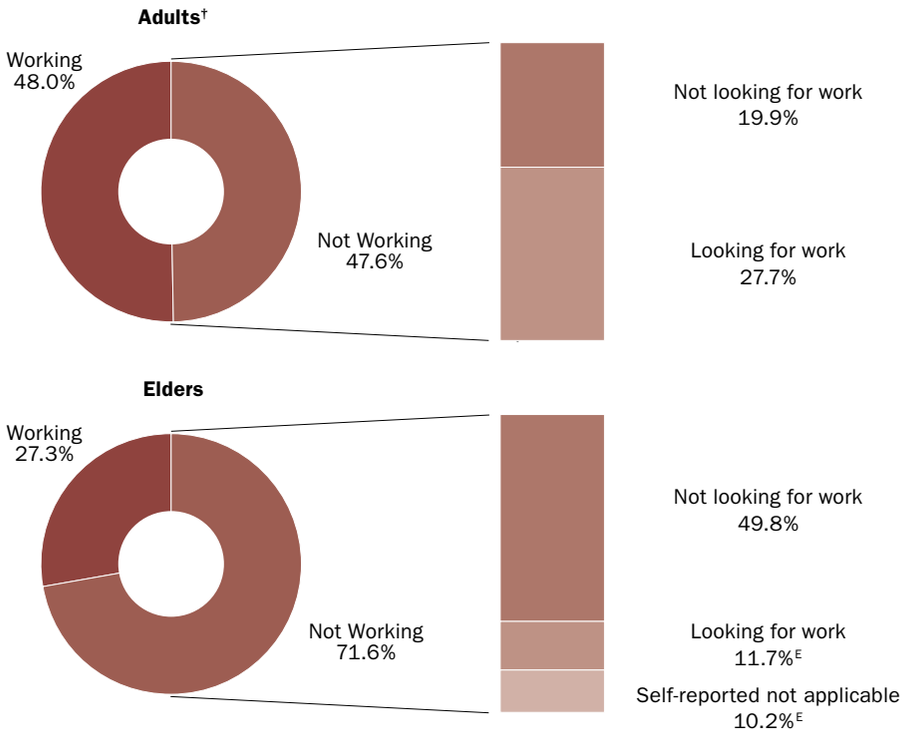


FIGURE 22: CURRENTLY WORKING FOR PAY OR LOOKING FOR WORK – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18-54) AND ELDERS (AGE 55+), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.

† The Category "Self-reported not applicable" among adults age 18-54 is suppressed because of extreme sampling variability (CV>0.33) or small sample size (n≤5).

A higher percentage of male adults age 18-54 (35.4% [95% CI: 29.8-41.1%]) reported that they were seeking work compared to females age 18-54 (19.5% [95% CI: 14.9-25.1%]). Similarly, among Elders, a higher percentage of men (19.3% [95% CI: 12.1-29.3%][E]) reported seeking work than women (4.1% [95% CI: 2.1-7.8%][E]). There was no difference in the percentage of adults reporting that they were looking for work by the remoteness of their community: 22.7% (95% CI: 17.0-29.7%) of adults in communities less than 50 kilometers from a service centre, 26.3% (95% CI: 22.0-31.1%) of adults in communities 50-350 kilometers from a service centre and 21.5% (95% CI: 15.1-29.7%) of adults in remote communities with no year-round access to a service centre.

Table 35 outlines the various reasons that BC on-reserve First Nations adults age 18+ were not seeking work. The largest percentage of adults age 18+ who were not looking for work reported that it was poor health or disability that prevented them from doing so (26.2%). Among adults age 18-54, the most common reason cited for not looking for work was parenting (24.0%). Among BC on-reserve First Nations Elders 55+, the most common reason for not looking for work was that they were retired (47.8%).

TABLE 35: REASONS FOR NOT LOOKING FOR WORK BY ADULT AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS, 2008-10 RHS

	Total (N=676) Per Cent (95% CI)	Age 18-54 (N=351) Per Cent (95% CI)	Age 55+ (N=325) Per Cent (95% CI)
Poor health or disabled	**26.2% (22.7-29.9%)**	23.4% (18.7-28.9%)	31.3% (25.5-37.9%)
Retired	**16.6% (14.3-19.2%)**	[F]	47.8% (42.2-53.3%)
Stay-at-home parent	**16.1% (12.7-20.2%)**	24.0% (18.7-30.1%)	[F]
Other	**14.8% (11.6-18.7%)**	18.6% (14.2-24.0%)	[F]
Student	**9.4% (6.6-13.1%)**	14.0% (9.9-19.5%)[E]	[F]
No longer looking for work, gave up	**2.1% (1.2-3.6%)**	2.5% (1.4-4.5%)	[F]
Seasonal worker	[F]	[F]	9.9% (5.1-18.3%)[E]

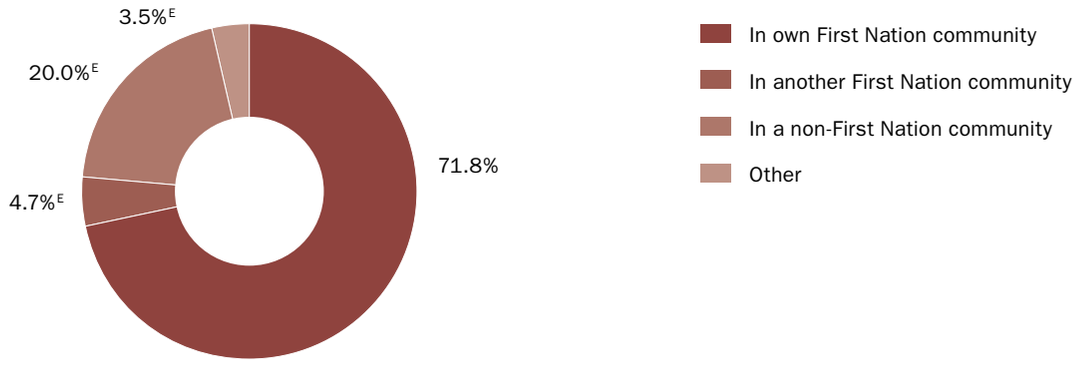
E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Table 36 outlines the major industries of work among BC First Nations adults 18+ who reported currently working for pay. The top five industries included: other (30.7%), agriculture, forestry, fishing and hunting (18.5%), educational services (11.7%), construction (8.0%) and health care and social assistance (7.6%).

TABLE 36: INDUSTRY OF WORK – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+) WHO ARE CURRENTLY EMPLOYED, 2008-10 RHS (N=581)

	Per Cent (95% CI)
Other	30.7% (25.9-36.0%)
Agriculture, forestry, fishing, and hunting	18.5% (14.2-23.8%)
Educational services	11.7% (9.0-15.1%)
Construction	8.0% (5.7-11.2%)[E]
Health care and social assistance	7.6% (5.3-10.7%)[E]
Public administration	6.5% (4.3-9.8%)[E]
Accommodation and food services	4.6% (2.7-7.9%)[E]
Other services (except public administration)	3.4% (1.9-6.0%)[E]
Administrative support, waste management and remediation services	3.1% (1.8-5.2%)[E]
Arts, entertainment, and recreation	3.0% (1.7-5.2%)[E]
Retail	2.4% (1.3-4.4%)[E]
Finance and insurance	2.3% (1.4-3.6%)
Mining	2.2% (1.2-3.9%)
Management of companies and enterprises	[F]
Information	[F]
Transportation and warehousing	[F]
Wholesale trade	0.9% (0.6-1.5%)[E]
Professional, scientific, and technical services	[F]
Utilities	[F]
Real estate, rental and leasing	[F]
Manufacturing	[F]

Among BC on-reserve First Nations adults age 18+ who reported currently working, 71.8% (95% CI: 64.5-78.1%) reported that they worked in their own First Nations community, 4.7% (95% CI: 3.2-6.7%) [E] reported working in another First Nations community, 20% (95% CI: 14.8-26.5%)[E] reported working in a non-First Nations community and 3.5% (95% CI: 2.0-6.3%)[E] reported working elsewhere (see Figure 23).



E – High sampling variability (CV>0.16). Interpret with caution.

FIGURE 23: LOCATION OF WORK – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+) CURRENTLY WORKING, 2008-10 RHS (N=575)

6.9 Household Composition

BC on-reserve First Nations children were reported living most frequently with their biological mothers (89.1%), their biological fathers (53.9%) and both their biological mothers and fathers (50.3%).

BC on-reserve First Nations youth reported living most frequently with their biological mother (74.1%), their brothers or sisters (45.6%) and their biological fathers (43.1%) (see Table 37).

TABLE 37: LIVE MOST FREQUENTLY WITH[15] – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11) AND YOUTH (AGE 12-17), 2008-10 RHS

Live Most Frequently With[15]	Children Per Cent (95% CI)	Youth Per Cent (95% CI)
Biological mother	89.1% (85.9-91.6%)	74.1% (67.7-79.6%)
Biological father	53.9% (48.9-58.8%)	43.1% (36.8-49.6%)
Both biological mother and biological father	50.3% (45.2-55.3%)	37.6% (31.3-44.3%)
Brothers or sisters	36.3% (30.1-42.9%)	45.6% (39.5-51.9%)
Aunt, uncle or cousins	8.5% (5.6-12.6%)E	8.2% (6.0-11.1%)
Grandparent	15.0% (11.6-19.1%)	21.2% (15.4-28.5%)
Stepfather	3.2% (2.1-4.9%)E	4.1% (2.4-6.8%)E

E – High sampling variability (CV>0.16). Interpret with caution.

As shown in Figure 24, among First Nations children age 0-11, 50.3% (95% CI: 45.2-55.3%) were reported living most frequently with both their biological parents, 42.4% (95% CI: 37.2-47.9%) were reported living most frequently with either their biological mother or biological father and 7.3% (95% CI: 5.1-10.3%)[E] were reported living most frequently with neither their biological mother nor their biological father.

Among First Nations youth age 12-17, 37.6% (95% CI: 31.3-44.3%) reported that they lived most frequently with both of their biological parents, 42.0% (95% CI: 36.7-47.5%) reported that they lived most frequently with either their biological mother or biological father and 20.4% (95% CI: 15.4-26.5%) reported that they did not live most of the time with either their biological mother or biological father. There was no difference between the 2002-03 RHS and 2008-10 RHS in the percentage of BC on-reserve First Nations children or youth who reported living with their biological parents most of the time.

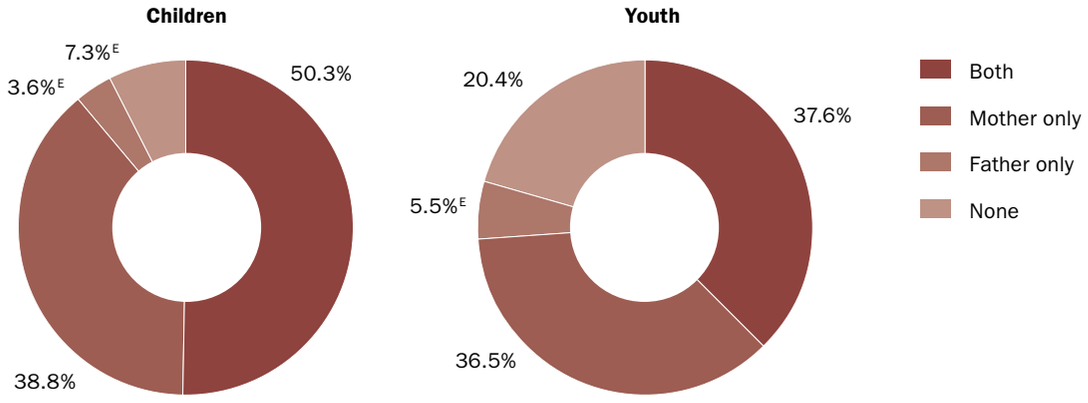


FIGURE 24: LIVING WITH ONE OR MORE BIOLOGICAL PARENT – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11) AND YOUTH (AGE 12-17), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.

Among First Nations youth age 12-17, 26.5% (95% CI: 20.8-33.0%) reported that their birth parents were married and lived together, 16.9% (95% CI: 12.5-22.4%) reported that their birth parents lived together and were not married, 47.8% (95% CI: 41.6- 54.0) reported that their birth parents did not live together, 2.2% (95% CI: 1.1-4.1%)[E] reported that their birth parents were divorced and 6.4% (95% CI: 4.1-9.7%) reported that one of their birth parents were deceased[16]. According to the 2006 Census, 25.8% of on-reserve First Nations age 15+ were married, 5.2% were divorced and 5.1% were widowed (Statistics Canada, 2006).

6.10 Crowded Housing

A review of current evidence on the link between housing and health found that there is a possible causal relationship between overcrowding and ill health (CIHI, 2004). The effects are generally considered more of a threat to mental health than physical health (O'Neil, 2000).

Among BC on-reserve First Nations, 22.3% (95% CI: 16.7-29.0%) of children age 0-11 and 14.5% (95% CI: 11.5-18.0) of adults age 18+ were categorized as living in crowded housing[17,18]. This is lower than the percentage of First Nations children (37.5%) and First Nations adults (23.4%) nationally who live in crowded housing according to the national 2008-10 RHS results (FNIGC, 2012).

There has been no change between the 2002-03 RHS and 2008-10 RHS in the percentage of children and adults who were categorized as living in crowded homes (14.9% [95% CI: 11.1-19.6%] versus 16.1% [95% CI: 13.3-19.4%], respectively).

According to the 2008-10 RHS, BC on-reserve First Nations youth age 12-17 reported living in homes with, including themselves, an average of 4.9 household members (with 2.7 children and youth age 0-17 and 2.3 adults age 18+). BC on-reserve First Nations children age 0-11 were reported living in homes with, including themselves, an average of 5.2 household members (with 2.8 children and youth age 0-17 and 2.4 adults age 18+).

> "So what's it going to take to turn this around? It starts with housing. In my mind I don't know, there's so many things, but I mean if we weren't having such overcrowded housing with two or three families crammed into single bedrooms and life is kind of crazy sometimes you know it's tough to have a stable sense of boundaries. If you think about the emphasis on education… But if there's no place to study… where do you sit? Where do you put your books? How do you do a school project?"
>
> ***RHS Steering Committee member***

6.11 Migration

Many BC First Nations community members are choosing to settle in urban centres due to employment, education and housing availability, but will move back to their home communities when possible for their family and community connections. Sustainable local economies, educational and employment options and affordable housing are all important for maintaining community populations.

According to the 2008-10 RHS, 60.0% (95% CI: 55.4-64.6%) of BC on-reserve First Nations adults age 18+ reported living outside of their community at some point in their lives. This is equivalent to the 59.2% of on-reserve First Nations who reported ever having lived outside of their First Nations community nationally in the 2008-10 RHS (FNIGC, 2011, p. 25). There was no difference between the percentage of BC on-reserve First Nations men age 18+ (60.9% [95% CI: 55.4-66.1%]) and women age 18+ (59.1% [95% CI: 53.6-64.4%]) who reported ever having lived outside of their First Nations community, nor was there any difference in the percentage of adults age 18-54 (62.8% [95% CI: 58.0-67.3%]) and Elders age 55+ (51.2% [95% CI: 42.6-59.8%]) who reported ever having lived outside of their First Nations community.

Among those adults who reported ever living outside of their community, 69.5% reported that they had lived away from their community for more than a year (see Figure 25).

FIGURE 25: LONGEST PERIOD SPENT LIVING AWAY FROM COMMUNITY – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=806)

By age group, adults age 18-24 were more likely to report living away from their community for less than a year than any other adult age group. Adults age 40-54 and age 55+ were more likely to report having lived more than five years away from their community than adults age 18-24 and 25-39 (see Table 38).

TABLE 38: LONGEST PERIOD SPENT LIVING AWAY FROM COMMUNITY BY ADULT AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=806)

	Age Group Per Cent (95% CI)			
	18-24	25-39	40-54	55+
Less than a year	54.6% (43.2-65.5%)	30.7% (25.4-36.6%)	18.4% (13.1-25.2%)	26.2% (18.4-36.0%)
1-5 years	24.1% (17.1-32.7%)	47.7% (40.0-55.5%)	31.2% (24.3-39.0%)	24.4% (18.0-32.1%)
More than 5 years	21.4% (12.5-34.2%)[E]	21.6% (15.4-29.6%)	50.4% (41.4-59.4%)	49.4% (41.1-57.7%)

E – High sampling variability (CV>0.16). Interpret with caution.

Over fourteen per cent (14.4% [95% CI: 11.3-17.8%]) of BC on-reserve First Nations adults age 18+ reported moving on- and off-reserve more than once a year. There was no difference in the per cent of men and women who reported moving on- and off-reserve more than once a year (16.4% [95% CI: 11.5-22.8%][E] and 12.0% [95% CI: 8.6-16.4%], respectively).

Among all BC on-reserve First Nations adults age 18+, 38.8% (95% CI: 34.3-43.5%) reported having never moved in or out of their community, 39.5% (95% CI: 34.5-44.7%) reported not moving in or out of their community in the 12 months prior to the 2008-10 RHS. 11.7% (95% CI: 9.7-14.2%) reported moving once in the year prior to the survey, 6.0% (95% CI: 4.6-7.8%) reported moving 2-5 times in the year prior to the survey, and 1.1% reported moving six or more times (95% CI: 0.6-2.1%)[E] in or out of their community in the year prior to the 2008-10 RHS[19]. According to the 2006 Census, 89.0% of BC First Nations living on-reserve age 15+ had not moved in the past year (Statistics Canada, 2006). This is slightly higher than the 78.3% of BC on-reserve First Nations adults who reported not having moved in the year prior the survey (38.8% who reported having never moved + 39.5% who had not moved in the past 12 months).

Just over half of BC on-reserve First Nations adults reported spending the majority of their time away from their community in a city within BC (50.8% [95% CI: 44.7-56.8%]), followed by another small town or rural area within BC (23.6% [95% CI: 20.8-26.7%]), another First Nations community (12.2% [95% CI: 9.2-15.8%]), another city in Canada (4.4% [95% CI: 2.8-6.9%][E]), other (3.8% [95% CI: 2.1-6.8%][E]), the United States of America (3.2% [95% CI: 1.7-5.9%][E]) and a small town or rural area of another province (2.1% [95% CI: 1.2-3.6%][E]).

As shown in Table 39, the most common reason cited by male BC on-reserve First Nations adults age 18+ to leave their community was for employment (34.7%), followed by education (22.2%) and relationships (16.0%). For female BC on-reserve First Nations adults 18+ the most common reasons cited for leaving their community was for education (25.3%), followed by relationships (20.5%), and employment (14.0%). The percentage of First Nations women who responded that they left their home communities for employment in BC (14.0%) was higher than the percentage of on-reserve First Nations women nationally reporting leaving their community for work (5.4%) (FNIGC, 2011, p. 26).

TABLE 39: REASON FOR LEAVING FIRST NATIONS COMMUNITY BY GENDER – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Total Per Cent (95% CI)	**Male** Per Cent (95% CI)	**Female** Per Cent (95% CI)
Employment	**24.7% (21.1-28.7%)**	34.7% (28.7-41.2%)	14.0% (10.6-18.2%)
Education	**23.7% (19.9-28.0%)**	22.2% (16.4-29.3%)	25.3% (21.7-29.3%)
Relationship	**18.2% (15.5-21.2%)**	16.0% (12.6-20.0%)	20.5% (16.8-24.8%)
Housing	**8.4% (6.0-11.7%)**	F	11.0% (8.1-14.7%)
Employment of spouse/partner	**3.6% (2.4-5.4%)E**	F	5.5% (3.7-8.1%)E
Marital/domestic problems	**3.1% (2.1-4.6%)E**	F	4.6% (3.1-6.9%)E
Support for disability	F	F	F
Other medical needs	F	F	F
Other (specify)	**14.9% (11.7-18.9%)**	14.6% (9.8-21.2%)E	15.3% (12.0-19.2%)

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

While living away from their community, 51.5% of BC on-reserve First Nations adults age 18+ reported that they wanted to receive services from their First Nation community (e.g. health, education). Over thirty-seven per cent (37.4% [95% CI: 31.3-44.0%]) of BC on-reserve adults reported voting in their First Nations elections while living outside of their community.

The majority of BC on-reserve First Nations adults returned to their communities because of family (64.4%), followed by connection to community (32.8%) and job opportunities (24.2%) (see Table 40). There were no differences in any of the reasons adults age 18-54 and 55+ cited in deciding to return home. A larger percentage of women reported returning home to their communities because housing became available than men (22.8% [95% CI: 18.0-28.4%] versus 11.2% [95% CI: 7.7-16.0%]E, respectively). No other differences were observed between men and women's responses.

TABLE 40: REASONS FOR RETURNING TO COMMUNITY – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

Reason for Returning to Community	Per Cent (95% CI)
Family	64.4% (59.8-68.7%)
Connection to community/home	32.8% (27.9-38.0%)
Job opportunities	24.2% (19.6-29.6%)
Housing became available	16.7% (13.7-20.2%)
Familiar culture	9.8% (7.2-13.1%)
Other	8.9% (6.2-12.7%)[E]
Exposure of children to culture	7.7% (5.6-10.3%)

E – High sampling variability (CV>0.16). Interpret with caution.

Notes

1. There has been no adjustment for inflation between the 2002-03 RHS and 2008-10 RHS.

2. In the 2008-10 RHS, 14.8% (95% CI: 11.6-18.6%) of adults reported not knowing their personal income and 7.4% (95% CI: 5.1-10.6%)[E] of adults preferred not to disclose their personal income. In the 2008-10 RHS, 27.3% (95% CI: 22.9-32.3%) of adults reported not knowing their household income and 10.2% (95% CI: 7.3-14.0%)[E] preferred not to disclose their household income. These responses are not included in the table.

3. In the 2002-03 RHS, 16.7% (95% CI: 11.5-23.6%)[E] of adults reported not knowing their personal income and 2.8% (95% CI: 1.5-5.0%)[E] preferred not to disclose their personal income. In 2002-03, 17.2% (95% CI: 11.9-24.4%)[E] of adults reported not knowing their household income and 23.5% (95% CI: 17.4-31.0%) preferred not to disclose their household income. These responses are not included in the table.

4. Question: "For the previous year (ending December 31, 2007), please think of your total personal income, before deductions from all sources."

5. Question: "For the previous year (ending December 31, 2007), please think of your total household income, before deductions from all sources."

6. Includes no income and income loss.

7. Based on a composite variable, which depends on individuals not reporting any of the sources of income in Table 23.

8. ''Food secure" is assigned to individuals who did not report any food access issues based on answers to a series of six food-security-related questions.

   Food security questions in the 2008-10 RHS included: 1) The food that we bought just didn't last and we didn't have money to get more *(Often true/Sometimes true/Never true)*. 2) We couldn't afford to eat balanced meals *(Often true/Sometimes true/Never true)*. 3) In the last 12 months, did you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food? *(No/Yes)*. 4) How often did you or other adults cut the size of meals or skip meals? *(Almost every month/Some months but not every month/Only one or two months)*. 5) In the last 12 months, were you ever hungry but didn't eat because there wasn't enough money for food? *(No/Yes)*. 6) In the last 12 months, did you ever eat less than you felt you should because there wasn't enough money to buy food? *(No/Yes)*.

   These questions were asked of all adult respondents.

   A composite variable for food security was created. For the questions with answers *(Often true/Sometimes true/Never true)*, the responses *(Often true/Sometimes true)* were coded as 1 and *(Never true)* was coded as 0. No/Yes questions were coded as 0 and 1 respectively. The responses to the six questions were summed. Individuals with scores of zero were labelled food secure (i.e. answered *(No)* to all six food security questions), individuals with scores of between 1 and 4 were labelled as moderately food insecure and individuals with scores of five or six were labelled as severely food insecure.

9. The questions relating to food security among households with children are: 1) In the last twelve months, you had to rely on only a few kinds of low-cost food (e.g. macaroni, rice) to feed your child/children because you were running out of money to buy food *(Often true/Sometimes true/Never true)*. 2) You couldn't feed your child/children a balanced meal, because you couldn't afford it. Was that statement often, sometimes, or never true for your household in the last 12 months? *(Often true/Sometimes true/Never true)*. 3) The child was not eating enough because you (the primary caregiver) just couldn't afford enough food. Was that statement often, sometimes, or never true for your household in the last 12 months? *(Often true/Sometimes true/Never true)*.

   These questions were asked only to adults who reported that there were children in their household.

   A composite variable for households with children was coded in the same manner described in footnote 8. The three questions were summed. Individuals with scores of zero were labelled food secure, individuals with scores of one were labelled moderately food insecure and individuals with scores of two or three were labelled as severely food insecure.

10. Other potential responses, including "Trucked in water", "Collecting from river, lakes or ponds", "From a neighbour's house" and "Other" had too few responses to report.

11. There were too few responses to the following categories to report: "Care in child's home by child's brother or sister", "Care in someone else's home by a non-relative", "Care in child's home by a non-relative", "Daycare centre", "Nursery school/preschool", "Private home daycare", "Before and after school program" and "Other".

12. The question in the 2008-10 RHS asks if adults have graduated from high school. The question does not differentiate between the options available to students to complete secondary school or its equivalent (BC Ministry of Education). These include:

    - The Dogwood Diploma, awarded upon successful completion of the provincial graduation requirements.
    - Adult Graduation Diploma Program, awarded to adults who successfully complete the adult graduation program requirements.
    - The School Completion Certificate Program (SCCP) or Evergreen Certificate, awarded to students that have had some challenges in high school and who opted to take locally-developed courses that differ from the provincial curriculum. The Evergreen Certificate is a certificate that indicates that the student has left high school but it is not the equivalent of a high school diploma.
    - General Educational Development (GED) Secondary School Equivalency Certificate is not the equivalent to high school. It's a set of five multiple choice tests in the area of language arts writing, language arts reading, social studies, science and mathematics.

13. That is, no high school diploma and no other certificate, diploma or degree.

14. Including some trade, technical, or vocational school, some community college, some university, diploma or certificate from trade, technical or vocational school, diploma or certificate from community college or university, undergraduate degree, professional degree (medicine, dentistry), master's degree, or doctorate.

15. More than one response allowed. The "Both biological mother and biological father" category is a composite variable made up of individuals who responded that they live with both their biological mother and biological father.

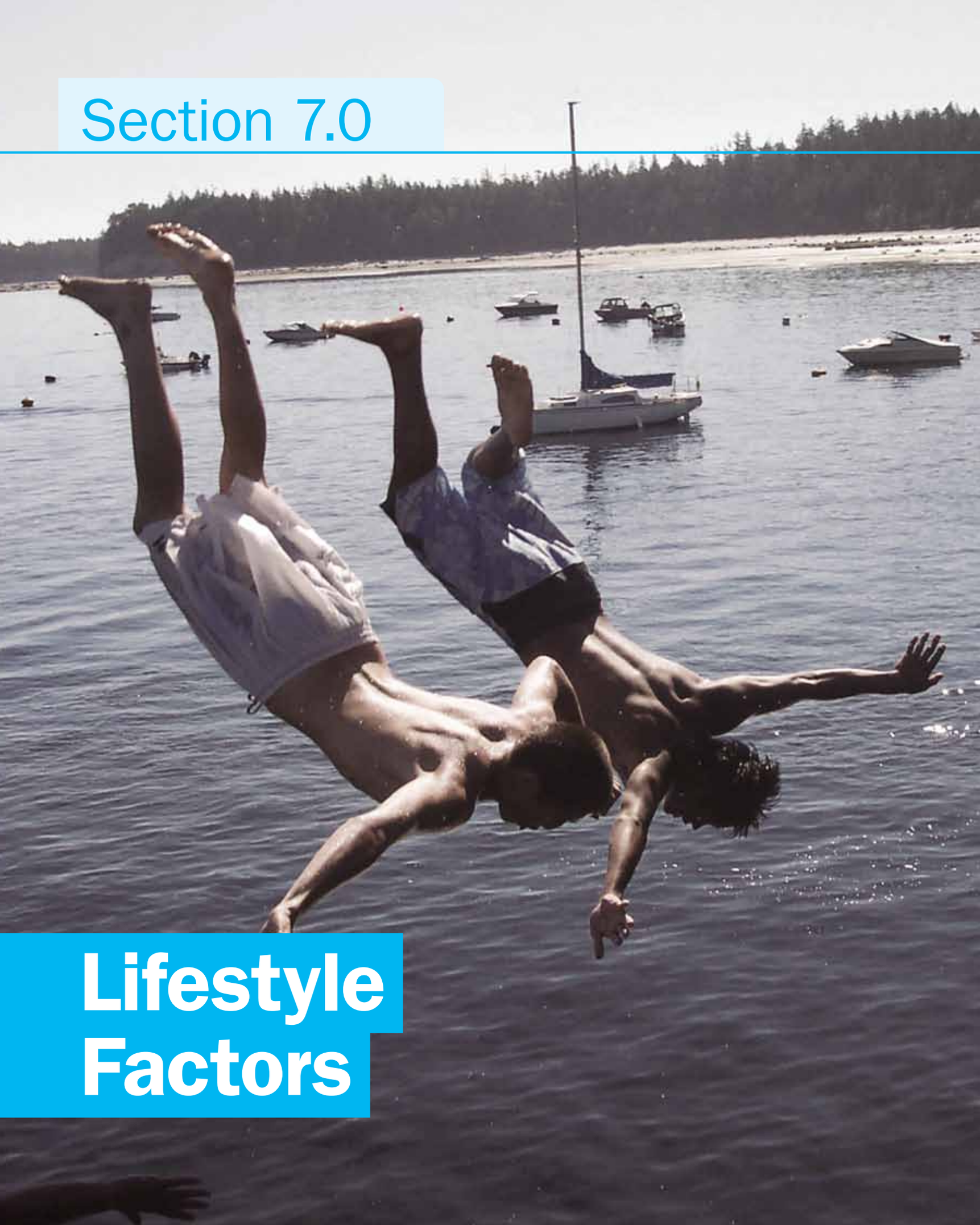
16. The number of youth reporting that both their birth parents were deceased is too variable to report.

17. Crowded housing is defined as more than one occupant per room. Rooms include kitchen, bedrooms, living rooms and finished basements but do not include bathrooms, halls and laundry rooms or attached sheds.

18. The questions relating to crowded housing were not asked in the Youth Questionnaire.

19. Each move refers to moving into and out of a First Nations community.

Section 7.0



Lifestyle Factors

First Nations have a rich tradition of healthy lifestyles. Traditional knowledge, physical activity and a healthy diet all come naturally for many First Nations individuals and communities. Since European contact, First Nations communities have been affected by many external environmental, social, political and economic factors. Many of these social determinants are discussed in the previous section of this report and provide the context in which individuals make decisions about their lifestyle.

7.1 Nutrition

Traditional food knowledge, access to healthy foods and eating a healthy diet all play an essential role in health. An increase in refined foods, starches, sugars and other processed goods has brought with it an increase in health issues like obesity, diabetes and heart disease. Today, eating a healthy diet involves making choices from the foods available from many sources, including the land, water, farm, grocery store and restaurant (iFNHA, 2009).

Over sixty-five per cent (65.2%) of caregivers reported that their children always or almost always eat a nutritious balanced diet (see Table 41). This is higher than both the percentage of youth and the percentage of adults who reported always or almost always eating a nutritious balanced diet. There was no difference in the percentage of children reported to always or almost always eat a balanced nutritious diet by gender (62.4% [95% CI: 54.5-69.7%] of boys versus 68.3% [95% CI: 59.3-76.1%] of girls).

> "[The percentage of children reportedly eating a nutritious, balanced diet is] so much [higher than youth and adults, perhaps because of] the fear of saying that your child is not eating a nutritious balanced diet and the implications of that."
> ***RHS Steering Committee member***

Among BC on-reserve First Nations youth age 12-17, 25.8% reported always or almost always eating a nutritious balanced diet (see Table 41). This is lower than the percentage of children and adults who reported always or almost always eating a nutritious balanced diet. There was no difference in the percentage of youth who reported always or almost always eating a nutritious balanced diet by gender (22.8% [95% CI: 16.7-30.3%] of male youth versus 29.2% [95% CI: 21.4-38.5%] of female youth).

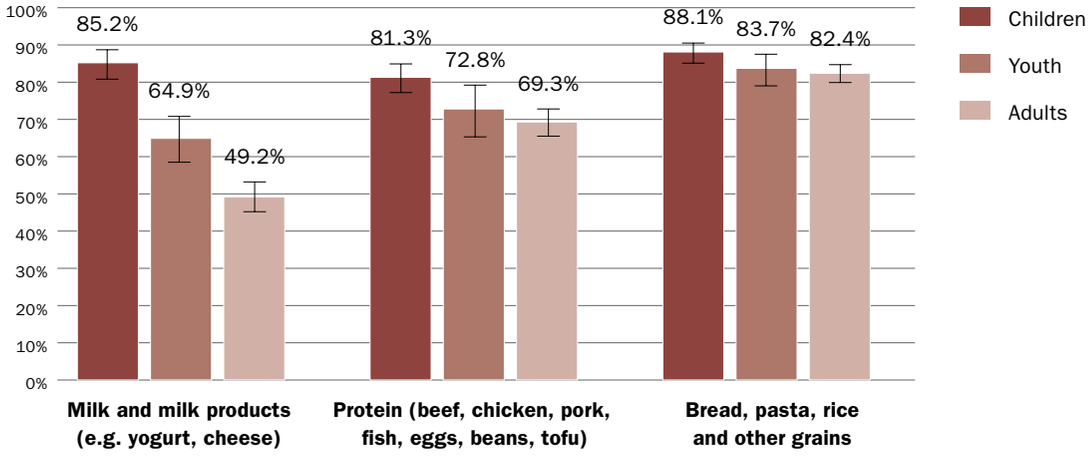
Among BC on-reserve First Nations adults age 18+, 36.2% reported always or almost always eating a nutritious balanced diet (see Table 41). There was no difference in the percentage of adults who reported always or almost always eating a nutritious balanced diet by gender (38.8% [95% CI: 33.8-44.1%] of female adults versus 33.7% [95% CI: 28.8-39.1%] of male adults). Elders age 55+ were more likely to report always or almost always eating a nutritious balanced diet (47.1% [95% CI: 39.8-54.6%]) than adults age 18-54 (32.8% [95% CI: 29.1-36.8%]).

TABLE 41: CONSUMPTION OF A NUTRITIOUS BALANCED DIET – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

	Always or Almost Per Cent (95% CI)	**Sometimes** Per Cent (95% CI)	**Rarely** Per Cent (95% CI)	**Never** Per Cent (95% CI)
Children	65.2% (58.0-71.8%)	32.0% (25.4-39.3%)	2.0% (1.2-3.2%)[E]	0.8% (.5-1.4%)[E]
Youth	25.8% (20.3-32.2%)	56.6% (50.1-62.9%)	13.8% (10.4-18.0%)	[F]
Adults	36.2% (32.6-39.9%)	49.6% (46.0-53.2%)	11.8% (9.9-14.0%)	2.4% (1.5-3.7%)[E]

Food Consumption

As displayed in Figure 26, the majority of BC on-reserve First Nations children and youth reported consuming milk products, protein and grains more than once a day. The majority of BC on-reserve First Nations adults reported consuming protein and grains once a day or more, but less than 50% of adults reported consuming milk products once a day or more (49.2% [95% CI: 45.2-53.2%]).



E – High sampling variability (CV>0.16). Interpret with caution.

FIGURE 26: EAT MILK PRODUCTS, PROTEIN AND GRAINS ONCE A DAY OR MORE – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

Among BC on-reserve First Nations adults age 18+, there was no difference in the reported consumption of milk or milk products once a day or more by gender (51.0% [95% CI: 45.3-56.6%] for men versus 47.5% [95% CI: 42.1-53.0%] for women) or by adult age group (42.5% [95% CI: 37.0-48.3%] for Elders age 55+ versus 51.3% [95% CI: 46.4-56.2%] for adults age 18-54).

The majority of BC on-reserve First Nations children, youth and adults reported eating fruits and vegetables once a day or more (see Figure 27).

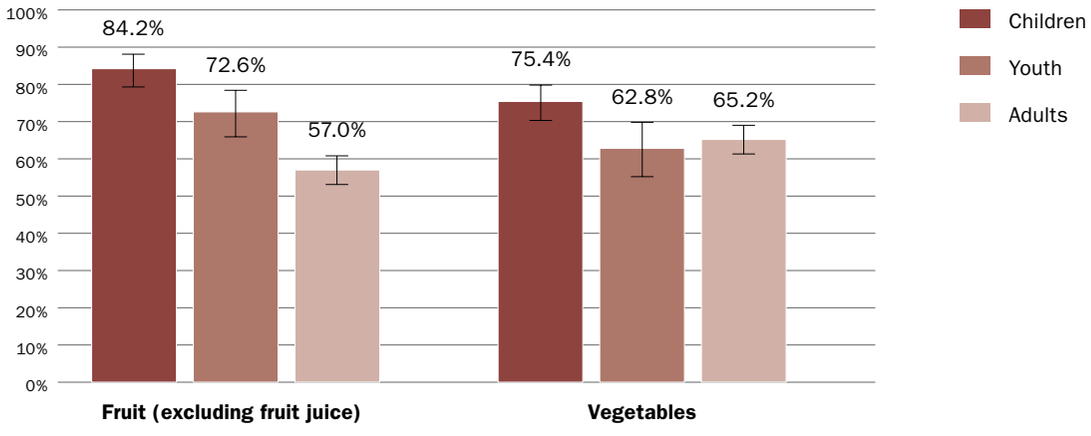


FIGURE 27: EAT FRUITS AND VEGETABLES ONCE A DAY OR MORE – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

There was no difference in the consumption of fruits or vegetables once a day or more by gender among children or youth. Among adults however, women were more likely to report consuming fruits once a day or more than men (63.8% versus 50.5%) (see Table 42).

TABLE 42: EAT FRUITS OR VEGETABLES ONCE A DAY OR MORE – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

	Fruits Per Cent (95% CI)		**Vegetables** Per Cent (95% CI)	
	Male	Female	Male	Female
Children	83.4% (77.2-88.2%)	85.0% (79.3-89.3%)	73.3% (67.9-78.1%)	77.5% (69.8-83.8%)
Youth	65.8% (56.5-74.0%)	80.1% (70.0-87.3%)	59.6% (51.2-67.4%)	66.4% (55.7-75.5%)
Adult	50.5% (44.8-56.2%)	63.8% (59.1-68.2%)	63.3% (56.8-69.3%)	67.2% (63.4-70.9%)

As displayed in Figure 28, 7.0% (95% CI: 4.8-10.01%)[E] of BC on-reserve First Nations youth and 7.1% (95% CI: 5.2-9.6%) of BC on-reserve First Nations adults reported eating fast foods such as pizza, burgers, hot dogs or French fries once a day or more. The percentage of children consuming fast foods is not reported because of extreme sampling variability/small sample size. Almost twenty-two per cent (21.9% [95% CI: 18.0-26.3%]) of youth age 12-17 and 17.1% (95% CI: 13.0-22.2%) of children age 0-11 reported eating sweets such as candy, cookies or cake once a day or more[1].

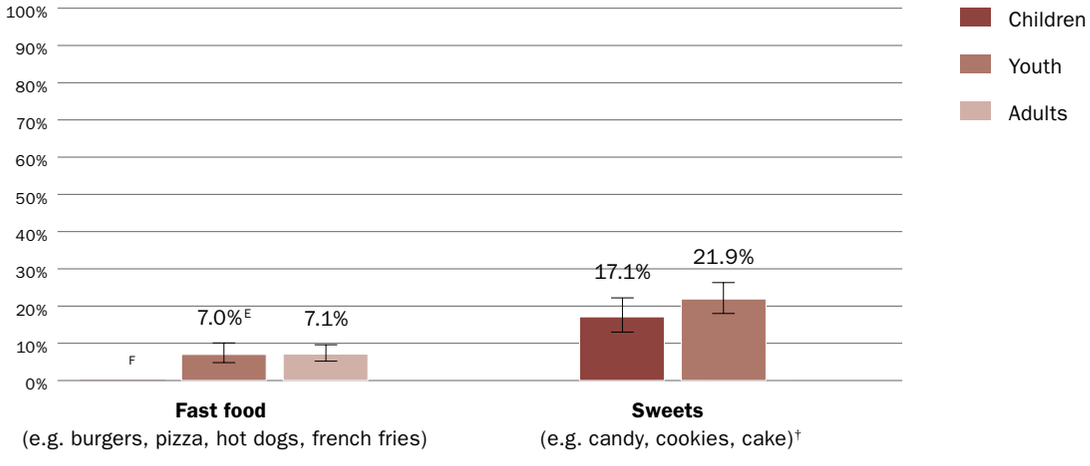
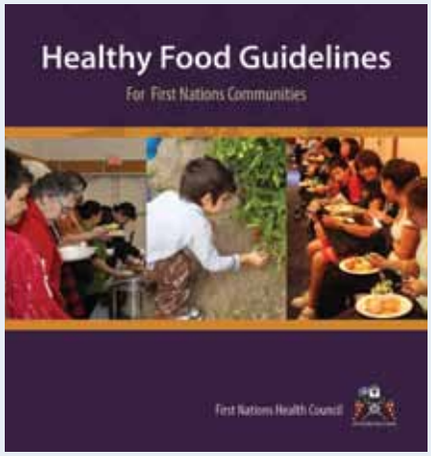


FIGURE 28: EAT FAST FOOD AND SWEETS† ONCE A DAY OR MORE – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).
† The category "Sweets" was not asked of Adult respondents.

The Healthy Food Guidelines For First Nations Communities were created by the First Nations Health Council to support community members in educating each other about better food and drink choices to serve in schools, meetings, homes, cultural and recreational events, and to choose in restaurants. The information is presented for various types of community members, from general background information to special handouts that can assist individuals in choosing better snacks for lunches.



As displayed in Figure 29, 83.0% (95% CI: 77.9-87.0%) of BC on-reserve First Nations children, 83.6% (95% CI: 80.0-86.7%) of youth and 84.1% (95% CI: 80.0-87.4%) of adults reported consuming water once a day or more. There were no differences in the percentage of First Nations adults who reported drinking water once a day or more by adult age group (18-54 and 55+). There were no differences in the percentage of First Nations children, youth or adults who reported drinking water once a day or more by gender.

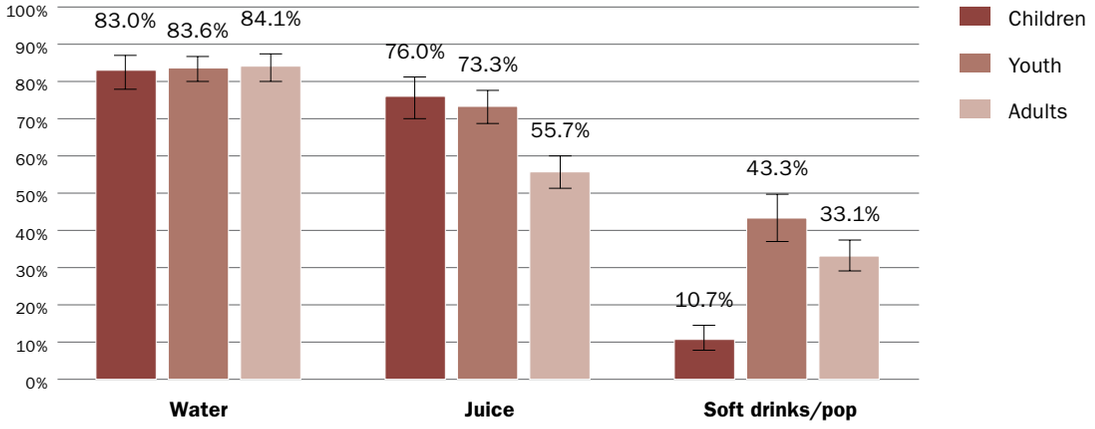


FIGURE 29: CONSUMER WATER, JUICE OR POP ONCE A DAY OR MORE – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

Over seventy-six per cent (76.0% [95% CI: 70.0-81.2%]) of BC on-reserve First Nations children, 73.3% (95% CI: 68.7-77.6%) of youth and 55.7% (95% CI: 51.3-60.0%) of adults reported consuming juice once a day or more[2]. A higher percentage of adults age 18-54 reported drinking juice once a day or more than Elders age 55+ (59.7% [95% CI: 55.1-64.2%] versus 42.9% [95% CI: 36.7-49.2%], respectively).

> "Why do you think people drink so much juice? I always thought it was better to eat a piece of fruit than to drink a glass of that juice?… Because a lot of kids don't eat fruit… So they figure fruit juice is better than nothing at all?… It's that balance. Some people probably think that juice is a healthier alternative to pop. Yes, and it probably is, but it still has a lot of sugar and that's the message."
> ***RHS Steering Committee member***

Overall, 30.0% (95% CI: 27.1-33.1%) of BC on-reserve First Nations adults, youth and children reported to consumer pop once a day or more, 42.1% (95% CI: 38.9-45.4%) reported consuming pop once a week to a few times a month and 27.9% (95% CI: 24.9-31.1%) reported hardly ever or never consuming pop. These are concerning results because of the association between consumption of soft drinks and increased body weight (Vartanian, 2007).

Among BC on-reserve First Nations children, 10.7% (95% CI: 7.8-14.5%) were reported to consume pop or soft drinks once a day or more. Among youth, 43.3% (95% CI: 37.0-49.7%) reported consuming pop or soft drinks once a day or more. Among BC adults age 18+, 33.1% (95% CI: 29.1-37.4%) reported consuming pop or soft drinks once a day or more. Just over thirty-six per cent (36.3% [95% CI: 31.6-41.2%]) of adults age 18-54 reported drinking pop once a day or more compared to 22.8% (95% CI: 17.7-28.8%) of Elders age 55+.

Among BC on-reserve First Nations children, there was no significant difference in the reported consumption of pop once a day or more by gender (10.0% [95% CI: 6.7-14.7%][E] among male children versus 11.5% [95% CI: 7.7-16.7%][E] among female children). Among youth, there was no significant difference in the reported consumption of pop once a day or more among by gender (50.1% [95% CI: 39.9-60.3%] among male youth versus 35.9% [95% CI: 27.9-44.8%] among female youth). There was no difference in the reported consumption of pop once a day or more by gender among adults (35.0% [95% CI: 29.2-41.3%] of adult males versus 31.1% [95% CI: 27.0-35.5%] of adult females).

> "That culture of deprivation too… you kind of think I can't give my kid this or this but I can do this. It's a less expensive way to at least bring a little pleasure into the house. You want to give your child better that what you had when you were a child. Sometimes people's water is not safe to drink… and pop is less expensive than bought water."
> ***RHS Steering Committee member***

7.2 Physical Activity

Historically, it was natural for BC First Nations to maintain a physically active life. Physical activity – hunting, gathering and travelling – was a necessity for survival throughout the seasons. Keeping active is as important for staying healthy now as it has been in the past.

The majority of BC on-reserve First Nations of all ages were categorized as being moderately physically active[3]: 80.4% of children age 0-11, 83.8% of youth age 12-17 and 62.1% of adults age 18+ (see Table 43). The percentage of children and youth who were categorized as being moderately physically active is higher than among adults age 18+. Among adults age 18+, a higher percentage of men were categorized as being moderately physically active than women (68.5% versus 55.2%, respectively). Elders age 55+ were less likely to be categorized as physically active than adults age 18-54 (49.2% versus 66.1%, respectively).

TABLE 43: PHYSICALLY ACTIVE BY GENDER – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

	Total Per Cent (95% CI)	**Male** Per Cent (95% CI)	**Female** Per Cent (95% CI)
Children	**80.4% (74.2-85.5%)**	82.0% (75.3-87.2%)	78.7% (69.8-85.6%)
Youth	**83.8% (77.3-88.7%)**	85.8% (78.5-90.9%)	81.5% (70.9-88.9%)
Adults (Age 18+)	**62.1% (56.5-67.4%)**	68.5% (62.1-74.3%)	55.2% (48.9-61.4%)
Adults (Age 18-54)	**66.1% (60.7-71.2%)**	72.4% (65.8-78.2%)	59.3% (52.6-65.6%)
Elders (Age 55+)	**49.2% (41.1-57.3%)**	55.5% (45.9-64.7%)	43.0% (34.3-52.1%)

As displayed in Table 44, 29.5% of youth and 32.6% of adults reported that their daily routine incorporates at least 60 minutes of moderate activity every day. Thirty one per cent youth and 29.2% of adults reported that they incorporate 30-59 minutes of moderate activities into their daily routine. Over twelve per cent (12.9%) of youth and 16.4% of adults reported that their routine on a typical day rarely includes any physical activity. There were no differences in the percentage of adults or youth reporting different activity-levels by gender.

TABLE 44: WHICH BEST DESCRIBES YOUR ROUTINE IN A TYPICAL DAY? BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), AND ADULTS (AGE 18+), 2008-10 RHS

	Youth Per Cent (95% CI)			**Adults** Per Cent (95% CI)		
	Total	Male	Female	Total	Male	Female
Your daily routine involves walking or other moderate activities (swimming, bicycling, outdoor gardening) at least 60 minutes every day.	**29.5% (23.8-35.8%)**	29.8% (22.9-37.7%)	29.1% (19.3-41.2%)[E]	**32.6% (27.5-38.1%)**	38.1% (32.8-43.6%)	26.8% (20.7-33.8%)
Your daily routine involves walking or other moderate activities (swimming, bicycling, outdoor gardening) 30-59 minutes a day.	**31.0% (26.8-35.5%)**	34.5% (27.3-42.5%)	26.9% (20.6-34.2%)	**29.2% (26.0-32.6%)**	30.3% (26.2-34.8%)	28.0% (23.7-32.8%)
You spend most of your day sitting[4] but you do at least 30 minutes of physical activity at least once a week.	**26.7% (21.8-32.3%)**	23.3% (17.6-30.0%)	30.7% (22.9-39.7%)	**21.8% (18.1-26.1%)**	17.8% (13.4-23.4%)	26.0% (21.7-30.9%)
You spend most of a typical day sitting[4]. You are rarely active.	**12.9% (9.2-17.7%)**	12.4% (8.0-18.8%)[E]	13.4% (8.3-20.9%)[E]	**16.4% (13.0-20.5%)**	13.8% (9.7-19.1%)	19.2% (15.5-23.5%)

Types of Activities

Table 45 outlines the types of physical activities BC on-reserve First Nations children, youth and adults reported taking part in within the 12 months prior to the 2008-10 RHS. The four most commonly reported physical activities for children age 0-11 in the 12 months prior to the survey were walking (85.6%), swimming (64.3%), bicycle riding (53.7%) and running or jogging (51.0%). Among youth age 12-17, the four most commonly reported physical activities in the past 12 months were walking (89.9%), swimming (65.0%), running or jogging (63.9%) and bicycle riding (47.6%). Among adults age 18+, the four most commonly reported physical activities in the past 12 months were walking (84.7%), berry picking or other food gathering (36.7%), gardening/yard work (34.5%) and fishing (34.4%).

Among youth and children, walking is followed closely by swimming as the second most commonly reported activity. For adults, on the other hand, the second most commonly-reported activity was berry picking or other food gathering, which only 37% of adults participated in over the year prior to the 2008-10 RHS.

TABLE 45: PARTICIPATION IN ACTIVITIES IN THE YEAR PRIOR TO THE 2008-10 RHS – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

	Children Per Cent (95% CI)	Youth Per Cent (95% CI)	Adults Per Cent (95% CI)
Walking	85.6% (80.9-89.3%)	89.9% (84.0-92.5%)	84.7% (81.9-87.2%)
Swimming	64.3% (55.1-72.6%)	65.0% (56.6-72.6%)	30.8% (25.3-36.9%)
Bicycle riding/Mountain biking	53.7% (46.9-60.4%)	47.6% (39.7-55.6%)	18.2% (15.1-21.7%)
Running or jogging	51.0% (43.8-58.1%)	63.9% (57.2-70.1%)	22.8% (19.4-26.5%)
Berry picking or other food gathering	47.2% (40.0-54.6%)	34.6% (28.4-41.5%)	36.7% (32.3-41.3%)
Dancing (aerobic, traditional, modern)	35.3% (28.4%-43.0%)	24.3% (19.2-30.3%)	23.4% (19.4-27.8%)
Fishing	24.5% (19.8-29.8%)	30.6% (25.4-36.2%)	34.4% (31.0-38.0%)
Competitive or team sports	23.4% (18.7-28.9%)	44.5% (38.9-50.2%)	17.5% (14.8-20.5%)
Gardening, yard work	23.2% (16.8-31.3%)	23.8% (17.7-31.4%)	34.5% (29.2-40.3%)
Skating	22.8% (17.9-28.6%)	23.3% (18.6-28.7%)	10.2% (7.4-13.8%)
Hiking	17.4% (13.4-22.3%)	29.9% (24.5-35.9%)	25.1% (21.4-29.1%)
Bowling	16.8% (13.2-21.3%)	16.8% (13.0-21.4%)	10.2% (8.1-12.9%)
Hunting or trapping	9.1% (6.7-12.2%)	14.6% (11.3-18.7%)	17.3% (14.6-20.5%)
Skiing/Snowboarding	8.5% (5.6-12.7%)[E]	20.4% (13.5-29.8%)[E]	5.0% (3.5-7.1%)[E]
Other	6.6% (4.6-9.4%)[E]	5.2% (3.0-8.8%)[E]	5.2% (3.4-8.1%)[E]
Golf	6.5% (4.4-9.6%)[E]	9.5% (5.4-16.1%)[E]	8.3% (6.3-11.0%)
Weights/Exercise equipment	5.2% (3.7-7.3%)	41.4% (35.5-47.5%)	25.3% (21.4-29.6%)
Canoeing/Kayaking	3.9% (2.7-5.8%)[E]	15.7% (11.5-21.1%)	8.0% (5.8-10.9%)
None	3.7% (2.3-5.8%)[E]	2.0% (1.0-3.8%)[E]	5.3% (4.1-6.8%)
Aerobic/Fitness classes	3.6% (2.1-5.9%)[E]	6.4% (4.5-8.9%)	6.4% (4.7-8.6%)
Martial arts	[F]	7.3% (4.1-12.8%)[E]	2.6% (1.8-3.8%)[E]
Snowshoeing	[F]	5.8% (3.4-9.9%)[E]	3.7% (2.4-5.4%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

7.3 Breastfeeding

Breastfeeding is recognized for the bonding and nutritional benefits it offers. A mother's health, as well as whether she chooses to breastfeed and for how long, influences the health of her children. The Canadian Paediatric Society recommends exclusive breastfeeding for the first six months of life for healthy, term infants and that breastfeeding may continue up to two years and beyond (Canadian Paediatric Society, 2009).

According to the 2008-10 RHS, the majority of children age 0-11 were reported by their primary caregivers to have ever been breastfed[5] (78.9% [95% CI: 72.8-84.0%]). A similar percentage of children in the 2002-03 RHS were reported to have ever been breastfed (77.2% [95% CI: 71.6%-82.0%]). A larger percentage of children aged 1-11[6] were reported to have been breastfed for more than six months in the 2008-10 RHS than in the 2002-03 RHS (72.3% [95% CI: 65.8-78.0%] versus 50.0% [95% CI: 43.2-56.7%], respectively).

Eighty-two per cent (82.0% [95% CI: 77.2-85.9%]) of BC on-reserve First Nations children age 0-11 were reported to have ever been bottle-fed. There was overlap between children who were reported to have ever been breastfed and children who were reported to have ever been bottle fed. Just over twenty per cent (20.2% [95% CI: 15.2-26.3%]) of children were reported to have only ever been bottle fed, 17.0% (95% CI: 13.0-21.9%) were reported to have only ever been breastfed, and 61.9% (95% CI: 55.8-67.6%) of children were reported to have ever been both bottle fed and breastfed (where bottle feeding and breastfeeding occurring concurrently). The number of children who were neither breastfed nor bottle-fed is too low to report.

Table 46 outlines the contents of bottles given to children who were bottle fed. The most common liquid reported was regular formula (62.2%), followed by milk (55.3%), water (51.6%), iron-fortified formula (43.1%), breast milk (42.2%) and 100% fruit juices (27.9%).

TABLE 46: CONTENTS OF BOTTLE WHILE BOTTLE FEEDING – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), 2008-10 RHS

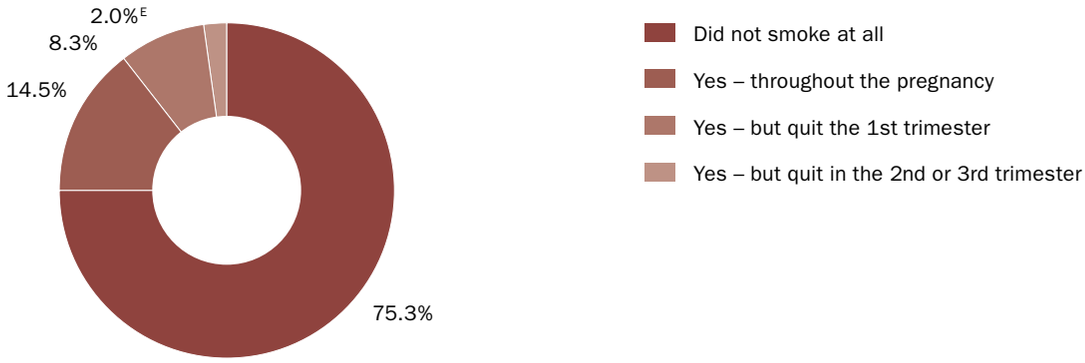
	Per Cent (95% CI)
Regular formula	62.2% (55.1-68.8%)
Milk	55.3% (48.4-61.9%)
Water	51.6% (42.5-60.5%)
Iron-fortified formula	43.1% (37.4-49.0%)
Breast milk	42.2% (36.6-48.1%)
100% fruit juices	27.9% (23.3-33.1%)
Kool-Aid and other powdered drinks	8.8% (6.3-12.2%)
Canned milk	8.7% (5.9-12.8%)[E]
Soy milk	5.8% (3.2-10.2%)[E]
Powdered milk	5.7% (3.8-8.4%)[E]
Other	3.4% (2.1-5.6%)[E]
Soft drinks	[F]
Tea	[F]
Herb mixtures	[F]
Coffee whitener	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

7.4 Tobacco Smoking[7]

Children[8]

According to the 2008-10 RHS, the majority (75.3% [95% CI: 69.6-80.2%]) of BC on-reserve First Nations children were reported to have been born to mothers who did not smoke during their pregnancy (see Figure 30). Less than twenty-five per cent (24.7% [95% CI: 19.8-30.4%]) of children were reported to have been born to mothers who smoked at some point during their pregnancy.



E – High sampling variability (CV>0.16). Interpret with caution.

FIGURE 30: CHILD'S MOTHER'S SMOKING BEHAVIOUR DURING PREGNANCY – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), 2008-10 RHS

Among the women who did smoke (n=147), 61.2% (95% CI: 50.2-71.2%) reported that they smoked occasionally and 38.8% (95% CI: 28.8-49.8%) reported that they smoked daily.

Less than a quarter (24.8% [95% CI: 19.58-30.9%]) of children were reported to have lived in a household where someone else smoked while the child's mother was pregnant.

Youth

According to the 2008-10 RHS, 15.2% (95% CI: 10.9-20.7%) of BC on-reserve First Nations youth age 12-17 reported smoking daily and 7.4% (95% CI: 4.4-12.0%)[E] reported smoking occasionally[9] (see Figure 31).

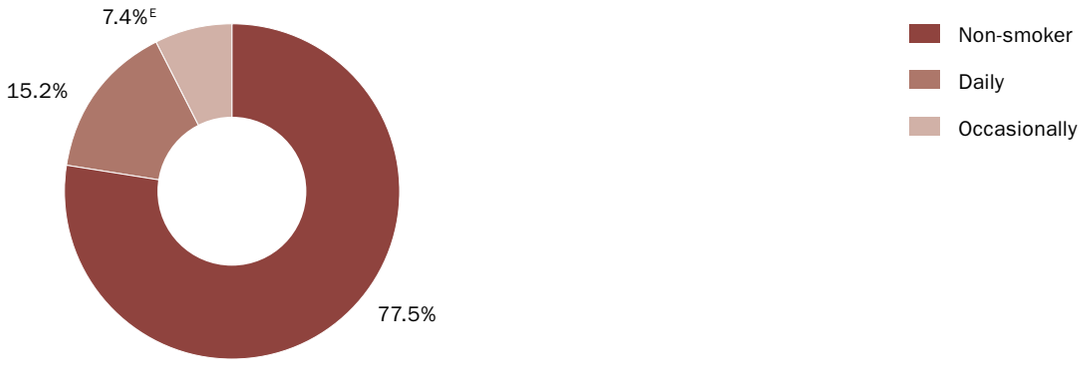


FIGURE 31: CURRENT SMOKER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS (N=420)

E – High sampling variability (CV>0.16). Interpret with caution.

Over four times the percentage of BC on-reserve First Nations youth age 12-17 (22.5% [95% CI: 17.2-29.0%]) reported smoking either daily or occasionally versus 5.4% (95% CI: 3.7-7.1%) of self-identified non-Aboriginal BC population age 12-17 from the 2009-10 Canadian Community Health Survey (Statistics Canada, 2009-10) (see Figure 32).

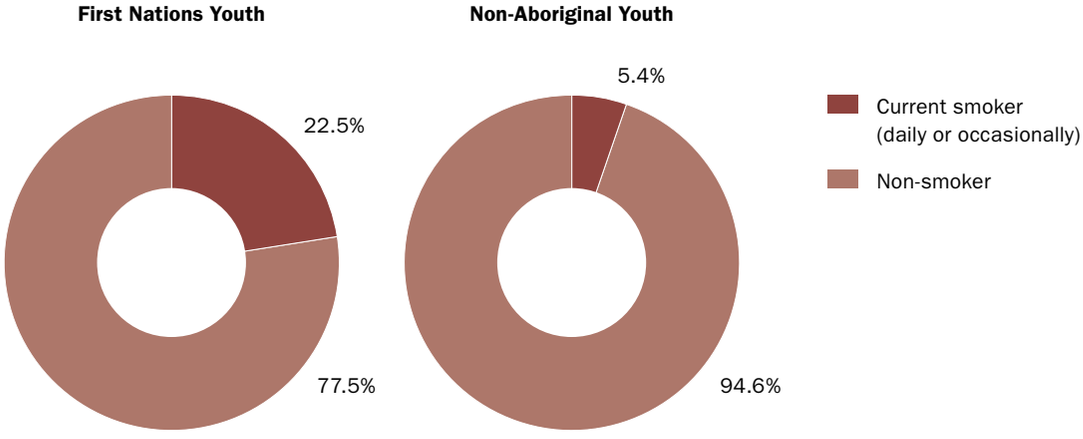


FIGURE 32: CURRENTLY SMOKE TOBACCO EITHER DAILY OR OCCASIONALLY – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS AND SELF-IDENTIFIED NON-ABORIGINAL BC POPULATION (AGE 12-17), 2009-10 CANADIAN COMMUNITY HEALTH SURVEY

There was no statistically significant difference in the percentage of youth who reported smoking either daily or occasionally by gender in the 2008-10 or 2002-3 RHS (see Table 47). The youth population was broken down into two age groups (age 12-14 and age 15-17) because of the differences in smoking initiation observed between these two groups and the potential for targeting early intervention activities. In the 2008-10 RHS, the percentage of youth age 12-14 who reported smoking either occasionally or daily was too small to report and the percentage of youth age 15-17 who reported smoking either occasionally or daily was 35.5%. Among youth age 15-17, the percentage of individuals who reported smoking daily has decreased between the 2002-03 and 2008-10 RHS surveys (from 28.3% to 10.6%) and the percentage of individuals who reported smoking occasionally has increased (from 12.5% to 24.7%).

TABLE 47: CURRENT SMOKERS BY GENDER AND AGE GROUP – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS AND 2002-03 RHS

	Youth – 2008-10 RHS Per Cent (95% CI)				Youth – 2002-03 RHS Per Cent (95% CI)			
	Non-smokers	Occasional or Daily	Occasional	Daily	Non-smokers	Occasional or Daily	Occasional	Daily
Total	**77.5% (71.0-82.8%)**	**22.5% (17.2-29.0%)**	**7.4% (4.4-12.0%)[E]**	**15.2% (10.9-20.7%)**	**72.8% (66.2-78.5%)**	**27.2% (21.5-33.8%)**	**9.3% (6.7-12.7%)**	**17.9% (13.6-23.3%)**
Gender								
Female	69.6% (59.3-78.2%)	30.4% (21.8-40.7%)	10.2% (5.5-17.9%)[E]	20.3% (12.9-30.4%)[E]	67.4% (59.1-74.7%)	32.6% (25.3-40.9%)	13.1% (8.7-19.3%)[E]	19.5% (13.5-27.4%)[E]
Male	84.9% (76.3-90.7%)	15.1% (9.3-23.7%)[E]	[F]	10.4% (6.4-16.3%)[E]	77.7% (69.4-84.2%)	22.3% (15.8-30.6%)	5.8% (3.1-10.6%)[E]	16.5% (10.8-24.5%)[E]
Age Group								
Youth (Age 12-14)	93.0% (85.4-96.8%)	[F]	[F]	[F]	92.5% (87.6-95.6%)	7.5% (4.4-12.4%)[E]	[F]	[F]
Youth (Age 15-17)	64.7% (53.0-74.8%)	35.3% (25.2-47.0%)	24.7% (17.7-33.4%)	10.6% (5.5-19.6%)[E]	59.2% (50.1-67.7%)	40.8% (32.3-49.9%)	12.5% (9.0-16.9%)	28.3% (21.8-35.9%)

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

According to the 2008-10 RHS, BC on-reserve First Nations youth age 12-17 who reported being current smokers reported that they began smoking when they were, on average, 12.9 years old and that they consumed, on average, 6.7 cigarettes a day. Among youth who reported being current non-smokers (n=332), 89.9% (95% CI: 83.0-94.1%) reported never having previously smoked and 10.2% (95% CI: 5.9-17.0%)[E] reported having been either daily or occasional smokers in the past.

River Run is one of a series of comic books produced by the *Healthy Aboriginal Network*, a non-profit organization aimed at promoting health literacy and wellness by creating comic books on health and social issues for Aboriginal youth.

Aimed at smoking prevention, *River Run* tells the story of a group of youth that learn the traditional use of tobacco while on a canoe trip.

There are twelve comic books available on a range of topics such as staying in school, gambling, diabetes awareness, mental health, sports, gang awareness, living with FASD, youth in care, integrating gang youth back into the community, sexual health and maternal child health.

More information and ordering information can be found at: *http://www.thehealthyaboriginal.net/*.

Adults

According to the 2008-10 RHS, 44.6% (95% CI: 39.8-49.4%) of BC on-reserve First Nations adults age 18+ reported smoking either daily or occasionally (see Figure 33).

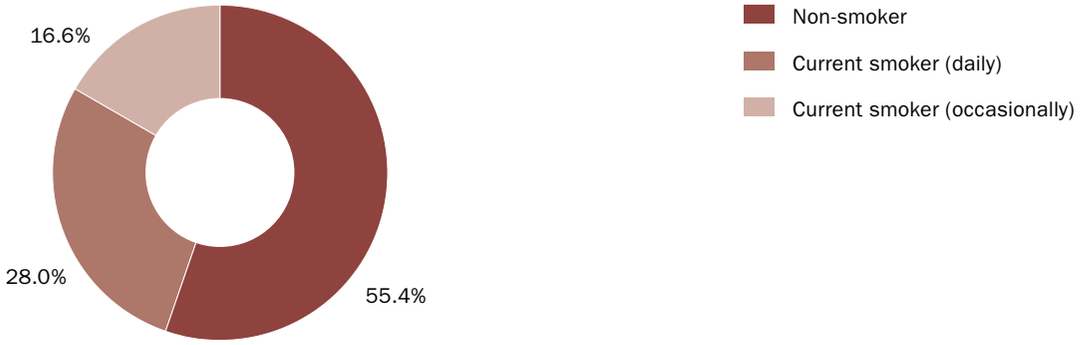


FIGURE 33: CURRENT SMOKER – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=1,381)

Over two and a half times the percentage of BC on-reserve First Nations adults age 18+ reported smoking either daily or occasionally (44.6% [95% CI: 39.8-49.4%]) than the to 17.2% (95% CI: 16.0-18.3%) of self-identified non-Aboriginal BC population age 18+ (Statistics Canada, 2009-10) (see Figure 34).

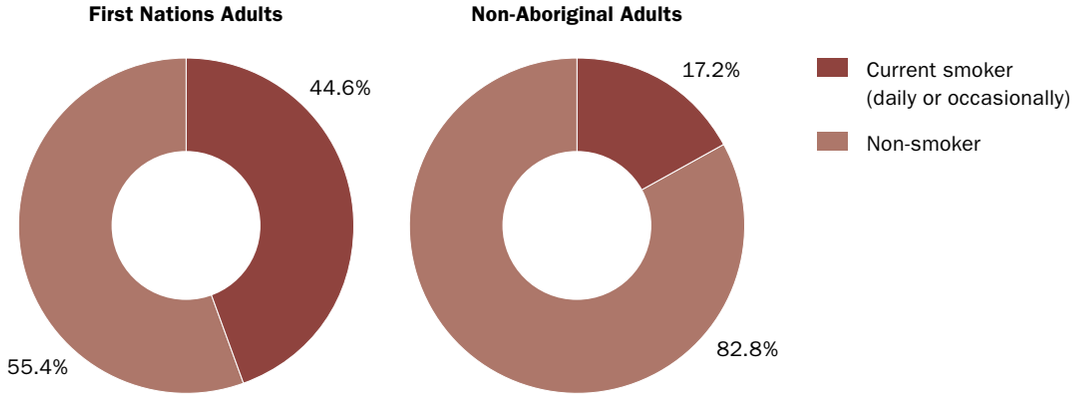


FIGURE 34: CURRENTLY SMOKE TOBACCO EITHER DAILY OR OCCASIONALLY – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS AND SELF-IDENTIFIED NON-ABORIGINAL BC POPULATION (AGE 18+), 2009-10 CANADIAN COMMUNITY HEALTH SURVEY

As displayed in Table 48, there was no significant difference in the percentage of adults who reported smoking occasionally or daily by gender in either the 2008-10 or 2002-03 RHS. Adults age 18-54 were more likely to report being both occasional (19.7%) or daily smokers (30.3%) than Elders age 55+ (6.8% and 20.4% respectively) in the 2008-10 RHS. Between the 2002-03 RHS and 2008-10 RHS there has been no significant change in the percentage of adults age 18+ who reported smoking either occasionally or daily and no significant change by gender or adult age group.

TABLE 48: CURRENT SMOKERS BY GENDER AND AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)			2002-03 RHS Per Cent (95% CI)		
	Non-Smokers	Occasional	Daily	Non-Smokers	Occasional	Daily
Total	**55.4% (50.6-60.2%)**	**16.6% (14.4-19.1%)**	**28.0% (23.8-32.6%)**	**51.5% (46.5-56.5%)**	**18.5% (14.7-23.1%)**	**30.0% (25.9-34.4%)**
Gender						
Female	65.5% (56.1-73.8%)	14.4% (9.8-20.6%)[E]	20.2% (14.0-28.2%)[E]	49.6% (41.6-57.5%)	20.7% (14.7-28.3%)	29.7% (24.7-35.3%)
Male	53.9% (46.3-61.4%)	12.1% (7.1-20.0%)[E]	33.9% (26.3-42.4%)	53.3% (46.9-59.5%)	16.5% (12.6-21.4%)	30.2% (24.6-36.4%)
Age Group						
Adults (Age 18-54)	50.0% (44.9-55.2%)	19.7% (17.0-22.6%)	30.3% (25.5-35.5%)	47.3% (41.8-52.9%)	20.8% (16.5-26.05%)	31.9% (27.0-37.2%)
Elders (Age 55+)	72.8% (67.3-77.6%)	6.8% (4.6-10.0%)[E]	20.4% (16.3-25.2%)	70.2% (57.8-80.2%)	[F]	21.5% (12.2-35.1%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Among BC on-reserve First Nations adults who reported being current non-smokers (n=751), 51.2% (95% CI: 45.6-56.8%) reported having never been a smoker, 18.7% (95% CI: 14.1-24.3%) reported having been a daily smoker in the past, and 30.1% (95% CI: 26.3-34.1%) reported having been an occasional smoker in the past.

On average, BC First Nations adults age 18+ who reported being current smokers reported smoking 7.3 cigarettes per day. Male smokers reported smoking more cigarettes per day than women smokers (7.8 [SE: 0.6] versus 6.6 [SE: 0.5], respectively). The average number of cigarettes reportedly smoked per day increased with each adult age group: 5.6 cigarettes (SE: 0.6) daily among 18-24 year old smokers, followed by 6.9 cigarettes (SE: 0.6) among 25-39 year olds, 7.9 cigarettes (SE: 0.7) among 40-54 year olds, and 8.8 cigarettes (SE: 0.9) among Elders age 55+.

According to the 2008-10 RHS, BC on-reserve First Nation adults who reported being current smokers reported that they began smoking when they were, on average, 15.5 years old. Men and women reported beginning smoking, on average, at approximately the same age (15.1 [SE: 0.3] and 16.0 [SE: 0.3], respectively). On average, adults age 18-54 reported beginning smoking at a younger age (15.2 [SE: 0.3]) than Elders age 55+ (17.7 [SE: 0.7]). Among those who reported they had stopped smoking (ex-smokers), the average age at which they reported beginning smoking was 15.7 years old (SE: 0.5), which is similar to current smokers. Ex-smokers, on average, reported they had quit smoking when they were 38.0 (SE: 5.1) years old.

Among current and ex-smokers (n=233), 67.4% (95% CI: 56.7-76.6%) reported never having tried to quit in the 12 months prior to the 2008-10 RHS, 21.1% (95% CI: 14.0-30.4%)[E] reported having tried to quit once or twice, and 11.5% (95% CI: 7.1-18.2%)[E] reported having tried to quit three or more times in the year prior to the survey. A lower percentage of Elders age 55+ reported trying to quit smoking in the year prior to the survey (14.2% [95% CI: 7.0-26.7%][E]) than adults age 18-54 (39.6% [95% CI: 29.2-51.1%]). There was no difference in the percentage of current or ex-smoking adults age 18+ who reported trying to quit smoking in the year prior to the survey by gender (34.1% [95% CI: 22.5-48.0%][E] of men versus 31.0% [95% CI: 21.9-41.7%] of women).

BC.QUITNET.com is a website that will calculate how many years of your life and how much of your money cigarettes have taken from you. If you enter your quit date into the website, it will tell you how many dollars and years of your life you have saved.

Visit *http://bc.quitnet.com/* for more information.

Table 49 outlines the different reasons adult smokers gave for quitting smoking. The largest percentage reported doing so in order to choose a healthier lifestyle (58.9%), followed by respect for loved ones (17.2%) and a health condition (15.7%).

TABLE 49: REASON FOR QUITTING SMOKING – BC ON-RESERVE FIRST NATION ADULTS (AGE 18+), 2008-10 RHS (N=384)

	Per Cent (95% CI)
Chose a healthier lifestyle	58.9% (51.4-65.9%)
Out of respect for loved ones	17.2% (12.1-23.9%)[E]
Health condition	15.7% (11.2-21.5%)
Greater awareness/education about the ill effects of cigarettes on my health	15.5% (11.4-20.8%)
Pregnancy	5.7% (3.6-8.8%)[E]
Respect for the cultural and traditional significance of tobacco	[F]
Doctor's orders	[F]
Peer pressure from friends or co-workers	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

According to the 2008-10 RHS, the majority of BC on-reserve First Nations adults who reported quitting smoking reported doing so by willpower alone (see Table 50).

TABLE 50: SMOKING CESSATION METHOD USED – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Per Cent (95% CI)
Cold turkey/Willpower alone	84.7% (79.6-88.7%)
With help from spirituality	3.2% (2.0-5.1%)[E]
With assistance from family	[F]
Traditional methods	[F]
Nicotine replacement patch	[F]
Nicotine replacement gum	[F]
Support or self-help program	[F]
Other prescribed medication	[F]
Zyban (bupropion)	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

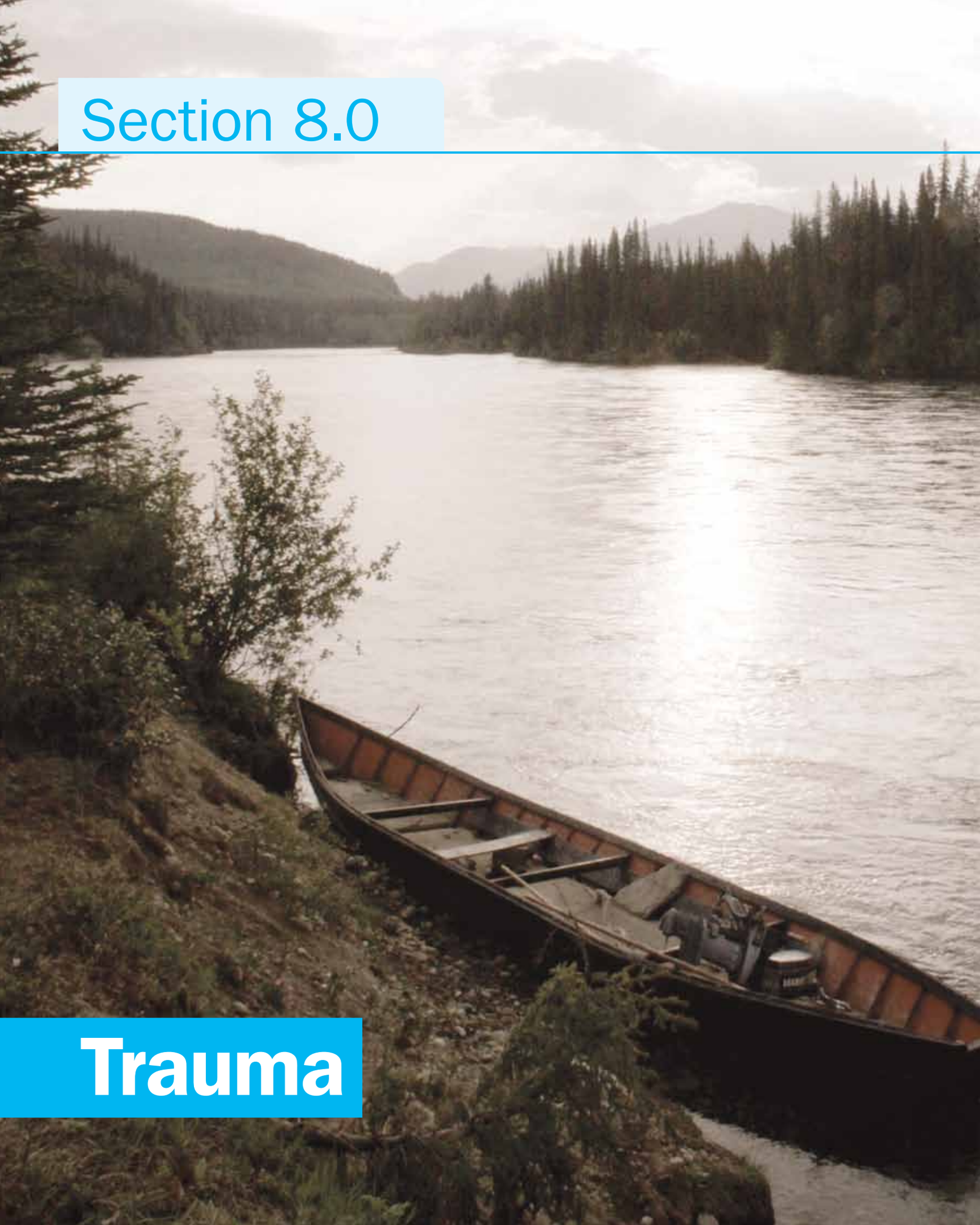
7.5 Smoke-Free Homes

The majority of BC on-reserve First Nations reported living in smoke free homes: 91.2% (95% CI: 87.0-94.1%) of children, 71.8% (95% CI: 64.4-78.2%) of youth and 74.6% (95% CI: 70.8-78.0%) of adults. Among current non-smokers[10], 85.7% (95% CI: 82.8-88.3%) of individuals reported living in smoke-free homes. This is an increase in the percentage of non-smoking BC First Nations who have reported living in a smoke-free home since the 2002-03 RHS (74.8% [95% CI: 70.36-78.6%]).

Notes

1. The consumption of sweets was not a question in the adult survey.
2. It is not asked whether this is 100% fruit juice.
3. Based on self-reported activity. Moderately physically active in the 2002-03 RHS was defined as three or more hours per week of activities that increase heart rate and breathing for adults age 18+, and one or more hours per week for youth age 12-17. In the 2008-10 RHS, moderate activity was defined as a Physical Activity Daily Energy Expenditure (PACDEE) of more than 1.5 kcal/kg/day for both youth and adults. The PACDEE is calculated by multiplying the frequency, duration and energy expenditure of each activity reported by the individual (e.g. bowling, gardening, jogging). This calculation, as well as the energy consumption designated for each activity, was taken from estimates used by the Canadian Community Health Survey 2008 (http://www.statcan.gc.ca/imdb-bmdi/document/3226_D2_T9_V6-eng.pdf, page 123).
4. In the youth questionnaire "sitting" is described as "watching TV, playing video games, going to school". In the adult questionnaire "sitting" is described as "watching TV, sitting at a desk at work, playing cards/bingo".
5. The RHS questionnaire asks "Was the child ever breastfed?" and does not specify whether this was exclusive breastfeeding or not.
6. The age group 1-11 is used to measure breastfeeding more than six months.
7. There were no questions asked in the 2008-10 RHS on chewing tobacco use. The question was asked in the 2002-03 RHS.
8. No questions regarding smoking habits are included in the children's questionnaire.
9. "Occasionally" is not defined.
10. Among youth and adults who responded "No" to the question, "At the present time, do you smoke cigarettes?" All children are assumed to be non-smokers. No questions regarding smoking habits are included in the children's questionnaire.

Section 8.0



Trauma

Trauma, whether from aggression, racism or the effects of residential schools, can have significant impacts on well-being. Responses to trauma can sometimes be manifested as self-medication using alcohol or other substances or through aggression directed towards self or others. This trauma and its effects are important to acknowledge and recognize so that healing can take place.

8.1 Residential Schools

Residential schools were government-funded and largely church-run schools whose primary purpose was to assimilate Aboriginal children into the dominant culture by removing them from their homes and families (The Truth and Reconcilitation Commission of Canada, 2012a). The effects of residential schools on First Nations are multi-generational. The psychological, physical, cultural and spiritual impacts of residential schools have social ramifications that many individuals and communities are working to address. There were 17 recognized Indian Residential Schools in BC, as well as an additional 224 unrecognized schools, with a decision pending by the Commission on an additional 26 schools (Truth and Reconciliation Commission, 2012b). The first residential school to open in BC was in Mission in 1861 and the last residential school to close in BC was St. Mary's in 1984 (Truth and Reconcilitation Commission, 2012b).

Overall, 21.1% (95% CI: 18.1-24.6%) of BC on-reserve First Nations adults reported attending residential school. Nationally, 19.5% (95% CI: 17.9-21.1%) of all First Nations adults reported attending residential school (FNIGC, 2012, p. 219). The percentage of adults who reported attending residential school was higher among older age groups: the number of residential school attendees in the 18-24 age group is too small to report (this is to be expected since the last residential school in BC closed in 1984 and most adults in this age group would have been too young to attend), 4.2% (95% CI: 2.4-7.1%)[E] of adults in the 25-39 age group reported attending residential school, 28.0% (95% CI: 23.0-33.7%) of 40-54 year olds reported attending and 48.4% (95% CI: 38.9-58.0%) of Elders age 55+ reported attending residential school.

Over fifty-eight per cent (58.6% [95% CI: 53.7-63.3%]) of adults reported that one or both of their parents attended residential school (34.4% [95% CI: 30.0-39.0%] of respondents reported that one of their parents attended residential school and 24.2% [95% CI: 19.7-29.4%] reported both parents attended residential school).

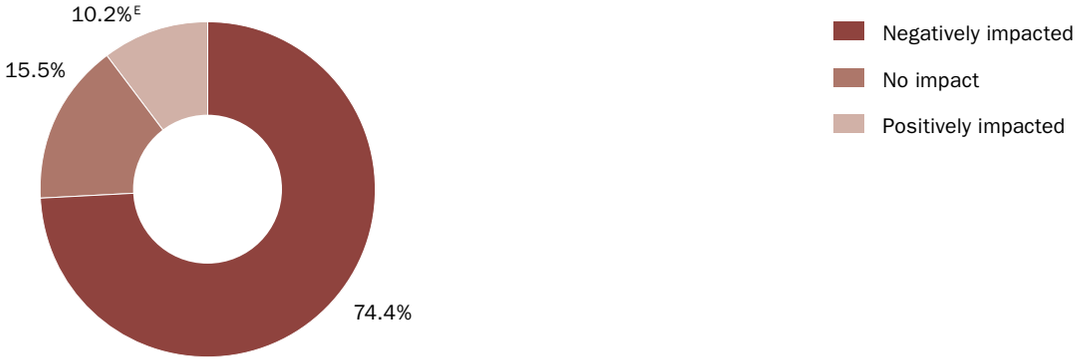
More than half (52.1% [95% CI: 46.3-57.9%]) of adults reported that one or more of their grandparents attended residential school. Nearly twenty per cent (19.4% [95% CI: 14.8-25.1%]) of adults reported that all four of their grandparents attended residential school.

Over seventy per cent of adults reported having at least one parent or grandparent who attended residential school (71.3% [95% CI: 66.3-75.9%]).

The average age that BC on-reserve First Nations adults reported starting residential school was 8.5 years old, and on average, they reported leaving when they were 13.7 years old. This is an average of 5.2 years that BC First Nations adults age 18+ spent in residential school.

Almost three-quarters (74.4% [95% CI: 67.4-80.3%]) of BC on-reserve First Nations adults who reported attending residential school reported feeling that their overall health and well-being was negatively impacted by their attendance at residential school (see Figure 35). Over fifteen per cent (15.5% [95% CI: 11.8-20.0%])[E] of adults who reported attending residential school reported that they felt that there was no impact from residential school attendance on their overall health and well-being and just over ten per cent (10.2% [95% CI: 6.1-16.6%][E]) reported that they felt their overall health and well-being was positively impacted. There was no variation in the impact of residential school attendance on overall well-being by gender or adult age group.

FIGURE 35: EFFECT ON OVERALL HEALTH AND WELL-BEING BY ATTENDANCE AT RESIDENTIAL SCHOOL – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=323)



E – High sampling variability (CV>0.16). Interpret with caution.

Among those who reported a negative impact on health and well-being from residential school attendance, a variety of factors were cited as being responsible for that negative impact, as shown in Table 51. The five most commonly reported negative impacts from residential school attendance included loss of language (82.5%), isolation from family (79.8%), loss of cultural identity (79.5%), harsh discipline (76.2%) and verbal or emotional abuse (76.2%)[1].

TABLE 51: FACTORS RESPONSIBLE FOR THE NEGATIVE IMPACTS ON HEALTH AND WELL-BEING FROM RESIDENTIAL SCHOOL ATTENDANCE[1] – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=267)

	Per Cent (95% CI)
Loss of language	82.5% (75.8-87.6%)
Isolation from family	79.8% (70.0-87.0%)
Loss of cultural identity	79.5% (73.3-84.6%)
Harsh discipline	76.2% (71.0-80.7%)
Verbal or emotional abuse	76.2% (70.5-81.1%)
Separation from community	75.5% (67.3-82.1%)
Physical abuse	73.9% (68.2-79.0%)
Witnessing abuse	68.7% (62.7-74.2%)
Loss of traditional religion or spirituality	68.1% (58.5-76.4%)
Bullying from other children	59.0% (50.2-67.2%)
Poor education	53.3% (45.8-60.7%)
Harsh living conditions (e.g. lack of heat)	53.2% (46.3-59.9%)
Lack of food	53.0% (46.1-59.7%)
Lack of proper clothing	49.5% (42.1-57.0%)
Sexual abuse	44.3% (36.0-52.9%)

There were no questions in the 2008-10 RHS that asked respondents to identify the factors from their residential school attendance that positively impacted their overall health and well-being.

8.2 Racism

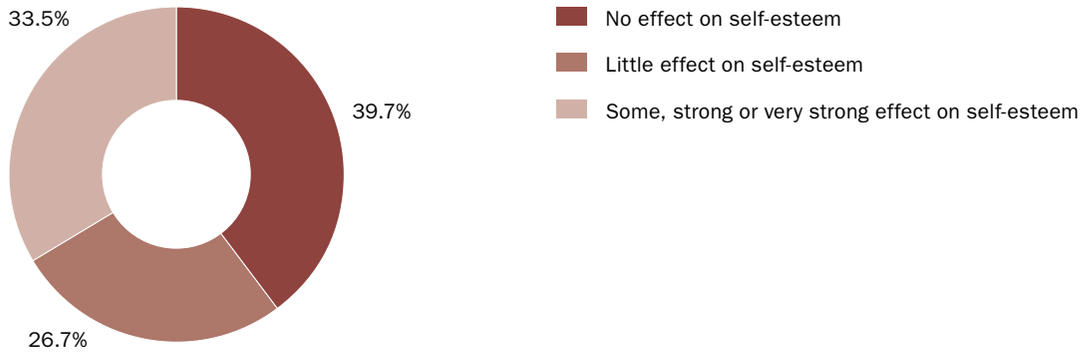
Racism is a systematic societal issue. "Aboriginal people are more likely to face inadequate nutrition, substandard housing and sanitation, unemployment and poverty, discrimination and racism, violence, inappropriate or absent services, and subsequent high rates of physical, social and emotional illness, injury, disability and premature death." (RCAP, 1996).

According to the 2008-10 RHS, 33.2% (95% CI: 29.3-37.3%) of BC on-reserve First Nations adults reported having personally experienced an instance of racism in the 12 months prior to the survey. This is a decrease from the percentage of adults who reported personally experiencing instances of racism in the 12 months prior to the 2002-03 RHS (48.5% [95% CI: 42.3-54.7%]).

There was no difference by gender in the percentage of adult men and women who reported personally experiencing instances of racism in the 12 months prior to the 2008-10 RHS (32.8% [95% CI: 27.8-38.2%] versus 30.7% [95% CI: 26.1-35.7%], respectively).

Of the adults who reported experiencing an instance of racism in the 12 months prior to the 2008-10 RHS, over one-third (39.7% [95% CI: 32.7-47.2%]) stated that the experience did not affect their self-esteem, 26.7% (95% CI: 22.2-31.8%) stated that it had little effect on their self-esteem and 33.5% (95% CI: 27.3-40.4%) stated that it had some, a strong or a very strong effect on their self-esteem (see Figure 36).

FIGURE 36: EFFECT ON SELF-ESTEEM OF PERSONAL EXPERIENCES OF RACISM IN THE 12 MONTHS PRIOR TO THE 2008-10 RHS – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=445)



There was no difference in the effects of experiencing an instance of racism between male and female adults. Older adults who reported experiencing an instance of racism in the year prior to the 2008-10 RHS were more likely to report that the experience had some, a strong or a very strong effect on their self-esteem (19.4% [95% CI: 10.1-34.2%][E] of adults age 18-24 and 23.8% [95% CI: 15.8-34.3%][E] of adults age 25-39 years old reported feeling some, a strong or a very strong effect on their self-esteem versus 46.3% [95% CI: 35.4-57.6%] of Elders age 55+). There was no significant difference among the 40-54 year old age group (40.0% [95% CI: 30.8-50.0%]).

8.3 Alcohol Consumption

Youth

Over sixty per cent of BC on-reserve First Nations youth age 12-17 (61.9% [95% CI: 56.0-67.5%]) reported that they had not consumed beer, wine, liquor or any other alcohol beverage in the 12 months prior to the 2008-10 RHS. The percentage of BC youth age 12-17 who reported having a drink of alcohol in the 12 months prior to the survey has not changed significantly between the 2002-03 RHS (46.5% [95% CI: 39.0-54.2%]) and 2008-10 RHS (38.1% [95% CI: 32.5-44.0%]).

There was no difference in the percentage of First Nations youth age 12-17 who reported consuming an alcoholic drink in the year prior to the 2008-10 RHS (38.1%) and the percentage of non-Aboriginal BC youth population age 12-17 who reported consuming an alcohol drink in the year prior to the 2009-10 Canadian Community Health Survey (CCHS) (36.8% [95% CI: 34.0-39.5%]) (Statistics Canada, 2009-10).

There was no significant difference in the percentage of BC on-reserve First Nations youth age 12-17 reporting consuming an alcoholic drink in the 12 months prior to the 2008-10 RHS by gender (45.2% of female youth versus 31.5% of male youth) (see Table 52). The percentage of male youth who reported drinking in the year prior to the survey did not change significantly between the 2002-03 and 2008-10 RHS (44.6% versus 31.5%, respectively). Similarly, the percentage of female youth reporting drinking in the year prior to the survey was similar between the 2002-03 RHS and 2008-10 RHS (48.7% versus 45.2%, respectively).

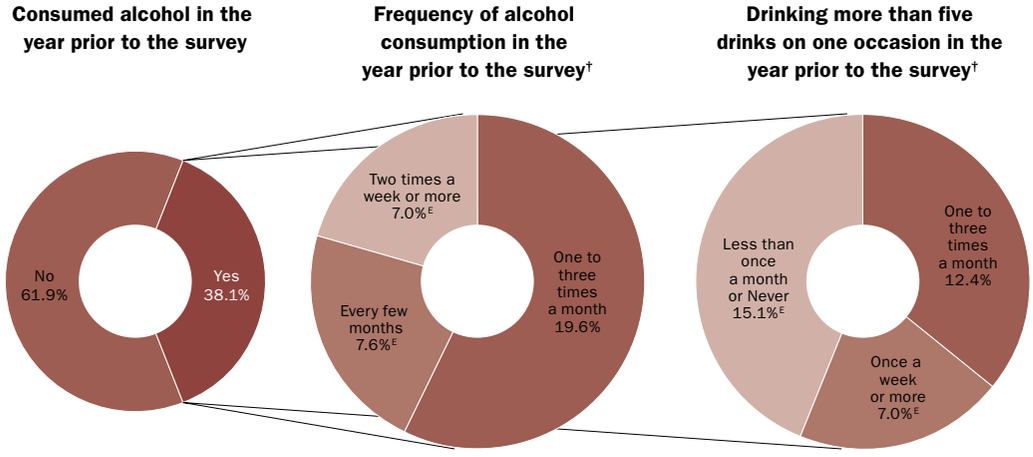
TABLE 52: ALCOHOL CONSUMPTION IN THE YEAR PRIOR TO THE SURVEY BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)	2002-03 RHS Per Cent (95% CI)
Female	45.2% (36.2-54.6%)	48.7% (39.9-57.5%)
Male	31.5% (22.8-41.8%)	44.6% (36.0-53.5%)

There was no difference in the percentage of female or male BC on-reserve First Nations youth age 12-17 who reported consuming alcohol in the year prior to the 2008-10 RHS compared to the non-Aboriginal BC population age 12-17 (39.0% [95% CI: 34.2-43.8%] of non-Aboriginal male youth age 12-17 and 34.4% [95% CI: 29.7-39.2%] of non-Aboriginal female youth age 12-17 reported consuming alcohol in the 12 months prior to the 2009-10 CCHS (Statistics Canada, 2009-10) versus 31.5% of male on-reserve First Nations youth and 45.2% of female on-reserve First Nations youth) (see Figure 38).

Among all BC on-reserve First Nations youth age 12-17, 7.6% (95% CI: 5.3-10.8%)[E] reported drinking alcohol every few months, 19.6% (95% CI: 14.2-26.5%) reported drinking alcohol one to three times a month and 7.0% (95% CI: 4.6-10.5%)[E] reported drinking alcohol two times a week or more in the 12 months prior to the 2008-10 RHS (see Figure 37).

FIGURE 37: CONSUMPTION OF ALCOHOL, FREQUENCY OF ALCOHOL CONSUMPTION AND FREQUENCY OF BINGE DRINKING IN THE YEAR PRIOR TO THE 2008-10 RHS – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS



E – High sampling variability (CV>0.16). Interpret with caution.

† The category 'Refused' is suppressed because of extreme sampling variability (CV>0.33) or small sample size (n≤5).

Although similar percentages of BC on-reserve First Nations and non-Aboriginal BC youth age 12-17 reported consuming alcohol in the past year in the 2008-10 RHS and the 2009-10 CCHS (38.1% versus 36.8%, respectively), when examining the frequency of alcohol consumption, First Nations youth who reported drinking in the year prior to the 2008-10 RHS reported drinking more frequently than non-Aboriginal youth reported drinking in the year prior to the 2009-10 CCHS. For example, among BC on-reserve First Nations youth, a higher percentage reported drinking 1-3 times a month (57.3% [95% CI: 45.5-68.3%]) compared to 32.6% (95% CI: 26.3-38.9%) of non-Aboriginal youth age 12-17 (Statistics Canada, 2009-10) and fewer BC on-reserve First Nations youth reported drinking every few months (22.3% [95% CI: 14.7-32.3%]) compared to 53.7% (95% CI: 47.2-60.2%) of non-Aboriginal youth.

There was no difference in the frequency of alcohol consumption in the year prior to the 2008-10 RHS among BC on-reserve First Nations youth by gender (see Table 53).

TABLE 53: FREQUENCY OF ALCOHOL CONSUMPTION IN THE YEAR PRIOR TO THE 2008-10 RHS BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

	Total Per Cent (95% CI)	**Male** Per Cent (95% CI)	**Female** Per Cent (95% CI)
Consume alcohol every few months	**7.6% (5.3-10.8%)E**	5.3% (3.2-8.6%)E	10.2% (6.6-15.5%)E
Consume alcohol 1-3 times a month	**19.6% (14.2-26.5%)**	19.2% (11.5-30.5%)E	20.0% (13.3-29.1%)E
Consume alcohol 2 times a week or more	**7.0% (4.6-10.5%)E**	F	11.0% (6.6-17.8%)E

E – High sampling variability (CV>0.16). Interpret with caution.

F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Binge drinking is defined as drinking more than five drinks on one occasion and has numerous mental and physical health implications. According to the 2008-10 RHS, 28.8% (95% CI: 23.6-34.5%) of BC on-reserve First Nations youth age 12-17 reported ever having more than five drinks on one occasion in the year prior to the 2008-10 RHS[2]: 9.3% (95% CI: 5.9-14.3%)[E] reported binge drinking less than once a month, 12.4% (95% CI: 8.8-17.2%) reported binge drinking one to three times a month and 7.1% (95% CI: 4.8-10.5%)[E] reported binge drinking once a week or more in the year prior to the 2008-10 RHS (see Figure 37). There has been no significant difference between the 2002-03 and 2008-10 RHS in the percentage of BC on-reserve First Nations youth who reported binge drinking once a week or more in the year prior to the survey (7.3% [95% CI: 4.9-10.9%][E] of youth reported binge drinking once a week or more in the year prior to the 2002-03 RHS). A higher percentage of female youth age 12-17 reported ever binge drinking in the year prior to the 2008-10 RHS than male youth age 12-17 (38.0% [95% CI: 29.2-47.7%] [E] versus 20.3% [95% CI: 14.1-28.2%][E], respectively).

"All the prevalence of mixed cocktails that taste like juice or pop – that's the drink of choice."

RHS Steering Committee member

The percentage of First Nations youth who reported binge drinking 1-3 times a month in the year prior to the 2008-10 RHS (12.4%) is similar to the 12-17 year old non-Aboriginal BC population, of which 13.5% (95% CI: 9.6-17.4%) reported binge drinking at least 1-3 times a month in the year prior to the 2009-10 CCHS (Statistics Canada, 2009-10).

Among BC on-reserve First Nations youth age 12-17, 7.0% (95% CI: 3.9-12.4%)[E] reported having ever sought treatment for alcohol abuse or addiction.

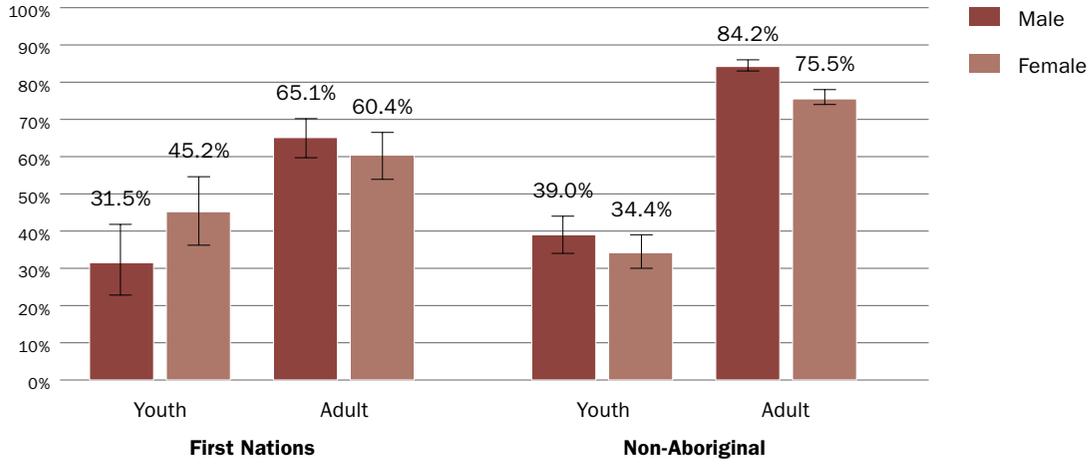
Adults

According to the 2008-10 RHS, 62.8% (95% CI: 58.4-67.0%) of BC on-reserve First Nations adults age 18+ reported that they had consumed beer, wine, liquor or another alcohol beverage in the 12 months prior to the survey. This is lower than the percentage of non-Aboriginal adults age 18+ in BC who reported consuming alcohol in the year prior to the 2009-10 CCHS (79.8% [95% CI: 78.7-80.9%]) (Statistics Canada, 2009-10).

A similar percentage of BC on-reserve First Nations adults in the 2002-03 RHS reported consuming alcohol in the year prior to the survey (59.7% [95% CI: 48.4-70.0%]). The percentage of adults who reported consuming alcohol in the 12 months prior to the 2008-10 RHS was higher among adults age 18-24 than adults age 40-54 and 55+ (82.0% [95% CI: 73.8-88.0%] of adults age 18-24 versus 76.5% [95% CI: 69.0-82.6%] of adults age 25-39, 60.5% [95% CI: 54.1-66.6%] of adults age 40-54 and 35.4% [95% CI: 30.0-41.2%] of Elders age 55+).

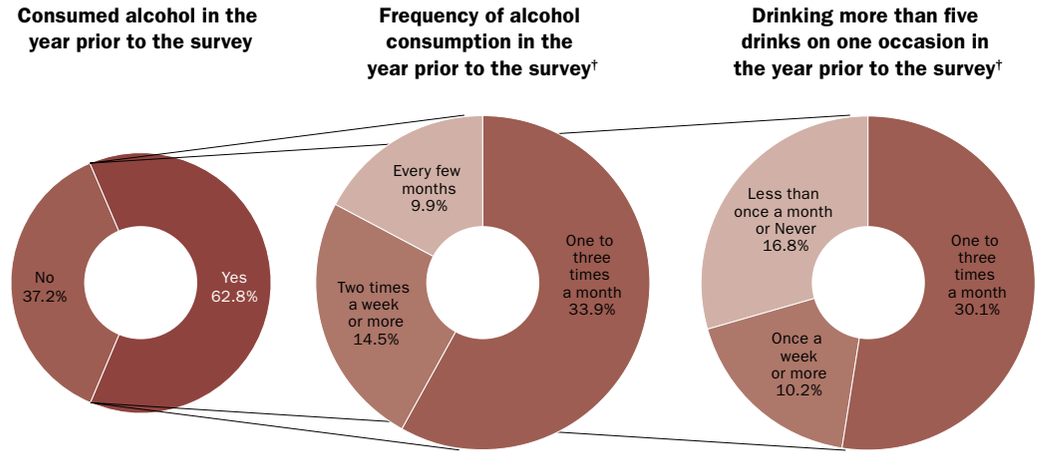
There was no difference in the percentage of First Nations adults age 18+ who reported consuming alcohol in the 12 months prior to the 2008-10 RHS by gender (65.1% [95% CI: 59.7-70.2%] of male adults versus 60.4% [95% CI: 53.9-66.5%] of female adults) (see Figure 38). This is lower than the percentage of non-Aboriginal BC men and women, of whom 84.2% (95% CI: 82.6-85.9%) of men and 75.5% (95% CI: 73.5-77.5%) of women reported having an alcoholic drink in the 12 months prior to the 2009-10 CCHS (Statistics Canada, 2009-10) (see Figure 38).

FIGURE 38: CONSUMED ALCOHOL IN THE YEAR PRIOR TO THE SURVEY – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS AND SELF-IDENTIFIED NON-ABORIGINAL BC YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2009-10 CANADIAN COMMUNITY HEALTH SURVEY



Almost three per cent (2.8% [95% CI: 1.8-4.3%][E]) of BC on-reserve First Nations adults age 18+ reported consuming alcohol daily in the year prior to the 2008-10 RHS, 11.7% (95% CI: 9.7-14.0%) reported consuming alcohol two or three times a week, 22.4% (95% CI: 19.8-25.3%) reported consuming alcohol two to three times a month, 11.5% (95% CI: 9.8-13.5%) reported consuming alcohol about once a month, and 9.9% (95% CI: 8.2-11.8%) reported consuming alcohol two to three times a year in the year prior to the 2008-10 RHS (see Figure 39).

FIGURE 39: CONSUMPTION OF ALCOHOL, FREQUENCY OF ALCOHOL CONSUMPTION AND FREQUENCY OF BINGE DRINKING IN THE YEAR PRIOR TO THE 2008-10 RHS – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS



† The category 'Refused' is suppressed because of extreme sampling variability (CV>0.33) or small sample size (n≤5).

There was no significant difference in the frequency of consumption of alcohol in the year prior to the 2008-10 RHS reported among BC on-reserve First Nations adults by gender (see Table 54).

TABLE 54: FREQUENCY OF ALCOHOL CONSUMPTION IN THE YEAR PRIOR TO THE 2008-10 RHS BY GENDER – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Total Per Cent (95% CI)	Male Per Cent (95% CI)	Female Per Cent (95% CI)
Consume alcohol every few months	**17.0% (14.2-20.2%)**	13.4% (10.0-17.8%)	21.0% (16.7-26.0%)
Consume alcohol 1-3 times a month	**58.3% (54.5-61.9%)**	59.4% (52.7-65.7%)	57.0% (51.9-62.0%)
Consume alcohol 2 times a week or more	**24.7% (20.9-29.0%)**	27.2% (21.7-33.5%)	22.0% (17.6-27.1%)

Binge drinking in the year prior to the 2008-10 RHS was reported by 51.3% (95% CI: 47.2-55.5%) of BC on-reserve First Nations adults age 18+. Binge drinking in the year prior to the 2008-10 RHS was more commonly reported among adults age 18-24 and 25-39 than among adults age 40-54 and 55+: 66.4% (95% CI: 56.9-74.7%) of 18-24 year olds and 67.0% (95% CI: 59.5-73.7%) of 25-39 year olds versus 48.8% (95% CI: 43.4-54.2%) of 40-54 year olds and 25.1% (95% CI: 20.8-30.0%) of Elders 55+. There was no significant difference in binge drinking reported among adults by gender (54.9% [95% CI: 49.6-60.1%] of adult males versus 47.5% [95% CI: 42.0-53.0%] of adult females).

Almost seventeen per cent (16.8%) of BC on-reserve First Nations adults reported binge drinking less than once a month or never in the year prior to the 2008-10 RHS, 30.1% reported binge drinking one to three times per month, and 10.2% reported binge drinking once a week or more in the year prior to the 2008-10 RHS (see Figure 39 and Table 55). There has been no significant difference between the 2002-03 and 2008-10 RHS in the percentage of BC on-reserve First Nations adults who reported binge drinking once a week or more in the year prior to the survey (15.7% [95% CI: 12.3-19.8%] of adults reported binge drinking once a week or more in the year prior to the 2002-03 RHS).

A larger percentage of BC on-reserve First Nations adult women reported binge drinking less than once a month or never in the year prior to the 2008-10 RHS (21.0%) compared to male adults (12.8%) (see Table 55). A higher percentage of men reported binge drinking one to three times a month in the year prior to the 2008-10 RHS than women (35.0% versus 24.9%, respectively). Similar percentages of men and women reported binge drinking once a week or more in the year prior to the 2008-10 RHS (10.9% of men versus 9.3% of women).

TABLE 55: FREQUENCY OF BINGE DRINKING IN THE YEAR PRIOR TO THE 2008-10 RHS BY GENDER – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Total Per Cent (95% CI)	Male Per Cent (95% CI)	Female Per Cent (95% CI)
Less than once a month or never	**16.8% (14.3-19.5%)**	12.8% (10.0-16.3%)	21.0% (17.0-25.5%)
One to three times per month	**30.1% (26.5-33.9%)**	35.0% (30.1-40.2%)	24.9% (21.2-29.0%)
Once a week or more	**10.2% (8.3-12.4%)**	10.9% (8.3-14.3%)	9.3% (6.6-13.0%)

8.4 Drug Use

Youth

Almost sixty-eight per cent (67.4% [95% CI: 61.1-73.1%]) of BC on-reserve First Nations youth age 12-17 reported not having used any non-prescription drug, including cannabis, cocaine, sedatives, hallucinogens, opioids, amphetamines or inhalants, in the 12 months prior to the 2008-10 RHS. In total, 31.7% (95% CI: 26.0-38.0%) of BC on-reserve First Nations youth age 12-17 reported having used or tried a non-prescription drug in the year prior to the 2008-10 RHS. Over thirty-one per cent (31.2%) of youth reported ever using cannabis in the year prior to the survey and a small percentage (11.1%) reported using cannabis daily or almost daily in the year prior to the 2008-10 RHS. There was no significant difference in the percentage of youth reporting the use of a non-prescription drug in the year prior to the 2008-10 RHS by gender (35.9% [95% CI: 27.0-45.9%] of female youth versus 25.5% [95% CI: 17.4-35.7%][E] of male youth).

Table 56 outlines the frequency of non-prescription drug use reported by BC First Nations youth age 12-17 in the year prior to the 2008-10 RHS.

TABLE 56: FREQUENCY OF NON-PRESCRIPTION DRUG USE IN THE YEAR PRIOR TO THE 2008-10 RHS – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

	Per Cent (95% CI)					
	Never	Tried Once or More[3]	Once or Twice	Monthly	Weekly	Daily or Almost Daily
Cannabis (marijuana, pot, grass, hash)	68.3% (61.6-74.3%)	31.2% (25.2-37.9%)	10.7% (7.9-14.4%)	F	4.9% (2.6-9.4%)[E]	11.1% (6.7-17.7%)[E]
Amphetamine-type stimulant (crystal meth, speed, ecstasy)	95.9% (93.5-97.4%)	3.8% (2.3-6.1%)[E]	3.8% (2.3-6.1%)[E]	F	F	F
Sedatives or sleeping pills (Valium, Serepax, Rohypnol)	96.4% (93.7-98.0%)	3.3% (1.8-5.9%)[E]	2.4% (1.2-4.8%)[E]	F	F	F
Hallucinogens (LSD, acid, mushrooms, PCP, Special K)	96.4% (94.6-97.7%)	2.7% (1.8-4.2%)[E]	2.7% (1.8-4.1%)[E]	F	F	F
Cocaine (coke, crack)	98.1% (95.7-99.1%)	F	F	F	F	F
Inhalants (solvents, glue, petrol, paint thinner)	98.4% (96.7-99.3%)	F	F	F	F	F
Opioids (heroin, morphine, methadone, codeine)	99.7% (97.7-100.0%)	F	F	F	F	F

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Over four per cent of BC on-reserve First Nations youth age 12-17 (4.6% [95% CI: 2.5-8.3%][E]) reported ever seeking treatment for drug abuse and/or addiction, and the percentage of youth who reported ever seeking treatment for solvent abuse was too low to report.

Adults

The majority (62.9% [95% CI: 59.2-66.5%]) of BC on-reserve First Nations adults age 18+ reported not using any non-prescription drugs in the year prior to the 2008-10 RHS. Overall, 36.3% (95% CI: 32.9-39.8%) of First Nations adults reported using a non-prescription drug in the year prior to the 2008-10 RHS. Male adults were more likely to report using a non-prescription drug in the year prior to the survey than female adults (43.5% [95% CI: 38.3-48.8%] versus 28.7% [95% CI: 25.5-32.2%], respectively).

Table 57 outlines the frequency of non-prescription drug use reported by adults age 18+ in the year prior to the 2008-10 RHS. The most commonly reported non-prescription drug used was cannabis, which 33.4% of BC on-reserve First Nation adults reported having used at least once in the year prior to the survey. Nationally, 32.3% (95% CI: 30.8-33.9%) of First Nation adults reported using cannabis in the 12 months prior to the 2008-10 RHS (FNIGC, 2012, p. 104). Table 57 also shows that 13.1% of adults reported using cannabis daily or almost daily in the year prior to the 2008-10 RHS.

The second most commonly reported non-prescription drug used was cocaine, which 5.5% of BC First Nations adults reported trying once or more in the year preceding the 2008-10 RHS, followed by sedatives (5.3%), hallucinogens (4.4%), opioids (4.2%[E]) and amphetamines (1.8%[E]). The per cent of adults who reported using inhalants in the year prior to the 2008-10 RHS was too small to report.

TABLE 57: FREQUENCY OF NON-PRESCRIPTION DRUG USE IN THE YEAR PRIOR TO THE 2008-10 RHS – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Per Cent (95% CI)					
	Never	Tried Once or More[4]	Once or Twice	Monthly	Weekly	Daily or Almost Daily
Cannabis (marijuana, pot, grass, hash)	65.6% (62.0-69.0%)	33.4% (30.0-37.0%)	12.1% (9.9-14.6%)	2.9% (2.0-4.3%)[E]	5.4% (4.2-6.9%)[E]	13.1% (10.2-16.5%)
Cocaine (coke, crack)	94.1% (92.1-95.7%)	5.5% (4.0-7.5%)	4.3% (3.0-6.3%)[E]	[F]	0.6% (0.3-1.0%)[E]	[F]
Sedatives or sleeping pills (Valium, Serepax, Rohypnol)	94.3% (92.1-95.9%)	5.3% (3.9-7.2%)	2.8% (1.7-4.5%)[E]	[F]	0.9% (0.5-1.5%)[E]	1.4% (0.9-2.1%)[E]
Hallucinogens (LSD, acid, mushrooms, PCP, Special K)	95.3% (93.7-96.4%)	4.4% (3.2-6.0%)	3.9% (2.7-5.6%)[E]	0.4% (0.2-0.6%)[E]	[F]	[F]
Opioids (heroin, morphine, methadone, codeine)	95.4% (93.4-96.8%)	4.2% (2.9-6.1%)[E]	2.5% (1.6-4.0%)[E]	[F]	0.7% (0.5-0.9%)[E]	[F]
Amphetamine-type stimulant (crystal meth, speed, ecstasy)	97.8% (96.3-98.7%)	1.8% (1.0-3.1%)[E]	1.5% (0.8-2.8%)[E]	[F]	[F]	[F]
Inhalants (solvents, glue, petrol, paint thinner)	99.4% (98.6-99.8%)	[F]	[F]	[F]	[F]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Adult males were more likely to report having ever used cannabis in the year prior to the 2008-10 RHS than adult females (see Table 58). There were no other gender differences in non-prescription drug use reported.

TABLE 58: EVER USED NON-PRESCRIPTION DRUGS IN THE YEAR PRIOR TO THE 2008-10 RHS BY GENDER – BC FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Male Per Cent (95% CI)	**Female** Per Cent (95% CI)
Cannabis (marijuana, pot, grass, hash)	41.9% (36.8-47.2%)	24.4% (21.2-28.0%)
Cocaine (coke, crack)	7.0% (4.6-10.4%)[E]	3.9% (2.6-5.8%)[E]
Sedatives or sleeping pills (Valium, Serepax, Rohypnol)	4.3% (2.8-6.5%)[E]	6.4% (4.6-8.7%)
Hallucinogens (LSD, acid, mushrooms, PCP, Special K)	7.0% (4.9-9.8%)[E]	[F]
Opioids (heroin, morphine, methadone, codeine)	5.4% (3.6-8.0%)[E]	3.0% (1.7-5.3%)[E]
Amphetamine-type stimulant (crystal meth, speed, ecstasy)	[F]	[F]
Inhalants (solvents, glue, petrol, paint thinner)	[F]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Just over sixteen per cent (16.1% [95% CI: 12.9-21.2%]) of BC on-reserve First Nations adults age 18+ reported ever seeking treatment for substance abuse or addiction. The percentage of adults who reported ever seeking treatment for substance abuse or addiction was similar across genders (16.7% [95% CI: 12.9-21.2%] among male adults and 15.5% [95% CI: 12.3-19.4%] among female adults). Adults age 40-54 were almost three times more likely to report that they had ever sought treatment for substance abuse (23.6% [95% CI: 19.3-28.4%]) than adults age 18-24 (8.4% [95% CI: 5.1-13.5%][E]), and more than twice as likely as those age 55+ (11.1% [95% CI: 8.1-15.1%]). Over seventeen per cent (17.6% [95% CI: 12.4-24.4%][E]) of adults age 25-39 had ever sought treatment for substance abuse.

Trauma and substance use

Trauma is common among people in BC seeking or needing help with substance use and mental health concerns.

The *Trauma Informed Practice project*, led by *British Columbia Centre of Excellence for Women's Health*, *BC Ministry of Health* and the *Vancouver Island Health Authority* aims to:

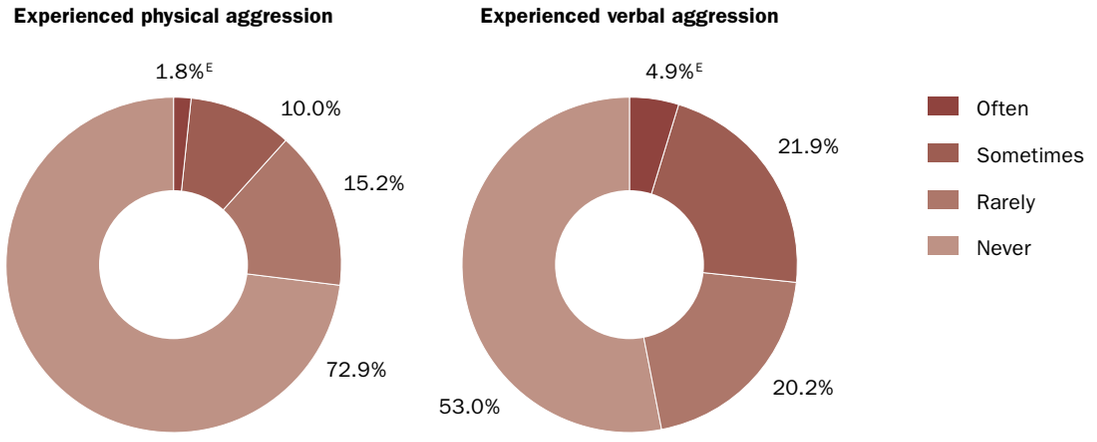
- raise awareness of the co-occurrence of the experience of violence and trauma with substance use and mental health problems,
- identify current efforts to provide trauma informed and trauma-specific interventions on the part of mental health and substance abuse services in BC,
- to increase awareness of evidence-based practices, and
- to increase the capacity of practitioners and organizations to better serve people impacted by violence and trauma.

The project embraces **trauma informed practice (TIP)**, which understands that trauma has a bearing on recovery for users of mental health and substance use services. Trauma-informed approaches to treatment of mental health and substance use increases positive outcomes for individuals.

8.5 Aggression

Aggression is an issue in some BC First Nations communities and can come in many forms: self-directed violence, lateral violence, domestic violence or interpersonal violence. Much of this aggression has roots in larger, systemic issues.

The majority of BC on-reserve First Nations adults age 18+ reported they have not experienced[5] any physical aggression (72.9% [95% CI: 68.2-77.2%]) or verbal aggression (53.0% [95% CI: 47.6-58.4%)] in the 12 months prior to the 2008-10 RHS (see Figure 40). A larger percentage of adults reported experiencing verbal aggression "Often" or "Sometimes" in the 12 months prior to the 2008-10 RHS (26.8% [95% CI: 22.1-32.1%]) than physical aggression (11.8% [95% CI: 9.0-15.3%]).



E – High sampling variability (CV>0.16). Interpret with caution.

FIGURE 40: EXPERIENCED PHYSICAL OR VERBAL AGGRESSION IN THE 12 MONTHS PRIOR TO THE 2008-10 RHS – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

There was no difference across gender in the percentage of male or female adults reporting either physical or verbal aggression "Often" or "Sometimes" in the 12 months prior to the 2008-10 RHS (see Table 59). The percentage of Elders reporting "Often" or "Sometimes" experiencing verbal aggression in the year prior to the 2008-10 RHS was lower than all other adult age groups, and for physical aggression was statistically lower than all other adult age groups other than adults age 18-24.

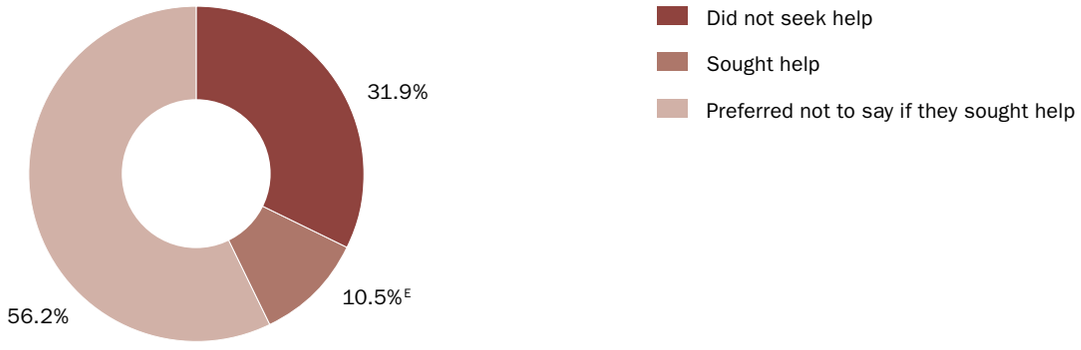
TABLE 59: EXPERIENCED VERBAL OR PHYSICAL AGGRESSION OFTEN OR SOMETIMES IN THE YEAR PRIOR TO THE SURVEY BY GENDER AND ADULT AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Verbal Aggression Per Cent (95% CI)	**Physical Aggression** Per Cent (95% CI)
Gender		
Female	27.9% (22.4-34.2%)	9.4% (6.5-13.3%)[E]
Male	25.8% (20.7-31.6%)	14.1% (10.4-18.8%)
Age Group		
Adults (Age 18-24)	29.6% (22.6-37.8%)	10.7% (6.8-16.7%)[E]
Adults (Age 25-39)	29.7% (22.7-37.7%)	14.0% (8.9-21.3%)[E]
Adults (Age 40-54)	31.3% (25.2-38.2%)	16.2% (12.4-20.9%)
Elders (Age 55+)	15.6% (11.4-21.0%)	4.7% (2.9-7.5%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

Among adults who reported experiencing aggression, 31.9% (95% CI: 27.9-36.1%) reported they did not seek help to deal with the physical or verbal aggression they experienced, 10.5% (95% CI: 7.4-14.7%)[E] reported that they sought help and 56.4% (95% CI: 50.5-61.8%) preferred not to say whether or not they sought help[6] to deal with the physical or verbal aggression they experienced (see Figure 41). There was no difference in the percentage of men and women who reported seeking help to deal with aggression (9.8% [95% CI: 5.8-16.1%][E] of men versus 11.3% [95% CI: 7.7-16.4%][E] of women). Over fifty per cent of men (51.3% [95% CI: 44.0-58.6%]) and sixty per cent of women (61.6% [95% CI: 54.6-68.1%]) preferred not to say whether they sought help to deal with the aggression they experienced in the 12 months prior to the survey.

FIGURE 41: SOUGHT HELP TO DEAL WITH AGGRESSION† EXPERIENCED IN THE 12 MONTHS PRIOR TO THE SURVEY – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=648)



E – High sampling variability (CV>0.16). Interpret with caution.
† The category "Don't Know" is not shown because of low numbers of responses.

As explored in Section 10.6, over five per cent (5.6% [95% CI: 2.9-10.5%][E]) of adults who reported being injured in the year prior to the 2008-10 RHS reported that the cause of that injury was domestic or family violence.

Among BC on-reserve First Nations youth, 8.8% (95% CI: 5.9-12.8%)[E] reported that they were currently being bullied.

Cyberbullying

"This questionnaire didn't have a question around cyber-bullying… FaceBook is fairly new… I don't know if it was even around in 2008. A lot of youth now use FaceBook and texting.

What does [cyberbullying] look like? A series of posts [on FaceBook] where someone says something about someone. Usually there's a lot of girl bullying that goes on… so someone will say something about a young girl and then it's posted and because on your friend list you'll have like 300 or 400 people that are your 'friends' … it goes out to a wide audience and then any one of those 400 people can make a comment on that post. So let's say 'so-and-so dyed her hair it looks so awful', 'yeah I totally agree that pink didn't do bla bla bla', 'and same thing with her shoes did you see that' and it's group mentality becomes a big snowball. It morphs from 'so and so got her hair dyed' to 'she's fat and ugly and she was trying to take my boyfriend away last week – we should gang up on her'… In the past you'd wait for this to pass from mouth to mouth and now immediately it's broadcast to all these people. That, and people don't feel any social context electronically. It's not the same as saying it out loud. You're more likely to make a diss behind a screen than you are face to face… The whole cyber-world has loosened our boundaries of how we make judgments and relationships with each other."

"There's a series of workshops that have been going around, there's a police officer, he's been making the rounds to all the schools on the island giving presentations to all the students on how they have been trying to address cyberbullying and how they will press charges – how they can use the law now to 'investigate' claims and charge the person who instigates a cyberbullying event.

He did a little exercise – he got the names of all of the students and posed as a young guy – a 15 year old boy – and tried to befriend almost everyone in the school and gain their confidence. A lot of people didn't friend him 'cause they didn't know who he was'. He created a phony profile of himself. Of those who did friend him, most of them were girls. He got address and phone number of ten of those girls. He made a date to meet with four of those girls. He started with a population of 600 and he worked his way through down to 'let's go meet for coffee' with four girls after just a series of back and forths."
RHS Steering Committee member

For more information on the cyberbullying workshops visit:
http://www.personalprotectionsystems.ca/programs/internet-safety/

Over the past two years, *Kids Help Phone* has focused their efforts on better serving young people from Aboriginal communities. Since this time, Kids Help Phone's professional counsellors have noted an anecdotal increase in calls from Aboriginal youth (Canada Newswire, 2012).

Kids Help Phone collaborated with the *National Aboriginal Health Organization* to develop Aboriginal bullying tip sheets for parents, teachers and youth, available online at: *http://www.naho.ca/publications/topics/bullying*.

8.6 Gambling

Gambling is an activity that, if abused, can have serious detrimental effects on individuals, families and communities.

Almost seventy per cent of BC on-reserve First Nations adults age 18+ (69.7% [95% CI: 64.1-74.7%]) reported that they have ever gambled[7].

Twenty-one per cent (21.0% [95% CI: 16.8-25.8%]) of adults who reported ever gambling stated that they had ever borrowed money to gamble.

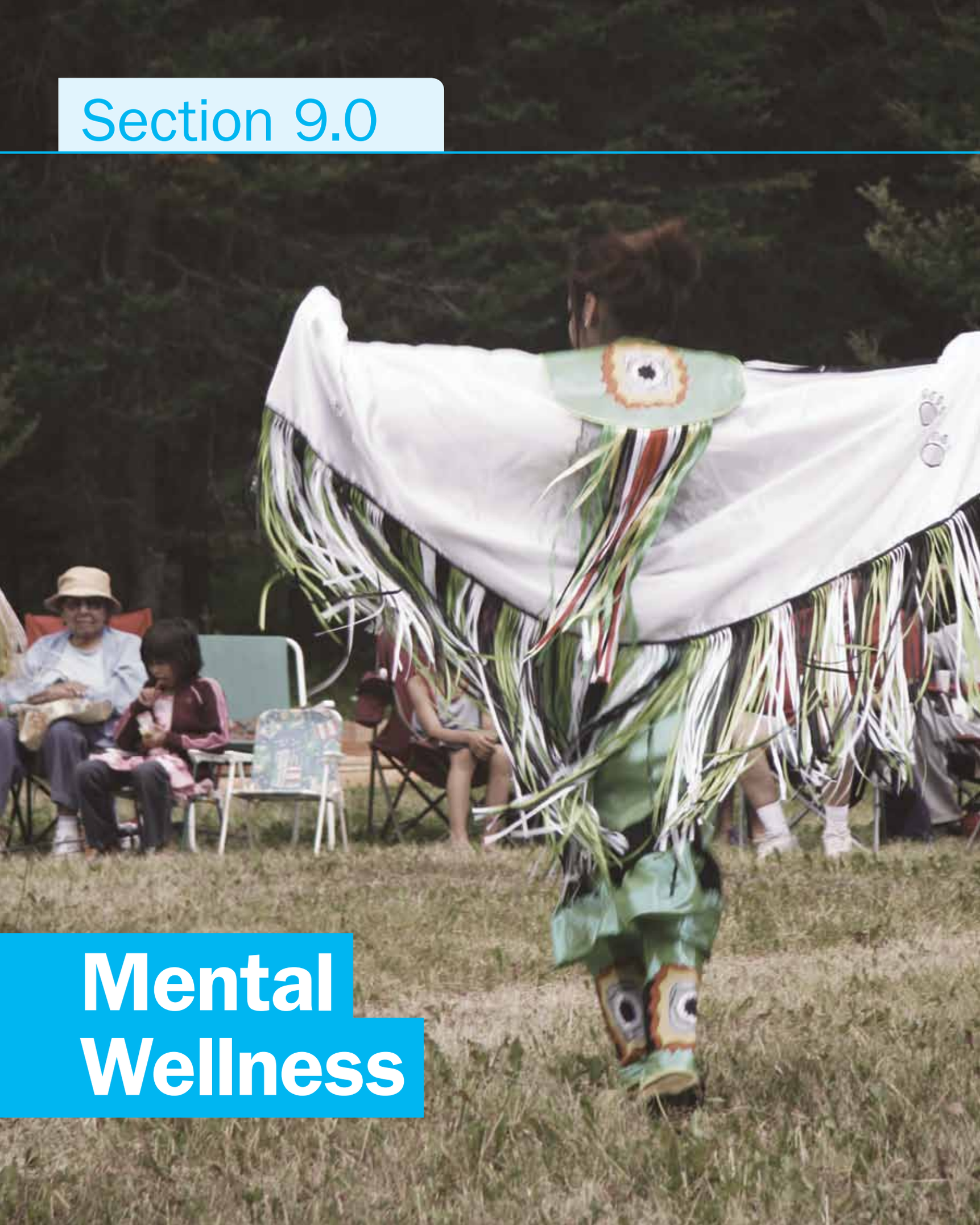
Almost sixteen per cent (15.7% [95% CI: 12.5-19.5%]) of adults who reported ever gambling reported betting more money than they could afford to lose. Just over eleven per cent (11.7% [95% CI: 9.0-15.0%]) of adults reported that gambling has caused financial problems for them or their family.

There was no difference by gender or adult age group in the percentage of adults who reported they had ever gambled, borrowed money to gamble, bet more money than they could afford to lose or that gambling had caused financial problems for them or their family.

Notes

1. Multiple responses permissable.
2. This percentage differs from the percentage presented in Figure 37 because one of the categories in Figure 37 (Less than once a month or never) includes those youth who reported having consumed alcohol in the past year, but who reported having never had more than five drinks on one occasion (which is too variable to report).
3. Sum of "Once or twice", "Monthly", "Weekly", and "Daily or almost daily".
4. Sum of "Once or twice", "Monthly", "Weekly", and "Daily or almost daily".
5. The question does not stipulate whether the individual is the perpetrator or the victim of the aggression.
6. The percentage of adults who responded "Don't know" is too small to report.
7. Defined in the RHS as betting or spending money on bingo, card games, lottery tickets, video lottery terminals (VLT), casinos or sports games.

Section 9.0



Mental Wellness

Mental wellness is a component of holistic health. First Nations have worked to promote mental wellness through traditional teachings, being culturally grounded and by addressing the historical and present-day traumas that can disrupt physical and mental wellness.

9.1 Mental Health

Youth

The majority of BC First Nations youth age 12-17 reported that they rate their mental health as excellent (25.9% [95% CI: 19.4-33.7%]), very good (34.4% [95% CI: 29.8-39.4%]) or good (31.3% [95% CI: 26.1-37.1%]). Just under eight per cent (7.9% [95% CI: 4.8-12.7%][E]) of youth reported that they would rate their mental health as fair. The number of youth respondents who indicated their mental health was poor was too small to report (see Figure 42).

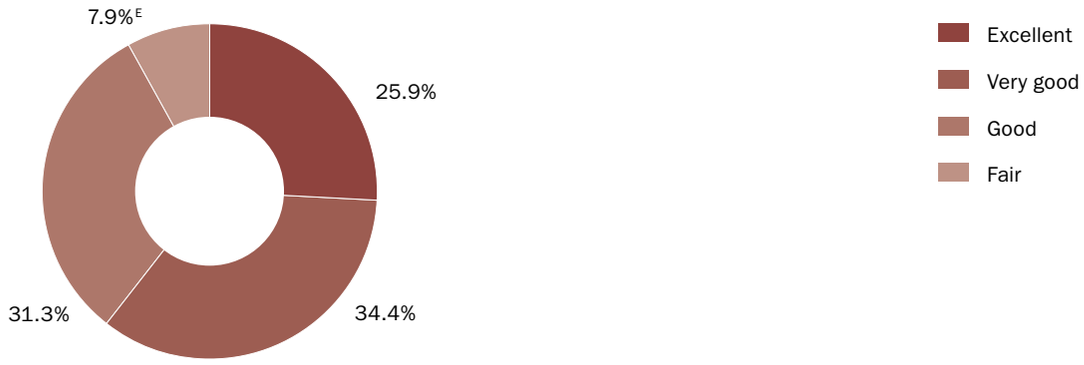


FIGURE 42: HOW WOULD YOU RATE YOUR MENTAL HEALTH? BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.
The category "Poor" is supressed because of the small number of responses.

There was no significant difference in the percentage of youth age 12-17 reporting "Excellent", "Very good" or "Good" mental health by gender (86.8% [95% CI: 75.8-93.2%] of female youth versus 96.2% [95% CI: 90.4-98.6%] of male youth).

According to the 2008-10 RHS, 21.4% of BC on-reserve First Nations youth reported that there was a time during the 12 months prior to the survey when they felt sad, blue or depressed for two weeks or more in a row (see Table 60). This is unchanged from the 2002-03 RHS (21.0%). Females were more likely than males to report feeling sad, blue or depressed for two weeks in a row in the 2002-03 RHS, however, there was no significant difference between genders in the 2008-10 RHS.

TABLE 60: FELT SAD, BLUE OR DEPRESSED FOR TWO WEEKS OR MORE IN A ROW IN THE 12 MONTHS PRIOR TO THE 2008-10 RHS BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS (N=437) AND 2002-03 RHS (N=555)

	2008-10 RHS Per Cent (95% CI)			**2002-03 RHS** Per Cent (95% CI)		
	Total	Male	Female	Total	Male	Female
Yes	**21.4% (16.3-27.5%)**	16.9% (11.2-24.8%)E	26.2% (18.4-35.9%)	**21.0% (17.2-25.5%)**	9.9% (6.2-15.2%)E	33.4% (26.3-41.4%)
No	**73.0% (67.0-78.4%)**	77.5% (69.4-83.0%)	68.3% (59.3-76.0%)	**67.6% (61.6-73.0%)**	78.7% (73.4-83.2%)	55.2% (46.0-64.1%)
Don't Know	**4.6% (3.0-7.0%)**	4.6% (2.8-7.5%)E	4.7% (2.6-8.3%)E	**9.7% (7.1-13.1%)**	11.1% (7.0-17.2%)E	8.0% (5.6-11.4%)E
Refused	F	F	F	F	F	F

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Adults

Among BC on-reserve First Nations adults age 18+, 46.5% were categorized as being at low risk of depression[1], 46.0% were categorized as being at medium risk of depression and 7.5% were categorized as being at high risk of depression (see Table 61). There was no difference in the percentage of adults categorized as being at high risk of depression across adult age groups. A higher percentage of adult women were categorized as being at high risk for depression than adult men.

TABLE 61: KESSLER DEPRESSION RISK SCORE BY GENDER – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Total Per Cent (95% CI)	Male Per Cent (95% CI)	Female Per Cent (95% CI)
Low risk of depression	**46.5% (41.3-51.7%)**	51.6% (44.2-59.0%)	41.1% (35.1-47.3%)
Medium risk of depression	**46.0% (41.6-50.5%)**	44.8% (37.6-52.2%)	47.3% (42.6-52.1%)
High risk of depression	**7.5% (5.4-10.1%)**	3.5% (2.1-5.9%)[E]	11.6% (8.2-16.0%)

E – High sampling variability (CV>0.16). Interpret with caution.

9.2 Suicidal Ideation and Attempts

Suicide is a serious issue that affects many BC First Nations individuals and communities.

Youth

Among BC on-reserve First Nations youth age 12-17, 9.9% (95% CI: 6.4-15.0%)[E] reported having had a close friend or family member commit suicide in the 12 months prior to the 2008-10 RHS.

Almost eleven per cent (10.9% [95% CI: 8.4-14.1%]) of BC on-reserve First Nations youth age 12-17 reported having ever thought about committing suicide in the 2008-10 RHS. More than three times as many female youth reported having ever thought about committing suicide than males in the 2008-10 RHS (17.3% [95% CI: 12.8-23.0%] versus 5.4% [95% CI: 2.9-9.9%][E], respectively) (see Table 62).

Over four per cent (4.6% [95% CI: 3.2-6.6%][E]) of BC First Nations youth age 12-17 reported ever having attempted suicide.

There has been no significant change in the percentage of BC on-reserve First Nations youth age 12-17 who reported ever thinking about committing suicide or reported ever having attempted suicide between the 2002-03 and 2008-10 RHS (see Table 62).

TABLE 62: SUICIDE ATTEMPTS OR IDEATION BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)			2002-03 RHS Per Cent (95% CI)		
	Total	Male	Female	Total	Male	Female
Ever thought of committing suicide	**10.9% (8.4-14.1%)**	5.4% (2.9-9.9%)[E]	17.3% (12.8-23.0%)	**18.8% (14.1-24.6%)**	9.5% (6.0-14.6%)[E]	29.7% (21.5-39.6%)
Ever attempted suicide	**4.6% (3.2-6.6%)[E]**	[F]	8.1% (5.4-11.9%)[E]	**8.3% (5.8-11.6%)[E]**	3.2% (1.7-6.0%)[E]	14.1% (9.8-19.8%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

According to the 2008-10 RHS, of those youth age 12-17 who reported ever having thought about committing suicide, 37.4% had thought of doing so within the year prior to the survey, 55.6% had thought of doing so when they were between 12-17 years of age (but more than a year prior to the survey), and the number who had thought of committing suicide when they were younger than 12 is too small to report (see Table 63)[2]. There was no significant difference by gender in the period of life youth had thought about committing suicide in either the 2008-10 or 2002-03 RHS.

Of those youth who reported ever attempting suicide, 64.6%[E] reported doing so within the year prior to the 2008-10 RHS, 29.0%[E] reported doing so when they were between the ages of 12-17 (but more than a year prior to the survey) and the number of youth who reported having attempted suicide when they were younger than 12 is too small to report[2]. Among female youth age 12-17 who reported ever attempting suicide, 68.5% (95% CI: 35.0-89.7%)[E] reported attempting suicide in the year prior to the 2008-10 RHS. The percentage of males who reported attempting suicide at any point in their lives is too small to report.

TABLE 63: PERIOD OF LIFE OF SUICIDE IDEATION OR ATTEMPTS BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)			2002-03 RHS Per Cent (95% CI)		
	Total	Male	Female	Total	Male	Female
Thought About Committing Suicide (N=47 in 2008-10 and N=98 in 2002-03)						
Within the year prior to the survey[2]	**37.4% (24.4-52.6%)[E]**	51.2% (25.8-76.0%)[E]	32.5% (18.1-51.2%)[E]	**29.7% (19.1-43.1%)[E]**	[F]	31.4% (17.2-50.2%)[E]
As an adolescent (Age 12-17)[2]	**55.6% (42.4-68.0%)**	42.4% (18.8-70.1%)[E]	60.3% (44.6-74.6%)	**49.6% (32.2-67.0%)[E]**	[F]	58.4% (38.2-76.1%)[E]
As a child (Age 0-11)[2]	[F]	[F]	[F]	[F]	[F]	[F]
Attempted Suicide (N=18 in 2008-10 and N=44 in 2002-03)						
Within the year prior to the survey[2]	**64.6% (37.8-84.5%)[E]**	[F]	68.5% (35.0-89.7%)[E]	**31.3% (19.2-46.7%)[E]**	47.2% (23.2-72.5%)[E]	27.1% (14.1-45.6%)[E]
As an adolescent (Age 12-17)[2]	**29.0% (14.5-49.5%)[E]**	[F]	[F]	**58.8% (43.4-72.7%)**	[F]	70.0% (51.7-83.6%)
As a child (Age 0-11)[2]	[F]	[F]	[F]	[F]	[F]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Adults

Among BC on-reserve First Nations adults age 18+, 10.2% (95% CI: 8.0-12.9%) reported having had a close friend or family member commit suicide in the 12 months prior to the survey.

Twenty-two per cent (22.0%) of adults age 18+ reported having ever thought about committing suicide (see Table 64). Over fourteen per cent (14.5%) of adults reported ever attempting suicide. There was no significant difference between genders in the percentage of adults who reported ever having thought about or attempted suicide in either the 2002-03 or 2008-10 RHS. There has been no significant change in the percentage of BC First Nations adults age 18+ who reported thinking about committing suicide or ever attempting suicide between the 2002-03 RHS and 2008-10 RHS.

TABLE 64: SUICIDE ATTEMPTS OR IDEATION BY GENDER– BC FIRST NATIONS ON-RESERVE ADULTS (AGE 18+), 2008-10 AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)			2002-03 RHS Per Cent (95% CI)		
	Total	Male	Female	Total	Male	Female
Ever thought of committing suicide	**22.0% (18.7-25.6%)**	19.7% (15.9-24.2%)	24.3% (19.5-29.9%)	**31.7% (25.1-39.1%)**	28.3% (20.9-37.1%)	35.3% (27.2-44.4%)
Ever attempted suicide	**14.5% (11.4-18.2%)**	13.0% (10.0-16.7%)	16.1% (11.8-21.7%)	**17.4% (13.7-21.7%)**	16.5% (10.8-24.4%)[E]	18.4% (13.9-23.9%)

E – High sampling variability (CV>0.16). Interpret with caution.

Just over two per cent of adults who reported receiving an injury in the year prior to the 2008-10 RHS (2.3% [95% CI: 1.2-4.3%][E]) reported that the cause of their injury was a suicide attempt or self-inflicted injury (see Section 10.6 Injuries).

According to the 2008-10 RHS, of those adults age 18+ who reported ever thinking about committing suicide, 22.0% had thought of doing so in the year prior to the survey, 50.8% had thought of committing suicide when they were an adult age 18+ (but more than a year prior to the survey), 41.3% when they were an adolescent age 12-17 and 4.2% as a child age 0-11 (see Table 65). There have been no significant changes in the percentage of adults reporting thinking about committing suicide during any period of their lives since the 2002-03 RHS. There were no differences by gender in the percentage of men or women who reported ever having thought about committing suicide during any period of their lives in either the 2008-10 or 2002-03 RHS.

Of those adults who reported having ever attempted suicide, 9.9%[E] reported doing so in the year prior to the 2008-10 RHS, 52.9% reported attempting suicide as an adult (over 18 years of age but more than a year prior to the survey), 45.3% reported attempting suicide as an adolescent between the ages of 12-17 and 4.8%[E] reported attempting suicide as a child under the age of 12. There was no difference in the percentage of men or women who reported attempting suicide at any point in their lives in the 2008-10 RHS. A higher percentages of adults in the 2008-10 RHS reported having attempted suicide as an adult (but more than a year prior to the survey) than in the 2002-03 RHS (52.9% versus 28.2%, respectively) and as an adolescent (45.3% versus 22.3%[E], respectively).

TABLE 65: PERIOD OF LIFE OF SUICIDE IDEATION OR ATTEMPTS BY GENDER – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)			2002-03 RHS Per Cent (95% CI)		
	Total	Male	Female	Total	Male	Female
Thought About Committing Suicide (N=279 in 2008-10 RHS and N=225 in 2002-03 RHS)						
Within the year prior to the survey	**22.0% (17.4-27.5%)**	19.2% (13.0-27.5%)[E]	24.5% (18.9-31.2%)	**13.9% (9.8-19.4%)**	13.3% (6.7-24.7%)[E]	14.5% (9.7-21.0%)[E]
As an adult (18+)	**50.8% (43.4-58.1%)**	54.4% (43.1-65.3%)	47.6% (40.3-55.0%)	**49.9% (41.0-58.9%)**	55.8% (43.3-67.5%)	44.9% (34.5-55.9%)
As an adolescent (Age 12-17)	**41.3% (34.6-48.3%)**	35.9% (27.0-45.9%)	45.9% (38.0-54.1%)	**45.4% (36.6-54.5%)**	39.9% (28.7-52.3%)	50.1% (36.9-63.3%)
As a child (0-11)	**4.2% (2.3-7.5%)[E]**	[F]	[F]	**7.2% (4.1-12.4%)[E]**	[F]	[F]
Attempted Suicide (N=196 in 2008-10 RHS and N=218 in 2002-03)						
Within the year prior to the survey	**9.9% (6.3-15.1%)[E]**	9.8% (5.1-17.8%)[E]	9.9% (5.4-17.5%)[E]	[F]	[F]	[F]
As an adult (18+)	**52.9% (40.8-64.7%)**	55.1% (42.2-67.4%)	51.0% (34.7-67.1%)	**28.2% (20.2-37.9%)**	41.2% (26.3-57.9%)[E]	16.6% (11.3-23.8%)[E]
As an adolescent (Age 12-17)	**45.3% (35.2-55.9%)**	45.3% (33.6-57.6%)	45.4% (32.3-59.2%)	**22.3% (15.4-31.2%)[E]**	11.8% (6.2-21.4%)[E]	31.6% (19.9-46.3%)[E]
As a child (0-11)	**4.8% (2.7-8.1%)[E]**	8.2% (4.4-14.9%)[E]	[F]	[F]	[F]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

9.3 Personal Supports

Youth

The majority of BC on-reserve First Nations youth age 12-17 reported they felt loved a lot (62.6% [95% CI: 55.9-68.9%]), didn't feel lonely at all (65.8% [95% CI: 59.0-72.0%]), and nearly half reported not feeling stressed at all (44.7% [95% CI: 38.3-51.2%]) (see Figure 43). A small percentage of youth reported feeling moderately, quite a bit, or a lot of loneliness (7.6% [95% CI: 5.3-10.8%][E]) or stress (18.6% [95% CI: 13.4-25.1%]). There was no significant difference in reported feelings of love, loneliness or stress among youth by gender.

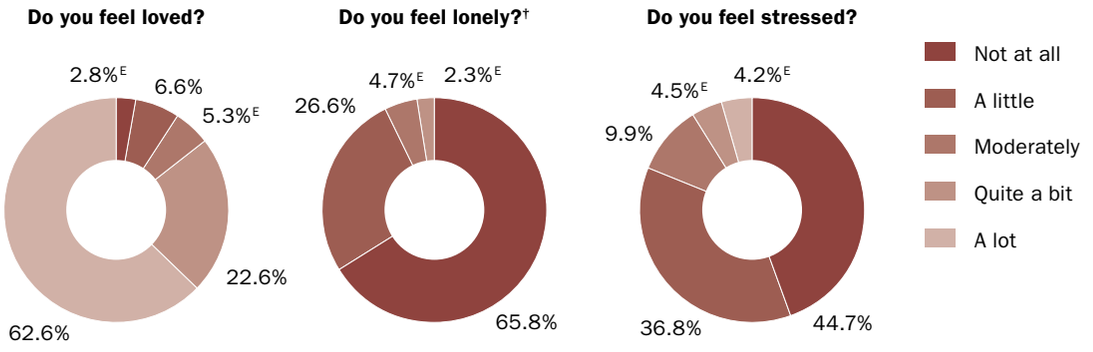


FIGURE 43: DO YOU FEEL LOVED, LONELY OR STRESSED? BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

E – High sampling variability (CV>0.16). Interpret with caution.
† The category "A lot" is supressed because of small numbers.

The highest percentage of BC on-reserve First Nations youth reported that they would turn to friends as their source of emotional or mental health support (59.0%), followed by parents (47.6%), other family members (41.9%) and counsellors (18.6%) (see Table 66). Female youth were more likely to report using friends and other family members as a source of emotional or mental health support than male youth.

TABLE 66: USE OF EMOTIONAL OR MENTAL HEALTH SUPPORT RESOURCES BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

	Total Per Cent (95% CI)	**Male** Per Cent (95% CI)	**Female** Per Cent (95% CI)
Friend	**59.0% (52.8-64.9%)**	43.6% (34.7-53.0%)	75.7% (67.5-82.4%)
Parents	**47.6% (41.5-53.9%)**	42.3% (33.7-51.4%)	53.6% (43.6-63.4%)
Other family members	**41.9% (35.4-48.7%)**	28.4% (21.0-37.1%)	56.8% (47.5-65.6%)
Counsellor	**18.6% (13.9-24.4%)**	16.5% (11.5-23.1%)E	20.9% (13.9-30.0%)E
Social worker	**5.0% (2.8-8.6%)E**	F	5.4% (2.7-10.5%)E
Family doctor	**4.8% (2.8-8.0%)E**	F	F
Traditional healer	F	F	F

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Table 67 outlines who BC on-reserve First Nations youth age 12-17 reported they would turn to in the event of specific kinds of problems or issues in their lives. Overall, the greatest percentage of youth cited their parents or guardians as the individuals they would turn to for most problems (except relationship problems with their boyfriend or girlfriend, for which youth would be more likely to turn to friends their own age). Even for medical issues, such as sexually transmitted infections (STIs), birth control or pregnancy, youth reported first turning to their parents or guardians rather than to medical professionals such as doctors, nurses or traditional healers. Traditional healers were not cited by sufficient numbers of BC on-reserve First Nations youth to report being a support for youth for any problem. Similarly, principals, teachers or school counsellors were not a first source of support for most problems among youth. Of concern are the percentages of First Nations youth who reported they would not turn to anyone in the event of a problem as serious and complex as drugs or alcohol, depression, sexual or physical assault, STIs or pregnancy. Male youth were consistently more likely to report confiding in no one for all problems than female youth.

Crisis lines were not included in the list of resources asked in the youth questionnaire.

> "I think it's positive that almost 40% [of youth] would turn to their parents for STDs, birth control, pregnancy – almost 50% for sexual or physical assault – you know those are all real hard subjects to talk about and that they'd go to their parents indicates at least that there's a connection to family there."

> "It would be a phone issue – nobody uses phones anymore, everybody texts, FaceBook… if you could text a crisis line maybe – because they don't have minutes for voice usage… I wonder if there is such a thing as text a crisis?"

> "People might be more willing to express their emotions and vulnerability to something like an internet site than they would say, phone up their parents or go talk to someone in the health centre."
> ***RHS Steering Committee member***

TABLE 67: WHO WOULD YOU FIRST TURN TO FOR HELP FOR PROBLEMS? – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

	Per Cent (95% CI)										
	Family Problems	Relationship With Boyfriend or Girlfriend	Financial Problems	Drugs or Alcohol	Anger or Feeling out of Control	Depression	Problems with Friends	Sexual or Physical Assault	STDs[3]	Birth Control	Pregnancy
Parent/ Guardian	41.6% (35.6-47.7%)	24.7% (19.6-30.6%)	53.4% (46.7-60.0%)	40.3% (34.7-46.1%)	37.3% (30.9-44.2%)	39.7% (32.5-47.3%)	42.0% (34.3-50.2%)	47.5% (40.8-54.3%)	39.2% (32.7-46.1%)	39.3% (33.5-45.4%)[E]	37.1% (32.0-42.6%)
Other family member	21.1% (16.0-27.3%)	8.4% (6.0-11.5%)	4.9% (3.0-7.7%)[E]	12.4% (7.7-19.4%)	8.5% (5.8-12.4%)[E]	6.7% (4.6-9.8%)[E]	13.8% (10.6-17.8%)	5.8% (3.8-8.6%)[E]	4.5% (3.1-6.5%)[E]	3.6% (2.2-6.0%)[E]	3.6% (2.3-5.6%)[E]
Friends my age	21.5% (17.2-26.5%)	39.4% (33.5-45.7%)	[F]	9.9% (6.4-14.9%)	22.6% (18.8-26.8%)	16.6% (12.5-21.7%)	19.4% (15.6-24.0%)	7.5% (4.2-13.0%)[E]	3.4% (2.1-5.7%)[E]	[F]	5.7% (3.0-10.7%)[E]
Adult friend	5.2% (3.4-7.8%)[E]	4.0% (2.5-6.2%)[E]	2.0% (1.2-3.4%)[E]	4.4% (3.1-6.1%)	[F]	4.1% (2.4-6.9%)[E]	3.3% (1.9-5.5%)[E]	3.6% (2.4-5.3%)[E]	[F]	[F]	3.5% (1.9-6.2%)[E]
Traditional healer	[F]	[F]	[F]	[F]	[F]	[F]	[F]	[F]	[F]	[F]	[F]
Doctor/ Nurse	[F]	[F]	[F]	[F]	[F]	[F]	[F]	[F]	15.0% (9.6-22.6%)[E]	13.0% (9.3-17.8%)	10.3% (6.8-15.3%)[E]
Principal/ Teacher/ School counsellor	[F]	[F]	[F]	[F]	3.2% (1.6-6.3%)[E]	2.2% (1.2-4.1%)[E]	[F]	[F]	[F]	[F]	[F]
No one	3.9% (2.6-5.8%)[E]	11.9% (8.1-17.1%)[E]	19.9% (15.3-25.6%)	9.8% (6.7-14.2%)[E]	6.8% (4.5-10.3%)[E]	7.8% (5.4-11.0%)[E]	6.3% (3.7-10.5%)[E]	9.0% (5.6-14.4%)[E]	10.6% (7.3-15.2%)[E]	9.5% (6.6-13.5%)[E]	9.1% (6.1-13.3%)[E]
Don't know	3.3% (2.1-5.1%)[E]	6.1% (4.1-9.0%)[E]	11.3% (7.8-16.0%)[E]	8.6% (5.2-13.8%)[E]	10.1% (6.8-14.9%)[E]	7.0% (4.6-10.5%)[E]	2.8% (1.5-5.5%)[E]	7.3% (4.8-11.1%)[E]	8.6% (5.7-12.7%)[E]	8.1% (5.0-12.6%)[E]	8.0% (5.3-11.8%)[E]
Refused	[F]	4.6% (2.8-7.5%)[E]	6.4% (3.9-10.2%)[E]	11.4% (7.8-16.3%)	6.8% (3.5-13.1%)[E]	10.4% (6.4-16.5%)[E]	[F]	15.1% (10.6-21.1%)[E]	16.3% (12.0-21.8%)	18.6% (13.8-24.5%)	22.2% (17.4-27.8%)

E – High sampling variability (CV>0.16). Interpret with caution.

F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Adults

Among BC on-reserve First Nations adults age 18+, immediate family members were identified by the highest percentage of adults as being a source of emotional or mental health support (63.7%), followed by friends (59.5%), other family members (53.9%), and family doctors (28.4%) (see Table 68). Female adults were more likely to report using their friends and family doctor as a source of emotional or mental health support than men.

TABLE 68: USE OF EMOTIONAL OR MENTAL HEALTH SUPPORT RESOURCES BY GENDER – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Total Per Cent (95% CI)	**Male** Per Cent (95% CI)	**Female** Per Cent (95% CI)
Immediate family member	**63.7% (59.6-67.7%)**	58.9% (53.3-64.3%)	68.8% (63.6-73.6%)
Friend	**59.5% (54.3-64.5%)**	52.6% (45.3-59.8%)	66.6% (62.3-70.6%)
Other family member	**53.9% (49.0-58.8%)**	49.8% (43.6-56.1%)	58.2% (52.9-63.2%)
Family doctor	**28.4% (24.7-32.4%)**	21.9% (17.2-27.3%)	35.2% (30.8-39.8%)
Counsellor	**19.9% (16.4-24.0%)**	17.6% (13.3-23.0%)	22.3% (18.6-26.6%)
Nurse	**14.2% (10.6-18.8%)**	13.2% (8.8-19.4%)[E]	15.3% (11.9-19.5%)
Traditional healer	**13.3% (10.6-16.5%)**	14.9% (11.2-19.5%)	11.6% (8.8-15.2%)
Community Health Representative	**12.3% (9.1-16.4%)**	10.2% (6.6-15.5%)[E]	14.5% (10.8-19.2%)
Social worker	**10.5% (8.1-13.4%)**	8.2% (5.8-11.5%)[E]	12.9% (9.7-16.9%)
Psychiatrist	**6.1% (4.3-8.6%)[E]**	5.6% (3.3-9.4%)[E]	6.6% (4.6-9.3%)[E]
Psychologist	**4.7% (3.1-7.0%)[E]**	4.2% (2.3-7.6%)[E]	5.2% (3.6-7.3%)[E]
Crisis line worker	**3.2% (2.1-4.8%)[E]**	2.6% (1.3-5.1%)[E]	3.7% (2.4-5.9%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

There were no changes between the 2002-03 RHS and the 2008-10 RHS in the percentages of adults reporting the use of different emotional or mental health supports.

Table 69 outlines the percentage of emotional or mental health support resources used by BC on-reserve First Nations adults by age group. Elders age 55+ were less likely to report using a friend as an emotional or mental health support and more likely to use a family doctor as an emotional or mental health support than adults age 18-54. This may be because Elders are more likely to come in contact with clinicians to discuss other health topics.

TABLE 69: USE OF EMOTIONAL OR MENTAL HEALTH SUPPORT RESOURCES BY AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Adults (Age 18-54) Per Cent (95% CI)	Elders (Age 55+) Per Cent (95% CI)
Immediate family member	65.0% (60.6-69.2%)	59.6% (53.3-65.7%)
Friend	62.9% (57.9-67.7%)	48.6% (41.3-56.0%)
Other family member	56.4% (51.4-61.2%)	46.2% (39.7-52.8%)
Family doctor	24.8% (20.6-29.5%)	39.8% (34.5-45.3%)
Counsellor	21.5% (17.5-26.2%)	14.8% (11.5-19.0%)
Nurse	12.9% (9.2-17.7%)	18.6% (13.8-24.6%)
Traditional healer	13.6% (10.6-17.1%)	12.4% (9.2-16.4%)
Community Health Representative	11.3% (7.9-15.9%)[E]	15.7% (11.4-21.1%)
Social worker	10.3% (7.7-13.6%)	11.1% (8.0-15.2%)
Psychiatrist	6.1% (4.1-9.1%)[E]	6.0% (4.0-9.1%)[E]
Psychologist	4.4% (2.6-7.45%)[E]	5.5% (3.5-8.4%)[E]
Crisis line worker	2.7% (1.6-4.6%)[E]	4.6% (2.7-7.6%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

9.4 Self-Esteem

In the 2008-10 RHS, 94.8% (95% CI: 91.8-96.8%) of BC on-reserve First Nations youth age 12-17 were categorized as having good self-esteem[4]. There was no difference in the percentage of youth who were categorized as having good self-esteem by gender (95.3% [95% CI: 91.7-97.4%] of male youth versus 94.4% [95% CI: 91.7-97.4%] of female youth).

9.5 Individual Self-Determination

Feelings of perceived control over one's life are an important determinant of health.

The RHS measures self-determination (or "mastery") through a series of questions[5] that estimates the amount of control each person feels they have over their lives.

Youth

According to the 2008-10 RHS, 45.2% (95% CI: 39.0-51.6%) of BC on-reserve First Nations youth were categorized as having a high or very high sense of control over their lives. This is unchanged since the 2002-03 RHS, which found that 40.3% (95% CI: 35.1-45.7%) of youth were categorized as having a high or very high sense of control over their lives. Sense of mastery between males and females was similar in both the 2002-03 RHS (41.2% [95% CI: 34.0-48.8%] versus 39.3% [95% CI: 32.2-46.8%], respectively) and the 2008-10 RHS (45.4% [95% CI: 36.9-54.2%] versus 45.0% [95% CI: 34.8-55.6%], respectively).

Adults

Among BC on-reserve First Nations adults age 18+, 55.3% (95% CI: 51.0-59.6%) were categorized as having a high or very high sense of control over their lives. This is unchanged from the 2002-03 RHS which found that 55.0% (95% CI: 49.7-60.2%) of adults were categorized as having a high or very high sense of control over their lives. There was no difference in the percentage of adults who were categorized as having a high or very high sense of control over their lives by gender (58.2% [95% CI: 52.0-64.2%] of men versus 52.3% [95% CI: 47.4-57.2%] of women) or by adult age group (50.8% [95% CI: 44.1-57.4%] of Elders age 55+ versus 56.8% [95% CI: 52.1-61.4%] of adults age 18-54).

> "I don't know how I would answer those questions… How much control do I have over the things that happen in my life? You either get too philosophical about them… or also spirituality has a lot of things to do with it… a lot of people they say 'I may not be able to affect the things that I have but I trust in whatever's out there and go with the flow' it doesn't mean that you don't feel empowered. It just means you're open to what comes in your life."
>
> ***RHS Steering Committee member***

Notes

1. Depression risk is based on the Kessler Psychological Distress Scale (K10). The Kessler Symptom Scale consists of ten questions and answers that produce a composite score. A score of 0 to 15 indicates low risk of depression, a score of 16 to 30 indicates medium risk of depression and a score of 30 or higher indicates high risk of depression. See http://www.hcp.med.harvard.edu/ncs/k6_scales.php for more details. The Kessler Depression risk score was not included in the 2002-03 RHS survey.
2. More than one age group could be selected.
3. "Sexually transmitted infections (STIs)" is now the commonly used term rather than "Sexually Transmitted Diseases (STDs)".
4. Self-esteem is measured using four of the eight items from the General Self Scale of the Self-Description Questionnaire (Marsh, 1983). Survey participants reported their agreement with the items on a scale ranging from 0 ("Strongly disagree") to 4 ("Strongly agree"). An individual who, on average, agrees or strongly agrees with these four statements is said to have good self-esteem.
5. Including: 1) I can solve the problems that I have; 2) No one pushes me around in life; 3) I have control over the things that happen to me; 4) I can do just about anything I really set my mind to; 5) I often feel helpless in dealing with the problems of life; 6) What happens to me in the future mostly depends on me; 7) There is little I can do to change many of the important things in my life.

Section 10.0

Health and Health Care Services

This section describes results that are based on self-reported data. These results may be different than data from other sources, such as the Provincial Health Officer's Annual Report, which is based on administrative data from hospital and physician billing records.

10.1 Self-Declared Health Status

Among non-Aboriginal BC residents age 12+, 60.1% (95% CI: 58.8-61.5%) reported that they had excellent or very good health in the 2009-10 CCHS (Statistics Canada, 2009-10). In comparison, 43.2% (95% CI: 39.8-46.6%) on BC on-reserve First Nation individuals age 12+ reported that they had very good or excellent health in the 2008-10 RHS. There has been no change in the percentage of BC on-reserve First Nations age 12+ who reported excellent or very good health since the 2002-03 RHS (45.1% [95% CI: 40.3-50.0%]).

The percentage of caregivers reporting that their child had excellent or very good health rose between the 2002-03 RHS and 2008-10 RHS from 69.2% to 86.5% (see Table 70). There were no differences between the 2002-03 and 2008-10 RHS in the percentage of youth, adults age 18-54 or Elders reporting excellent or very good health.

TABLE 70: EXCELLENT OR VERY GOOD HEALTH BY AGE GROUP, 2008-10 RHS AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)	**2002-03 RHS** Per Cent (95% CI)
Children (Age 0-11)[1]	86.5% (83.0-89.3%)	69.2% (63.6-74.3%)
Youth (Age 12-17)	67.1% (61.3-72.4%)	61.2% (54.1-67.8%)
Adults (Age 18+)	39.5% (35.5-43.6%)	42.4% (36.9-48.0%)
Adults (Age 18-54)	45.6% (40.3-51.0%)	45.0% (39.6-50.5%)
Elders (Age 55+)	19.9% (15.7-24.7%)	30.5% (19.7-43.9%)[E]
Total youth and adults (Age 12+)	43.2% (39.8-46.6%)	45.1% (40.3-50.0%)

E – High sampling variability (CV>0.16). Interpret with caution.

Figure 44 depicts self-reported health status by gender and by age group. The majority of both male and female children were reported by their caregivers to be in excellent or very good health in the 2008-10 RHS. The majority of both male and female youth self-reported excellent or very good health, although the percentage of female youth with excellent or very good health is lower than for female children. The percentage of adults who self-reported excellent or very good health is lower among both men and women than among male and female youth and children. A higher percentage of male and female adults self-reported fair or poor health than male and female youth. There were no gender differences in reported health status among children, youth or adults.

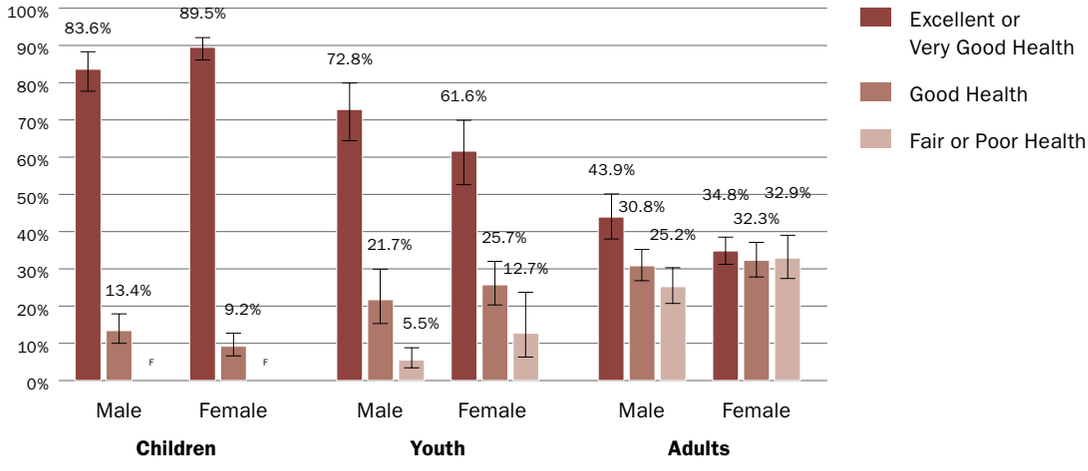


FIGURE 44: SELF-REPORTED HEALTH STATUS BY GENDER – ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

Among BC First Nations adults age 18+ who self-reported excellent, very good or good health, 77.4% attribute their excellent, very good or good health to a good diet (low fat, fruits and vegetables etc)[1], 70.4% to being happy and content, 69.6% to regular exercise or being active in sports, 68.7% to good sleep or proper rest, 67.3% to good social supports (family, friends or co-workers), 57.9% to being in balance physically, emotionally, mentally and/or spiritually, and 52.4% to reduced stress. There were no differences in the percentage of men and women attributing their good health to different factors (see Table 71).

TABLE 71: WHAT THINGS MAKE YOU HEALTHY[2]? BY GENDER – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+) WHO SELF-REPORTED EXCELLENT, VERY GOOD OR GOOD HEALTH, 2008-10 RHS (N=514)

	Total Per Cent (95% CI)	Male Per Cent (95% CI)	Female Per Cent (95% CI)
Good diet (low fat, fruits and vegetables, etc.)[1]	**77.4% (71.5-82.4%)**	73.5% (64.8-80.6%)	82.7% (76.0-87.8%)
Happy, content	**70.4% (63.2-76.8%)**	68.2% (59.8-75.5%)	73.5% (64.0-81.2%)
Regular exercise or active in sports	**69.6% (63.6-75.0%)**	72.9% (64.0-80.3%)	65.0% (57.6-71.7%)
Good sleep, proper rest	**68.7% (60.5-75.8%)**	63.5% (52.4-73.3%)	75.6% (68.5-81.6%)
Good social supports (family, friends or co-workers)	**67.3% (58.1-75.3%)**	66.2% (56.3-74.9%)	68.7% (58.4-77.5%)
Being in balance physically, emotionally, mentally or spiritually	**57.9% (50.5-65.0%)**	57.4% (48.4-66.0%)	58.5% (49.7-66.9%)
Reduced stress	**52.4% (45.8-59.0%)**	47.8% (38.8-57.0%)	58.6% (51.9-65.0%)
Other	**2.5% (1.4-4.6%)**	F	F

F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Among BC on-reserve First Nations youth who self-reported excellent, very good or good health, 70.1% attributed their good health to regular exercise or activity in sports, 58.5% to good diet[1], 58.0% to good sleep or rest, 54.1% to being happy or content, 46.6% to good social support, 32.1% to being in balance physically, emotionally, mentally and spiritually, and 28.2% to reduced stress (see Table 72). Female youth were more likely to report that their excellent, very good or good health was attributable to being happy or content than male youth (69.9% versus 41.8%, respectively). There were no other differences by gender.

TABLE 72: WHAT THINGS MAKE YOU HEALTHY[2]? BY GENDER – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17) WHO SELF-REPORTED EXCELLENT, VERY GOOD OR GOOD HEALTH, 2008-10 RHS (N=284)

	Total Per Cent (95% CI)	**Male** Per Cent (95% CI)	**Female** Per Cent (95% CI)
Regular exercise or active in sports	**70.1% (62.8-76.5%)**	71.4% (60.3-80.4%)	68.4% (58.1-77.2%)
Good diet (low fat, fruits and vegetables, etc.)[1]	**58.5% (49.7-66.8%)**	55.3% (44.6-65.6%)	62.6% (52.9-71.4%)
Good sleep, proper rest	**58.0% (49.1-66.5%)**	53.4% (41.9-64.7%)	63.9% (53.8-73.0%)
Happy, content	**54.1% (46.6-61.5%)**	41.8% (32.3-52.0%)	69.9% (61.0-77.5%)
Good social supports (family, friends or co-workers)	**46.6% (37.5-55.9%)**	42.3% (32.3-52.9%)	52.1% (40.1-63.9%)
Being in balance physically, emotionally, mentally or spiritually	**32.1% (25.5-39.5%)**	29.5% (20.3-40.8%)[E]	35.4% (25.5-46.7%)
Reduced stress	**28.2% (20.3-37.7%)**	25.6% (15.4-39.4%)[E]	31.5% (22.1-42.8%)
Don't know	**3.4% (2.3-5.1%)[E]**	5.7% (3.9-8.3%)[E]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Over forty-two per cent (42.4% [95% CI: 35.6-49.6%]) of BC on-reserve First Nations youth age 12-17 reported that their health is about the same as one year before the survey. Fifty-one per cent stated that their health is much better or somewhat better (25.9% [95% CI: 21.3-31.2%] and 25.1% [95% CI: 19.9-31.1%], respectively) than one year before the survey. Just over six per cent (6.4% [95% CI: 3.56-11.7%][E]) reported that their health is somewhat worse than one year before the survey. The number of respondents reporting that their health is much worse than one year before the survey is too small to report.

What creates good health?

A gathering of traditional healers organized by the *interim First Nations Health Authority* in 2011 discussed what has been working to create good health and healing, and what factors are missing for people that creates ill health.

The factors identified as working to create good health and healing include:

- **Culture and traditions:** practising our ceremonies, youth and Elder involvement, traditional foods and gardens, traditional medicines
- **Education:** for both Aboriginal communities and non-Aboriginal organizations; bridging traditional and contemporary cultures; medical practitioners are starting to listen
- **Youth and Elders**: children with more knowledge; better role models; collaboration between youth and Elders; Elder wisdom; adaptation, not assimilation

10.2 Disability and Home Care

Access to home care and disability services can be difficult in both rural and urban settings. Having access to competent and culturally sensitive health care workers is a concern for First Nations across the province.

Activity Limitations

Overall, 11.8% (95% CI: 9.5-14.6%) of BC on-reserve First Nations adults age 18+ reported that they were often[3] limited in the type or amount of activity they can do at home, work or elsewhere because of a physical or mental condition, or a health problem. Another 22.3% (95% CI: 19.4-25.5%) of adults reported that they were sometimes limited in the type or amount of activity they can do because of a physical or mental condition or health problem. Almost sixty-six per cent (65.9% [95% CI: 61.5-69.9%]) of adults reported that they were not limited in the type or amount of activity they can do because of a physical or mental condition or health problem.

There was no difference in the percentage of adults who reported often being limited in their activities by gender (14.3% [95% CI: 10.9-18.5%] of women versus 9.5% [95% CI: 7.1-12.5%] of men). The percentage of adults who reported being often or sometimes limited in their activities was higher among older age groups. Among Elders age 55+, 53.6% (95% CI: 46.5-60.6%) of adults reported being often or sometimes limited in their activities, compared to 14.5% (95% CI: 9.8-21.0%)[E] of adults age 18-24, 24.5% (95% CI: 18.5-31.6%) of adults age 25-39 and 39.3% (95% CI: 32.7-46.3%) of adults age 40-54 (see Figure 45).

- **Resources:** More Aboriginal-specific resources; language and culture programs; traditional food; treatment centres; clinics
- **Healing:** healing ourselves; resolving issues; better understanding; spiritual awakening; resilience; responsibility.

The things that were identified as missing for people that is creating ill health include:

- **Culture and traditions:** knowledge/awareness of histories and culture; disconnect between urban and rural First Nations; lost culture/identity/spirituality; lack of respect for traditional knowledge and practices
- **Loss:** lack of trust, unity; lack of family values; loss of trust and safety (in self and surroundings); loss of laughter; loss of leadership and teachings
- **Knowledge:** loss of knowledge; loss of protocol; teachings; impact of residential schools;
- **Resources:** basic needs not being met (food and shelter); lack of medical safety (not understanding terminology); lack of money for food (special diets are expensive); lack of hunters and fishers; loss of our traditional land (iFNHA, 2011)

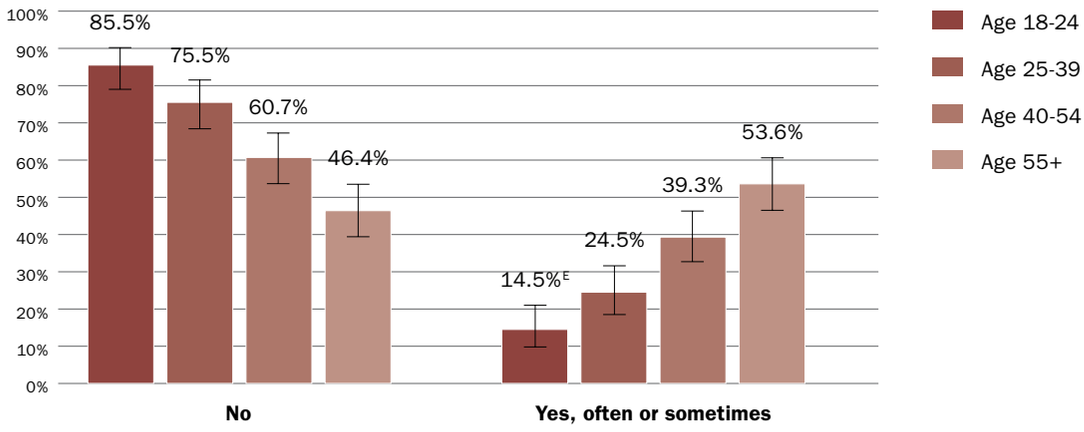
The British Columbia Aboriginal Network on Disability Society (BCANDS)

The BCANDS is a not-for-profit organization dedicated to improving the lives of Aboriginal people living with a disability in BC through multi-disciplinary disability case management services and provision of health resources and information.

BCANDS provides a vast array of services to Aboriginal persons living with a disability, either on- or off-reserve. Staff work with each individual to understand their needs and goals and to work to identify solutions and ways of meeting those goals through the resources available within BCANDS or through a host of other external service providers.

BCANDS assists and advocates for their clients to obtain a variety of health and disability services and they work with individuals through correctional facilities to provide services such as housing, employment services and addiction counselling.

FIGURE 45: LIMITED IN THE KINDS OR AMOUNT OF ACTIVITY YOU CAN DO AT HOME, WORK OR ELSEWHERE BECAUSE OF A PHYSICAL OR MENTAL CONDITION OR HEALTH PROBLEM BY AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=1,355)



E – High sampling variability (CV>0.16). Interpret with caution.

Health Utility Index

The Health Utility Index Mark 3 (HUI3) is a measure of overall functional health, based on eight dimensions of functioning (vision, hearing, speech, mobility, dexterity, feelings, cognition and pain). An HUI3 Multi-Attribute score was calculated based on each individual's responses to 15 questions capturing their level of functioning in these eight dimensions. An HUI3 Multi-Attribute score of 0.8 to 1.0 is considered to indicate that an individual has good to full functional health and scores below 0.8 are considered to indicate moderate to poor functional health.

Overall, 53.0% (95% CI: 47.7-58.2%) of BC on-reserve First Nations adults were categorized as having good to full functional health (an HUI3 score of between 0.8 and 1.0). There was no significant differences in the percentage of adults who were categorized as having good to full functional health by age group except for a smaller percentage of Elders age 55+ were categorized as having good to full functional health than adults age 18-24 (41.0% versus 61.5%, respectively) (see Table 73). There were no significant differences by gender in any age group in terms of the percentage of men and women who were categorized as having good to full functional health.

TABLE 73: GOOD TO FULL FUNCTIONAL HEALTH AS DERIVED FROM THE HEALTH UTILITY INDEX MULTI-ATTRIBUTE SCORE BY GENDER AND AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Good to Full Functional Health Per Cent (95% CI)		
	Total	Male	Female
Adults (Age 18-24)	**61.5% (53.7-68.7%)**	58.1% (43.6-71.3%)	64.7% (54.8-73.4%)
Adults (Age 25-39)	**60.3% (51.5-68.4%)**	68.5% (57.2-78.0%)	53.1% (42.7-63.3%)
Adults (Age 40-54)	**50.5% (43.6-57.4%)**	57.3% (48.5-65.7%)	41.4% (32.7-50.6%)
Elders (Age 55+)	**41.0% (32.9-49.7%)**	48.7% (39.2-58.4%)	33.6% (24.7-43.8%)
Total	**53.0% (47.7-58.2%)**	58.2% (51.8-64.4%)	47.6% (42.3-52.9%)

10.3 Health Conditions

A positive social environment, adequate income, food security, good access to primary care, healthy lifestyle choices and positive mental and spiritual health are important for preventing chronic conditions. For those already living with chronic conditions, however, treatment, rehabilitation, patient support and access to appropriate services are important for managing these conditions and maintaining good quality of life.

Children

Among BC on-reserve First Nations children, the top five health conditions most commonly reported by their caregivers were allergies (17.1%), followed by asthma (11.6%), dermatitis (8.2%)[E], speech/language difficulties (5.9%)[E], and chronic ear infections or ear problems (5.5%)[E] (see Table 74)[4]. There were no significant changes in the percentage of children who were reported to have any health conditions between the 2002-03 and 2008-10 RHS.

TABLE 74: SELF-REPORTED HEALTH CONDITIONS – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), 2008-10 RHS AND 2002-03 RHS

2008-10 RHS			2002-03 RHS		
2008-10 Ranking	Condition	Per Cent (95% CI)	2002-03 Ranking	Condition	Per Cent (95% CI)
1	Allergies	17.1% (14.1-20.6%)	1	Allergies	18.0% (14.1-22.7%)
2	Asthma	11.6% (8.9-15.0%)	2	Asthma	13.0% (9.7-17.0%)
3	Dermatitis, atopic eczema	8.2% (5.6-11.9%)[E]		*Not asked in the 2002-03 RHS*	
4	Speech/language difficulties	5.9% (3.9-8.8%)[E]		*Not asked in the 2002-03 RHS*	
5	Chronic ear infections or ear problems[5]	5.5% (3.7-8.2%)[E]	3	Chronic ear infections or ear problems	8.2% (5.5-11.9%)[E]
6	Learning disability	2.7% (1.5-4.8%)[E]	4	Learning disability	4.6% (3.1-6.7%)[E]
7	ADD or ADHD	2.6% (1.5-4.3%)[E]	8	ADD or ADHD	1.8% (1.1-3.2%)[E]
8	Heart condition	2.3% (1.2-4.3%)[E]	5	Heart condition or problem	4.0% (2.4-6.7%)[E]
9	Hearing impairment	[F]	7	Hearing impairment	3.0% (1.5-5.7%)[E]
10	Fetal Alcohol Symptom Disorder (FASD)	1.4% (0.7-2.6%)[E]	10	Fetal Alcohol Syndrome or Fetal alcohol effects (FAS/FAE)	[F]
11	Anxiety or depression	[F]		*Not asked in the 2002-03 RHS*	
12	Anemia (chronic)	[F]		*Not asked in the 2002-03 RHS*	
13	Tuberculosis	[F]	18	Tuberculosis	[F]
14	Blindness or serious vision problems (can't be corrected with glasses)	[F]	11	Blindness or serious vision problems (can't be corrected with glasses)	[F]
15	Cognitive or mental disability	[F]	9	Cognitive or mental disability	[F]
16	Chronic bronchitis	[F]	6	Chronic bronchitis	3.2% (1.9-5.5%)[E]
17	Kidney disease	[F]	12	Kidney disease	[F]
18	Cancer	[F]		*Not asked in the 2002-03 RHS*	
19	Autism	[F]		*Not asked in the 2002-03 RHS*	
20	Diabetes	[F]	19	Diabetes	[F]
21	Hepatitis	[F]		*Not asked in the 2002-03 RHS*	
	Not asked in the 2008-10 RHS		13	Physical disability other than cerebral palsy	[F]
	Not asked in the 2008-10 RHS		14	Cerebral palsy	[F]
	Not asked in the 2008-10 RHS		15	Epilepsy	[F]
	Not asked in the 2008-10 RHS		16	Liver disease	[F]
	Not asked in the 2008-10 RHS		17	HIV/AIDS	[F]

E – High sampling variability (CV>0.16). Interpret with caution.

F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Among those children who were reported by their caregivers to have asthma, 26.8% (95% CI: 14.8-43.6%) reported that the child had an asthma attack in the 12 months prior to the 2008-10 RHS. Children's caregivers were also asked separately if the child had ever had an ear infection. Over forty-seven per cent (47.5% [95% CI: 40.9-54.2%]) of children were reported to have ever had an ear infection. Children had, on average, 0.99 (SE: 0.09) ear infections in the year prior to the survey. The average number of ear infections reported was higher among younger age groups: children in the 0-5 age group had an average of 1.33 (SE: 0.1) ear infections in the year prior to the survey compared to an average of 0.67 (SE: 0.1) ear infections in the year prior to the survey among children age 6-11. This is to be expected as the incidence of chronic ear infections declines in older age groups. According to the *Provincial Health Officer's Annual Report*, in 2006-07 First Nations children under the age of one had almost twice the incidence of otitis media (ear infections) compared to other children.

Chronic Ear Infections

Children who are breastfed for more than four months and live in smoke-free houses are less likely to suffer from chronic ear infections. Male gender, position while bottle feeding, exposure to tobacco or wood smoke and children who have a lot of colds and flus are more likely to have ear infections. Even the change from traditional diets to Western diets with more carbohydrates has been associated with more chronic ear infections (Bowd, 2005). Chronic ear infections can have lasting effects on children's ability develop language skills and do well in school.

How can we help? Breastfeeding is an important way of keeping our children healthy, not just to protect from chronic ear infections but for many other health benefits as well. Smoke-free homes are an important way of keeping the air clean.

Medication Use in Children

Table 75 outlines the types of medications[6] being taken by First Nations children age 0-11, as reported by their primary caregivers. The most commonly reported medications were vitamins (47.8%), followed by asthma drugs (10.7%), antibiotics (9.1%) and traditional medicines (5.4%).

TABLE 75: SELF-REPORTED MEDICATION USE – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), 2008-10 RHS

	Per Cent (95% CI)
Vitamins	47.8% (40.2-55.5%)
Asthma drugs (puffers, inhalers, ventolin)	10.7% (86.2-91.9%)
Antibiotics	9.1% (7.1-11.5%)
Traditional medicines	5.4% (3.7-7.9%)
Antihistamines	F
Ritalin (or other ADD meds)	F

F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Youth

The three most commonly reported health conditions among BC on-reserve First Nations youth were allergies (16.2%), asthma (12.7%) and learning disabilities (6.1%)[E] (see Table 76)[7]. Compared to the 2002-03 RHS, there were no changes in the percentage of youth reporting any health conditions.

TABLE 76: SELF-REPORTED HEALTH CONDITIONS – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2002-03 RHS AND 2008-10 RHS

2008-10 RHS			2002-03 RHS		
2008-10 Ranking	Condition	Per Cent (95% CI)	2002-03 Ranking	Condition	Per Cent (95% CI)
1	Allergies	16.2% (13.0-20.0%)	**1**	Allergies	20.6% (15.5-26.8%)
2	Asthma	12.7% (9.4-17.0%)	**2**	Asthma	13.6% (9.9-18.5%)
3	Learning disability	6.1% (3.6-10.0%)[E]	**4**	Learning disability	4.9% (3.1-7.7%)[E]
4	ADD or ADHD	[F]	**6**	ADD or ADHD	[F]
5	Anemia (chronic)	[F]		*Not asked in the 2002-03 RHS*	
6	Stomach and intestinal problems	[F]		*Not asked in the 2002-03 RHS*	
7	Dermatitis, atopic eczema	[F]		*Not asked in the 2002-03 RHS*	
8	Chronic ear infections	[F]	**3**	Chronic ear infections	5.5% (3.6-8.5%)[E]
9	Blindness or serious vision problems (can't be corrected with glasses)	2.2% (1.2-4.2%)[E]	**5**	Blindness or serious vision problems (can't be corrected with glasses)	3.2% (1.7-6.0%)[E]
10	Chronic bronchitis	1.9% (1.0-3.8%)[E]	**8**	Chronic bronchitis	[F]
11	Epilepsy	[F]	**12**	Epilepsy	[F]
12	Hearing impairment	[F]	**7**	Hearing impairment	[F]
13	Cognitive or mental disability	[F]	**10**	Cognitive or mental disability	[F]
14	Fetal alcohol syndrome disorder (FASD)	[F]		*Not asked in the 2002-03 RHS*	
15	Diabetes	[F]	**13**	Diabetes	[F]
16	Psychological or nervous disorders	[F]	**14**	Psychological or nervous disorders	[F]
17	Tuberculosis	[F]	**9**	Tuberculosis	[F]
18	Hepatitis	[F]	**15**	Hepatitis	[F]
19	Liver disease (excluding Hepatitis)	[F]	**18**	Liver disease (excluding Hepatitis)	[F]
20	HIV/AIDS	[F]	**16**	HIV/AIDS	[F]
	Not asked in the 2008-10 RHS		**11**	Physical disability	[F]
	Not asked in the 2008-10 RHS		**17**	Cerebral palsy	[F]
	Not asked in the 2008-10 RHS		**19**	Kidney disease	[F]

E – High sampling variability (CV>0.16). Interpret with caution.

F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Adults

Among BC on-reserve First Nation adults age 18+, the five health conditions in the 2008-10 RHS with the highest age-standardized prevalence were arthritis (27.9%), chronic back pain (23.9%), allergies (23.7%), high blood pressure (17.0%) and hearing impairments (16.0%) (see Table 77)[8].

TABLE 77: AGE-STANDARDIZED PREVALENCE OF SELF-REPORTED HEALTH CONDITIONS – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2002-03 RHS AND 2008-10 RHS

2008-10 RHS			2002-03 RHS		
2008-10 Ranking	Condition	Age-Standardized Prevalence[9]	2002-03 Ranking	Condition	Age-Standardized Prevalence[9]
1	Arthritis[10]	27.9%	2	Arthritis[10]	24.8%
2	Chronic back pain (excluding arthritis)	23.9%	4	Chronic back pain (excluding arthritis)	17.5%
3	Allergies	23.7%	1	Allergies	25.2%
4	High blood pressure	17.0%	6	High blood pressure	14.3%
5	Hearing impairment	16.0%	3	Hearing impairment	18.7%
6	Stomach and intestinal problems	13.8%	7	Stomach and intestinal problems	13.2%
7	Asthma	12.2%	5	Asthma	14.5%
8	Diabetes	9.9%	8	Diabetes	11.1%[E]
9	Heart disease	7.9%	10	Heart disease	6.0%[E]
10	Rheumatism	7.1%	11	Rheumatism	5.9%[E]
11	Blindness or serious vision problems (can't be corrected with glasses)	6.0%	16	Blindness or serious vision problems (can't be corrected with glasses)	3.4%[E]
12	Cataracts	6.0%	9	Cataracts	9.4%
13	Learning disability	5.8%	19	Learning disability	3.0%[E]
14	Osteoporosis	4.9%	12	Osteoporosis	5.7%[E]
15	Chronic bronchitis	4.6%	17	Chronic bronchitis	3.4%[E]
16	Psychological or nervous disorders	4.0%[E]	14	Psychological or nervous disorders	4.7%[E]
17	Thyroid problems	3.7%[E]	15	Thyroid problems	3.8%[E]
18	Liver disease (excluding Hepatitis)	2.5%[E]	24	Liver disease (excluding Hepatitis)	1.0%[E]
19	Cancer	2.5%[E]	20	Cancer	2.6%[E]
20	Effects of stroke (brain haemorrhage)	2.4%[E]	18	Effects of stroke (brain haemorrhage)	3.1%[E]
21	Tuberculosis	2.3%[E]	13	Tuberculosis	5.3%
22	Cognitive or mental disability	1.9%[E]	23	Cognitive or mental disability	[F]
23	Glaucoma	1.7%[E]	21	Glaucoma	2.4%[E]
24	Epilepsy	1.2%[E]	27	Epilepsy	[F]
25	Emphysema	[F]	26	Emphysema	[F]
26	ADD or ADHD	1.0%[E]	25	ADD or ADHD	[F]
27	Hepatitis	[F]	22	Hepatitis	1.8%[E]
28	HIV/AIDS	[F]	28	HIV/AIDS	[F]

E – High sampling variability (CV>0.16). Interpret with caution.

F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

As displayed in Table 78, the BC on-reserve First Nations adult population age 18+ had significantly higher percentages of adults self-reporting arthritis, asthma, diabetes and heart disease than the non-Aboriginal BC adult population age 18+ surveyed as part of the 2009-10 Canadian Community Health Survey[11]. Compared to the national RHS results, BC First Nations reported more arthritis and less diabetes than the total Canadian on-reserve First Nations adult population.

Chronic Disease Self-Management Programs

A series of self-management programs are available to BC residents living with chronic diseases. These programs, coordinated by the University of Victoria, are led by volunteer patient educators. Two trained volunteers meet with groups of 10-12 people for 2.5 hours each week over the course of six weeks. Since 2002, the self-management workshops and leadership training courses have been offered in 63 First Nations communities.

Types of Self-Management Programs Offered:

1) Chronic disease self-management program (CDSMP)
The CDSMP teaches adults with chronic health conditions and their family members exercise programs, symptom management, healthy eating, breathing exercises, problem solving, communication skills, use of medication and how to deal with the emotions of chronic illness (anger and depression).

2) On-line chronic disease self-management program
This program is a free, confidential six-week online chronic disease self-management workshop offered over the Internet.

3) Chronic pain self-management program (CPSP)
The CPSP is for adults with chronic pain. The program teaches techniques to deal with fatigue, isolation, poor sleep and appropriate exercises for maintaining and improving strength, flexibility, endurance, etc.

4) Diabetes self-management program
This diabetes program is for adults living with type 2 diabetes and their family members, friends and caregivers. The program teaches the skills needed for day-to-day management of diabetes and related symptoms including preventing low blood glucose, preventing or delaying complications, planning low fat meals, reading nutrition labels and practising proper foot care.

5) Arthritis/fibromyalgia self-management program
Designed for adults living with different types of rheumatic diseases, this program provides tips on relieving tense muscles, preventing fatigue and managing pain, dealing with stress and depression, protecting joints, modifying activities to reduce pain and fatigue, engaging in flexibility, endurance and strengthening exercises safely, preventing/delaying osteoporosis, preventing falls, communicating effectively with your health care team, etc.

6) Active Choices
Active Choices is a personal, telephone support program that encourages regular physical activity. A physical activity "coach" works with you to develop an exercise routine customized to your needs, abilities and goals.

For more information or to register for these programs, please see *http://www.coag.uvic.ca/cdsmp/*.

TABLE 78: SELECT SELF-REPORTED HEALTH CONDITIONS – BC AND NATIONAL ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS AND NON-ABORIGINAL BC POPULATION (AGE 18+), 2009-10 CANADIAN COMMUNITY HEALTH SURVEY

	RHS		CCHS
	First Nations in BC Per Cent (95% CI)	**First Nations in Canada** Per Cent (95% CI)	**Non-Aboriginal BC Population** Per Cent (95% CI)
Arthritis	26.5% (22.3-31.0%)	19.9% (18.8-21.1%)	17.8% (16.8-18.9%)
Back problems[12]	23.6% (18.9-29.0%)	16.2% (14.8-17.6%)	20.7% (19.4-22.0%)
Hypertension	15.5% (13.6-17.6%)	21.8% (20.6-23.0%)	16.3% (15.4-17.2%)
Asthma	12.0% (9.5-15.2%)	9.9% (9.0-10.7%)	7.2% (6.4-8.0%)
Diabetes	9.0% (6.8-11.7%)	16.2% (15.1-17.4%)	5.7% (5.1-6.3%)
Heart disease	6.4% (4.9-9.0%)	5.7% (5.3-6.3%)	4.2% (3.8-4.6%)
Cancer	2.2% (1.6-3.1%)[E]	2.3% (1.9-2.7%)	2.1% (1.7-2.5%)

Table 79 breaks down the five most commonly reported health conditions among BC on-reserve First Nations adults in the 2008-10 RHS, as well as diabetes, by age and gender. The percentage of BC on-reserve First Nations adults reporting arthritis, high blood pressure, hearing impairment and diabetes was higher among those age 55+ than among adults age 18-54. There were no significant gender differences in the percentage of men and women reporting these health conditions among either adults age 18-54 or Elders 55+ except for female adults age 18-54 reporting more allergies than men of the same age group (28.8% versus 19.0%, respectively).

TABLE 79: TOP FIVE HEALTH CONDITIONS REPORTED BY GENDER AND AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Adults (Age 18-54) Per Cent (95% CI)			**Elders (Age 55+)** Per Cent (95% CI)		
	Total	Male	Female	Total	Male	Female
Arthritis	**19.6% (15.6-24.2%)**	15.4% (11.7-20.0%)	24.1% (18.5-30.7%)	**50.5% (42.1-58.8%)**	41.8% (32.5-51.7%)	59.2% (49.4-68.3%)
Chronic back pain	**21.2% (16.7-26.5%)**	21.3% (16.6-26.8%)	21.2% (15.6-28.1%)	**32.3% (24.4-41.4%)**	27.7% (19.1-38.5%)	36.9% (28.0-46.9%)
Allergies	**23.7% (20.8-26.9%)**	19.0% (15.5-23.0%)	28.8% (24.1-34.0%)	**23.8% (18.1-30.7%)**	17.4% (11.8-25.0%)[E]	30.1% (22.5-38.9%)
High blood pressure	**9.8% (8.0-12.1%)**	10.3% (7.7-13.7%)	9.4% (6.8-12.8%)	**35.0% (28.6-41.9%)**	30.7% (23.1-39.6%)	39.2% (32.2-46.7%)
Hearing impairment	**9.1% (7.3-11.3%)**	11.7% (9.1-14.9%)	6.3% (4.0-9.8%)[E]	**28.8% (22.7-35.8%)**	29.0% (21.4-38.0%)	28.6% (20.7-38.0%)
Diabetes	**4.5% (3.0-6.8%)[E]**	3.0% (1.6-5.5%)[E]	6.2% (3.8-10.1%)[E]	**23.0% (17.4-29.9%)**	17.4% (11.7-25.1%)[E]	28.7% (21.1-37.7%)

E – High sampling variability (CV>0.16). Interpret with caution.

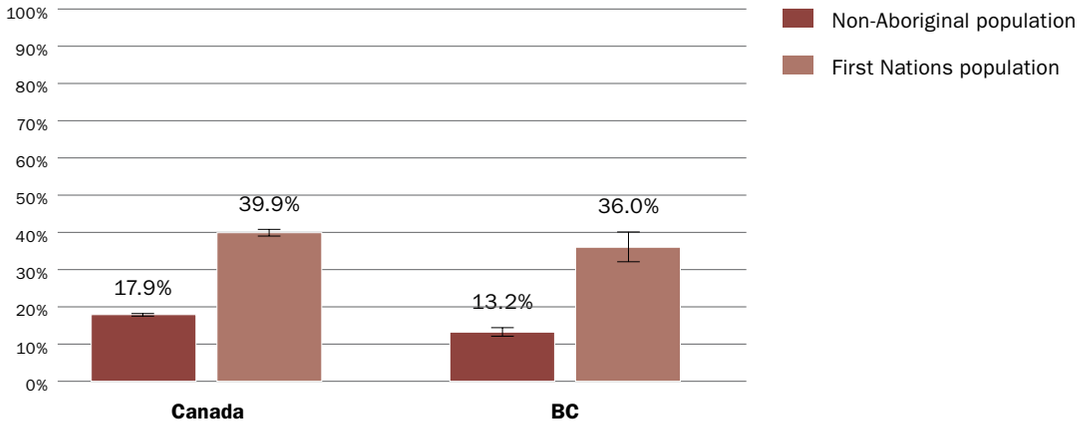
10.4 Obesity

Obesity is a major risk factor for a number of health conditions, including diabetes, heart disease and cancer. The rising rates of obesity among BC First Nations and the general population is a concerning public health problem. A multi-sector approach is required to make healthy dietary choices widely available, and physical activity a part of everyday life.

According to the 2009-10 Canadian Community Health Survey, 17.9% (95% CI: 17.5-18.2%) of non-Aboriginal Canadians age 18+ nationally were categorized as being obese (Statistics Canada, 2009-10). In the same survey, 13.2% (95% CI: 12.1-14.4%) of non-Aboriginal British Columbia residents age 18+ were categorized as being obese (Statistics Canada, 2009-10) (see Figure 46).

The 2008-10 RHS found that 39.9% (95% CI: 39.0-40.8%) of on-reserve First Nations adults age 18+ nationally were categorized as being obese, and 36.0% (95% CI: 32.1-40.1%) of BC on-reserve First Nations adults 18+ were categorized as being obese[13] (see Figure 46). An additional 36.6% (95% CI: 33.0-40.3%) of BC on-reserve First Nations adults age 18+ were categorized as overweight. While there was a little difference in the percentage of adults categorized as obese between First Nations in BC and First Nations nationally in the 2008-10 RHS (36.0% versus 39.9%, respectively), the percentage of BC on-reserve First Nation adults age 18+ who were categorized as obese in the 2008-10 RHS was over two and a half times the percentage of non-Aboriginal BC adults age 18+ categorized as obese in the 2009-10 CCHS (36.0% vs. 13.2%, respectively).

FIGURE 46: SELF-REPORTED OBESITY† – BC AND CANADIAN ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS, AND NON-ABORIGINAL BC AND CANADIAN POPULATION (AGE 18+), 2009-10 CANADIAN COMMUNITY HEALTH SURVEY



† Obese is defined as having a BMI>30, which is calculated using self-reported height and weight.

"Within our own community we've put together a health policy on nutritious meals. If we serve meals to the community there is no bannock, [only] healthy foods… when we have Christmas dinner the only time we have mashed potatoes is with the turkey but we don't have bannock. We have a salad and we try to keep it as nutritious as possible.

We've had an Elder's dinner one time and 'where's this, where's this?' We almost had a military coup at our Elders' lunch [when] they stopped serving fried bologna. The Elders were some ticked off!"

RHS Steering Committee member

Obesity by Age and Gender

According to the 2008-10 RHS, 33.0% of all BC on-reserve First Nations of all ages were categorized as being obese (see Table 80). Just over thirty-four per cent (34.1%) of First Nations children age 0-11 and 12.3% of First Nations youth were categorized as being obese in the 2008-10 RHS. Thirty-six per cent of First Nations adults age 18+ were categorized as being obese (36.0%) in the 2008-10 RHS, with higher percentages among adult females age 18+ than males (42.0% versus 30.3%). This is opposite to the non-Aboriginal BC population age 18+, where self-reported obesity was higher among males than females (15.7% [95% CI: 14.0-17.4%] versus 10.8% [95% CI: 9.5-12.0%], respectively) (Statistics Canada, 2009-10). Almost forty-one per cent (40.9%) of Elders age 55+ were categorized as being obese. The highest percentage of obesity across all age and gender groups was among Elder females (48.6%).

There has been no significant change in the per cent of First Nations in BC who were categorized as being obese between the 2002-03 and 2008-10 RHS in any age or gender category.

TABLE 80: SELF-REPORTED OBESITY BY AGE GROUP AND GENDER – BC ON-RESERVE FIRST NATIONS, ALL AGES, 2008-10 RHS AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)			2002-03 RHS Per Cent (95% CI)		
	Total	Male	Female	Total	Male	Female
Children	**34.1% (27.3-41.6%)**	33.6% (25.9-42.2%)	34.5% (26.8-43.2%)	**23.4% (18.1-29.6%)**	28.3% (20.5-37.7%)	18.0% (10.8-28.3%)[E]
Youth	**12.3% (8.3-17.8%)[E]**	15.8% (10.7-22.7%)[E]	[F]	**8.1% (5.5-11.7%)[E]**	10.0% (6.5-15.1%)[E]	[F]
All adults (Age 18+)	**36.0% (32.1-40.1%)**	30.3% (25.4-35.7%)	42.0% (37.2-47.0%)	**32.7% (27.4-38.5%)**	26.1% (20.6-32.5%)	40.3% (33.2-47.7%)
Adults (Age 18-54)	**34.4% (30.4-38.6%)**	29.4% (24.3-35.0%)	39.8% (34.9-45.0%)	**32.1% (26.8-37.9%)**	27.7% (22.0-34.3%)	37.9% (30.2-46.1%)
Elders (Age 55+)	**40.9% (34.4-47.7%)**	33.3% (25.8-41.7%)	48.6% (39.4-57.8%)	**34.1% (23.0-47.3%)[E]**	[F]	49.6% (32.5-66.8%)[E]
Total	**33.0% (29.5-36.6%)**	29.2% (25.1-33.6%)	37.0% (32.8-41.5%)	**28.5% (24.3-33.1%)**	24.5% (20.2-29.5%)	33.3% (27.9-39.1%)

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Among BC on-reserve First Nations youth age 12-17, 35.4% (95% CI: 28.9-42.4%) reported being very satisfied with their weight, 39.0% (95% CI: 33.0-45.3%) reported being somewhat satisfied with their weight, 13.6% (95% CI: 10.2-17.8%) reported being neither satisfied nor dissatisfied with their weight, 6.0% (95% CI: 4.1-8.6%)[E] reported being somewhat dissatisfied with their weight, and 6.1% (95% CI: 3.8-9.5%)[E] reported being very dissatisfied with their weight.

10.5 Diabetes

Type 1 diabetes typically occurs in childhood or adolescence and requires multiple daily injections of insulin. The development of type 2 diabetes is closely related to obesity and could potentially be prevented and managed by eating healthy foods and getting regular exercise. Gestational diabetes occurs only during pregnancy.

First Nations have had a long history of being physically active through traditional lifestyles. With the introduction of Western diets rich in refined sugars, starches and processed foods, along with a loss of land base and other impacts to the local food systems, diabetes and obesity have become a 21st century challenge for many First Nations communities.

Overall 9.0% of on-reserve BC First Nations adults age 18+ reported that they have diabetes. There has been no change in the percentage of adults reporting that they have diabetes since the 2002-03 RHS (8.2%[E]) (see Table 81). There was no significant difference by gender in the percentage of adults reporting that they have diabetes in the 2008-10 RHS. A higher percentage of Elders age 55+ self-reported diabetes (23.0%) than adults age 40-54 (7.3%) and adults age 25-39 (4.8%) in the 2008-10 RHS. The percentage of adults age 18-24 with self-reported diabetes was too small to report.

The percentage of BC on-reserve First Nations adults reporting that they have diabetes is lower than the percentage of First Nations on-reserve adults who reported having diabetes nationally (16.2% [95% CI: 15.0-17.4%]) (FNIGC, 2012, p. 131).

TABLE 81: SELF-REPORTED DIABETICS BY GENDER AND AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=708) AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)	2002-03 RHS Per Cent (95% CI)
Total	**9.0% (6.8-11.7%)**	**8.2% (5.8-11.5%)[E]**
Gender		
Male	6.3% (4.4-9.0%)[E]	7.2% (4.7-10.9%)[E]
Female	11.7% (8.6-15.8%)	9.3% (6.1-13.9%)[E]
Age Group		
Adults (Age 18-24)	[F]	[F]
Adults (Age 25-39)	4.8% (2.6-8.7%)[E]	[F]
Adults (Age 40-54)	7.3% (4.5-11.5%)[E]	8.6% (5.8-12.6%)[E]
Elders (Age 55+)	23.0% (17.4-29.9%)	23.0% (14.3-34.9%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

The most commonly reported type of diabetes among adults who self-reported having diabetes was type 2 (70.4%), followed by type 1 (11.6%) (see Table 82).

TABLE 82: TYPE OF DIABETES – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=139)

Type of Diabetes	Per Cent (95% CI)
Type 2	70.4% (56.9-81.0%)
Type 1	11.6% (6.9-18.9%)[E]
Gestational	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Diabetes can be controlled using a variety of methods. Among self-reported diabetic adults, the largest percentage of adults self-reported controlling their illness using diet (74.2%), followed by exercise (57.5%) and pills (56.9%)[14] (see Table 83). There were no significant differences in the percentage of self-reported diabetics reporting that they use different treatments to control their diabetes by adult age group.

TABLE 83: SELF-REPORTED TREATMENT TO CONTROL DIABETES BY ADULT AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=139)

	Total Per Cent (95% CI)	**Adults Age 18-54 (N=36)** Per Cent (95% CI)	**Elders Age 55+ (N=104)** Per Cent (95% CI)
Diet	**74.2% (62.7-83.1%)**	80.2% (54.0-93.3%)	70.5% (59.8-79.3%)
Exercise	**57.5% (47.3-67.1%)**	72.3% (54.6-85.1%)	48.1% (37.7-58.7%)
Pills	**56.9% (46.2-66.9%)**	44.4% (29.0-61.0%)[E]	64.8% (52.2-75.6%)
Insulin	**20.2% (12.8-30.6%)[E]**	[F]	18.8% (10.8-30.7%)[E]
No treatment or medicine	[F]	[F]	[F]
Traditional medicines	**6.0% (3.2-11.0%)[E]**	[F]	7.1% (3.8-12.8%)[E]
Other	[F]	[F]	[F]
Traditional ceremonies, healer	[F]	[F]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Male and female adults who self-reported having diabetes were equally likely to report using diet (73.0% [95% CI: 57.8-84.2%] and 74.9% [95% CI: 60.5-85.4%], respectively) and exercise (70.2% [95% CI: 55.7-81.5%] and 50.3% [95% CI: 38.1-62.5%], respectively) to control their diabetes.

The majority of BC on-reserve First Nations adults age 18+ with self-reported diabetes reported checking their blood sugar levels once a day or more (see Table 84). There was no significant difference in the reported frequency of checking blood sugar levels by adult age group. The recommended frequency of blood glucose testing varies from person to person and should be determined in consultation with a health care professional.

TABLE 84: HOW OFTEN ARE BLOOD SUGAR LEVELS CHECKED BY AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=134)

	Total Per Cent (95% CI)	**Adults Age 18-54** Per Cent (95% CI)	**Elders Age 55+** Per Cent (95% CI)
More than once a day	**22.7% (14.2-34.2%)[E]**	32.6% (15.7-55.7%)[E]	17.2% (10.0-28.1%)[E]
Once a day	**30.6% (23.0-39.4%)**	[F]	38.6% (27.2-51.4%)
2-13 times in the past two weeks	**23.2% (16.5-31.8%)**	[F]	26.4% (18.5-36.3%)
Not at all in the past two weeks	**23.4% (16.4-32.3%)**	33.7% (16.5-56.5%)[E]	17.8% (12.1-25.4%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Close to all BC on-reserve First Nations adults with self-reported diabetes state that their diabetes has prompted them to adopt a healthier lifestyle, including diet and exercise (93.8% [95% CI: 86.9-97.2%]). This is unchanged since the 2002-03 RHS, which found that 94.7% (95% CI: 86.7-98.0%) of adults with self-reported diabetes reported that their diabetes had prompted them to adopt a healthier lifestyle. There was no significant difference in the percentage of adults who reported adopting a healthier lifestyle because of their diabetes among adult age groups (89.5% [95% CI: 71.7-96.6%] of adults age 18-54 versus 96.5% [95% CI: 92.6-98.4%] of Elders age 55+).

Over sixty-two per cent (62.3%) of BC on-reserve First Nations adults with self-reported diabetes reported that they have experienced at least one diabetic complications (see Table 85). Over thirty-six per cent (36.3%) of BC on-reserve First Nations adults with self-reported diabetes reported that their diabetes has affected their vision, 31.0%[E] reported that their diabetes has affected the feeling in their hands or feet, 28.1%[E] reported that their diabetes has affected their circulation other than their heart[15], and 20.5%[E] reported that their diabetes has affected their lower limbs.

Several Canadian studies among First Nations diabetics have documented the prevalence of diabetic complications. One study in Alberta found that 23% of 743 individuals with diabetes had undiagnosed kidney damage, 11% had undiagnosed foot complications, 9% had undiagnosed hypertension and 7% had undiagnosed retinopathy (Oster, 2009). Another Canadian study found that among a randomly selected sample of 885 diabetics from 19 First Nations communities, 92.0% had hypertension, 55.1% had chronic kidney disease and 13.3% had coronary artery disease (Harris, 2011).

TABLE 85: SELF-REPORTED DIABETIC COMPLICATIONS – BC ON-RESERVE FIRST NATIONS ADULTS WITH SELF-REPORTED DIABETES BY AGE GROUP, 2008-10 RHS (N=138)

	Total Per Cent (95% CI)	**Adults (Age 18-54) (N=35)** Per Cent (95% CI)	**Elders (Age 55+) (N=103)** Per Cent (95% CI)
Affected your vision (e.g. retinopathy)	**36.3% (27.1-46.6%)**	21.6% (11.9-36.0%)[E]	45.4% (32.6-58.8%)
Affected the feeling in your hands or feet (e.g. neuropathy)	**31.0% (21.0-43.2%)[E]**	[F]	36.5% (25.2-49.5%)
Affected your circulation other than your heart[15]	**28.1% (18.1-41.0%)[E]**	[F]	30.0% (20.2-42.1%)[E]
Affected your lower limbs	**20.5% (13.3-30.1%)[E]**	[F]	29.4% (19.4-4.0%)[E]
Affected your kidney function	**19.1% (11.0-31.2%)[E]**	[F]	22.9% (14.0-35.2%)[E]
Resulted in infections	**10.0% (5.6-17.1%)[E]**	[F]	11.6% (5.8-22.0%)[E]
Resulted in amputation	[F]	[F]	[F]
Resulted in one or more complication(s)	**62.4% (47.7-75.2%)**	60.1% (40.1-77.3%)	63.8% (47.0-77.8%)

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Close to sixty per cent of BC on-reserve First Nations adults age 18+ with self-reported diabetes reported currently attending a diabetes clinic or seeing a health care professional (doctor, nurse, etc.) for diabetes education (59.9%) (see Table 86). There was no difference in the percentage of adults who reported attending diabetes clinics for diabetes education by gender or adult age group.

TABLE 86: CURRENTLY ATTENDING A DIABETES CLINIC OR SEEING SOMEONE (DOCTOR, NURSE, ETC.) FOR DIABETES EDUCATION BY GENDER AND AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Per Cent (95% CI)
Total	**59.9% (48.0-70.7%)**
Gender	
Female	58.7% (40.2-75.1%)
Male	61.9% (45.5-76.0%)
Age Group	
Adults (Age 18-54)	53.2% (30.5-74.7%)[E]
Elders (Age 55+)	63.7% (52.5-73.5%)

E – High sampling variability (CV>0.16). Interpret with caution.

Among adults who reported that they were not currently attending a diabetes clinic, the primary reason reported for this was that they no longer required diabetes education (52.0%) (see Table 87).

TABLE 87: REASON FOR NOT ATTENDING A DIABETES CLINIC[16] – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=57)

Reason for Not Attending a Diabetes Clinic	Per Cent (95% CI)
No longer require diabetes education, I already have the information I need	52.0% (36.5-67.1%)
I don't have sufficient information about where to go	[F]
Other	[F]
A diabetes clinic is not available in my area	12.2% (6.1-22.9%)[E]
A diabetes health specialist is not available in my area	[F]
Transportation costs	[F]
Chose not to attend	[F]
Childcare costs	[F]
Felt services would be inadequate	[F]
Could not afford it	[F]
Direct health care costs	[F]
Felt services would be culturally inappropriate	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

10.6 Injuries

Injury was declared the leading cause of hospitalization, disability and death among First Nations in BC in the 2007 PHO report (Provincial Health Officer, 2007).

According to the 2008-10 RHS, 10.4% of BC First Nations on-reserve children age 0-11 were reported to have been injured in the 12 months prior to the survey, likely representing a range of severity of injuries (see Table 88). There was no difference in the percentage of children reported to have been injured in the year prior to the survey by gender. There are no comparisons made between the 2002-03 and 2008-10 RHS because of changes in question wording[17].

Thirty-five per cent of BC on-reserve First Nations youth age 12-17 reported being injured in the 12 months prior to the 2008-10 RHS. There was no difference in the percentage of youth reporting that they were injured in the year prior to the survey by gender in the 2008-10 RHS (see Table 88).

Twenty per cent of BC on-reserve First Nations adults age 18+ reported being injured in the 12 months prior to the survey. There was no difference in the percentage of adults reporting that they were injured in the year prior to the 2008-10 RHS by gender in the 2008-10 RHS (see Table 88). Elders age 55+ were less likely to report being injured in the 12 months prior to the survey (12.2% [95% CI: 8.9-16.7%]) than adults age 40-54 (24.1% [95% CI: 19.4-29.5%]) and adults age 18-24 (23.1% [95% CI: 17.1-30.5%]). There was no significant difference in the percentage of Elders and the percentage of adults age 25-39 (19.9% [95% CI: 15.2-25.5%]) who reported being injured in the year prior to the 2008-10 RHS.

TABLE 88: INJURED IN THE 12 MONTHS PRIOR TO THE 2008-10 RHS BY GENDER AND AGE GROUP – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

	Total Per Cent (95% CI)	Male Per Cent (95% CI)	Female Per Cent (95% CI)
Children	**10.4% (7.5-14.3%)**	12.6% (8.1-19.0%)[E]	8.1% (5.3-12.1%)
Youth	**35.0% (29.4-40.9%)**	38.0% (30.7-45.9%)	31.5% (22.2-42.7%)
Adults	**20.0% (17.4-22.8%)**	21.1% (17.8-24.8%)	18.8% (15.7-22.4%)

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Injury Types

Among BC on-reserve First Nations children age 0-11 who were reported to have been injured in the year prior to the 2008-10 RHS, the three most commonly reported injuries were major cuts, scrapes or bruises (41.5%)[E], followed by other (25.9%)[E] and broken or fractured bones (19.2%)[E] (see Table 89). Among youth who reported being injured in the year prior to the survey, the three most commonly reported injury types were major cuts, scrapes or bruises (53.3%), followed by major sprain or strain (40.5%), and burns or scalds (23.5%). Among adults who reported being injured in the year prior to the survey, the three most commonly reported injury types were major sprains or strains (33.5%), followed by major cuts, scrapes or bruises (30.9%) and broken or fractured bones (25.5%).

TABLE 89: INJURY TYPES – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+) WHO WERE INJURED IN THE 12 MONTHS PRIOR TO THE SURVEY, 2008-10 RHS

	Children Per Cent (95% CI)	**Youth** Per Cent (95% CI)	**Adults** Per Cent (95% CI)
Major cuts, scrapes or bruises	41.5% (27.0-57.8%)[E]	53.3% (39.6-66.5%)	30.9% (23.9-38.8%)
Other	25.9% (14.3-42.1%)[E]	12.0% (7.3-19.0%)[E]	20.7% (14.2-29.1%)[E]
Broken or fractured bones	19.2% (10.5-32.3%)[E]	17.4% (11.2-26.0%)[E]	25.5% (18.1-34.6%)
Major sprain or strain	15.4% (8.9-25.3%)[E]	40.5% (27.9-54.5%)	33.5% (26.3-41.6%)
Repetitive strain	[F]	[F]	12.2% (7.7-18.8%)[E]
Dislocation	[F]	[F]	8.3% (5.7-12.1%)[E]
Burns or scalds	[F]	23.5% (17.7-30.5%)	5.8% (3.8-8.8%)[E]
Dental injury	[F]	[F]	[F]
Concussion	[F]	[F]	[F]
Injury to internal organ	[F]	[F]	[F]
Poisoning	[F]	[F]	[F]
Hypothermia, frostbite or other injury due to cold exposure	[F]	[F]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.

F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Part of Body Injured

Among BC on-reserve First Nations children who were reported to have been injured in the 12 months prior to the 2008-10 RHS, the three most commonly reported injured parts of the body were the head (28.8%)[E], followed by leg (26.6%)[E] and knee (25.2%)[E] (see Table 90). Among youth who reported having been injured in the past 12 months prior to the survey, the three most commonly reported injured parts of their body were hands (41.9%), followed by the ankle (41.5%) and foot (33.9%)[E]. Among adults who reported being injured in the year prior to the survey, the three most commonly reported injured parts of their body were hands (25.6%), followed by knee (23.7%), and leg (22.3%).

TABLE 90: INJURED PART OF THE BODY – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+) WHO WERE INJURED IN THE 12 MONTHS PRIOR TO THE SURVEY, 2008-10 RHS

	Children Per Cent (95% CI)	Youth Per Cent (95% CI)	Adults Per Cent (95% CI)
Head	28.8% (19.2-40.9%)[E]	17.8% (10.5-28.5%)[E]	16.1% (9.8-25.3%)[E]
Leg	26.6% (16.9-39.2%)[E]	20.4% (12.0-32.5%)[E]	22.3% (16.2-29.8%)
Knee	25.2% (16.9-35.8%)[E]	29.5% (19.9-41.4%)[E]	23.7% (17.6-31.1%)
Hand	21.0% (13.5-31.2%)[E]	41.9% (31.3-53.4%)	25.6% (19.6-32.7%)
Arm	14.8% (9.1-23.4%)[E]	30.0% (19.3-43.4%)[E]	19.6% (14.6-25.9%)
Ankle	13.7% (7.9-22.8%)[E]	41.5% (30.1-54.0%)	21.9% (15.2-30.4%)[E]
Foot	9.8% (4.9-18.6%)[E]	33.9% (21.7-48.8%)[E]	12.5% (7.8-19.3%)
Multiple sites	9.2% (5.1-16.0%)[E]	[F]	*Not asked in the Adult survey*
Eyes	2.8% (1.9-4.1%)[E]	[F]	4.6% (2.3-8.8%)[E]
Torso	[F]	12.3% (6.9-21.0%)[E]	15.8% (11.1-21.9%)[E]
Wrist	[F]	21.1% (11.2-36.3%)[E]	13.8% (9.7-19.1%)
Other	[F]	[F]	22.9% (17.7-28.9%)

E – High sampling variability (CV>0.16). Interpret with caution.

F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Location Injury Took Place

Home[18] was the location of injury most commonly reported for children who had been injured in the year prior to the 2008-10 RHS (49.2%), followed by school, college or university (31.8%)[E] and a street, highway or sidewalk (21.6%)[E] (see Table 91). Among youth, home was the most commonly reported location where injury took place (40.3%), followed by a sports field/school facility (36.1%) and a street, highway or sidewalk (29.2%)[E]. Among adults home was also the most commonly reported location where injury took place (33.9%), followed by a street, highway or sidewalk (29.6%)[E] and a sports field/school facility (19.9%)[E].

TABLE 91: LOCATION INJURY TOOK PLACE – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+) WHO WERE INJURED IN THE 12 MONTHS PRIOR TO THE SURVEY, 2008-10 RHS

	Children Per Cent (95% CI)	**Youth** Per Cent (95% CI)	**Adults** Per Cent (95% CI)
Home	49.2% (35.7-62.8%)	40.3% (31.7-49.6%)	33.9% (27.5-40.9%)
School, college, university	31.8% (19.9-46.5%)[E]	25.5% (18.9-33.5%)	3.2% (1.6-6.3%)[E]
Street, highway, sidewalk	21.6% (12.9-33.8%)[E]	29.2% (19.3-41.4%)[E]	29.6% (20.6-40.6%)[E]
Sports field/facilities of schools	17.6% (11.0-26.9%)[E]	36.1% (26.2-47.3%)	19.9% (13.4-28.5%)[E]
Community buildings (community centre, band office)	8.6% (5.1-14.1%)[E]	[F]	8.5% (5.5-12.9%)[E]
Countryside, forest, woodlot	7.2% (3.7-13.6%)[E]	[F]	13.1% (8.6-19.6%)[E]
Other	[F]	12.5% (8.0-18.9%)[E]	15.8% (10.7-22.7%)[E]
Lake, river, ocean	[F]	[F]	8.6% (4.3-16.6%)[E]
Industrial or construction area	[F]	[F]	6.0% (3.4-10.3%)[E]
Office	[F]	[F]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.

F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Activity Engaged in When Injury Took Place

Among BC on-reserve First Nations children age 0-11 who were reported to have been injured in the 12 months prior to the survey, 46.4% were reported to have been engaged in leisure or a hobby when they were injured, 43.2% were reported to have been engaged in sports or physical exercise, and 24.6%[E] were reported to have been engaged in other activities when they were injured (see Table 92). Among youth, 51.7% of individuals who reported being injured in the 12 months prior to the survey reported being engaged in sports or physical exercise when they were injured, 32.8%[E] reported being engaged in leisure or a hobby[19], and 19.2%[E] reported being engaged in other activities. Among adults who reported that they were injured in the 12 months prior to the survey, 26.5% reported being injured while engaged in a leisure activity or hobby[19], 24.2% reported being at work at a job or business, and 23.5% reported being engaged in sports or physical exercise when they were injured.

TABLE 92: ACTIVITY ENGAGED IN WHEN INJURED – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+) WHO WERE INJURED IN THE 12 MONTHS PRIOR TO THE SURVEY, 2008-10 RHS

	Children Per Cent (95% CI)	Youth Per Cent (95% CI)	Adults Per Cent (95% CI)
Leisure or hobby[19]	46.4% (35.7-57.5%)	32.8% (20.8-47.4%)[E]	26.5% (19.6-34.9%)
Sports or physical exercise	43.2% (32.0-55.2%)	51.7% (39.8-63.5%)	23.5% (16.5-32.5%)
Other	24.6% (14.2-39.3%)[E]	19.2% (11.4-30.4%)[E]	21.1% (15.2-28.6%)
Travel to and from work/school	6.5% (3.7-11.3%)[E]	10.1% (6.2-16.2%)[E]	10.8% (6.0-18.7%)[E]
Unpaid work/Chores around the house	6.1% (3.6-10.0%)[E]	16.0% (8.3-28.6%)[E]	17.9% (13.1-24.0%)
Working at a job or business	*Not asked in the Children's survey*	[F]	24.2% (17.6-32.2%)

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Cause of Injury

Falls (55.5%), other causes (28.8%) and accidental contact with another person or animal (18.6%) were the most frequently reported cause of injury among BC on-reserve First Nations children who were reported to have been injured in the 12 months prior to the 2008-10 RHS (see Table 93). Similarly, among youth, falls were the most commonly reported cause of injury (37.1%)[E], followed by other causes (20.7%)[E] and other bicycle accidents (7.2%)[E]. Among adults who reported having been injured in the year prior to the survey, the most commonly reported cause of their injury was a fall or trip (34.6%), followed by other causes (23.4%), motor vehicle accidents (18.4%)[E] and accidental contact with another person or animal (13.7%).

TABLE 93: CAUSE OF INJURY – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+) WHO WERE INJURED IN THE 12 MONTHS PRIOR TO THE SURVEY, 2008-10 RHS

	Children Per Cent (95% CI)	Youth Per Cent (95% CI)	Adults Per Cent (95% CI)
Fall	55.5% (42.7-67.5%)	37.1% (25.5-50.4%)[E]	34.6% (26.8-43.4%)
Other	28.8% (20.0-39.5%)[E]	20.7% (13.4-30.7%)[E]	23.4% (16.8-31.5%)
Accidental contact with another person or animal	18.6% (12.5-26.8%)[E]	[F]	13.7% (9.7-18.9%)
Motor vehicle accident	[F]	[F]	18.4% (10.3-30.7%)[E]
Overexertion or strenuous movement	[F]	[F]	13.7% (9.8-18.8%)
Domestic or family violence	[F]	[F]	5.6% (2.9-10.5%)[E]
Other bicycle accident	[F]	7.2% (5.0-10.1%)[E]	[F]
Other physical assault	[F]	[F]	[F]
Contact with machine, tool	[F]	[F]	[F]
Thin ice	[F]	[F]	[F]
Contact with hot liquid or object	[F]	6.2% (3.6-10.4%)[E]	[F]
Smoke, fire, flames	[F]	7.1% (3.9-12.7%)[E]	2.6% (1.3-4.9%)[E]
Suicide attempt or self-inflicted injury	[F]	[F]	2.3% (1.2-4.3%)[E]
Snowmobile collision	[F]	[F]	[F]
All-terrain vehicle (ATV) accident	[F]	[F]	[F]
Hunting incident	[F]	[F]	[F]
Boating incident	[F]	[F]	[F]
Extreme weather or natural disaster (i.e. flood)	[F]	[F]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Among adults who reported having been involved in a motor vehicle accident (n=47), 51.3% (95% CI: 25.1-76.8%)[E] reported that they were wearing a seatbelt and 24.6% (95% CI: 11.9-43.9%)[E] declined to say whether they were wearing a seatbelt.

Summary of Injury Findings

Table 94 summarizes the 2008-10 RHS injury results, capturing the most common responses for each question related to injuries for children, youth and adults. This table is meant to paint a picture of the most common types, causes and location of injuries, but please note that these responses do not necessarily refer to the same injury event.

TABLE 94: SUMMARY OF INJURY FINDINGS, BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

	Injury Type	Body Part Injured	Cause of Injury	Location Injury Took Place	Activity Engaged In
Children	Cut, scrape or bruise	Head	Fall	Home	Leisure or hobby
Youth	Cut, scrape or bruise	Hand	Fall	Home	Sports or physical exercise
Adults	Major sprain or strain	Hand	Fall	Home	Leisure or hobby

Location of Treatment for Injuries

Among children who were reported injured in the 12 months prior to the survey, 47.4% were reported to have sought treatment in a hospital emergency room, 35.8%[E] were reported to have sought treatment at home and 21.7%[E] were reported to have sought treatment in a doctor's office (see Table 95). Among youth, 36.1% reported seeking treatment in a hospital emergency room, 25.9% reported seeking treatment at home and 25.3% of youth reported not seeking any medical treatment. Among adults who were injured in the 12 months prior to the 2008-10 RHS, 53.2% reported seeking treatment for their injury in a hospital emergency room. Another 31.8% of adults reported seeking treatment in a doctor's office and 13.1% sought treatment at home. The location of treatment reported may be affected by the community services available as well as the severity of the injury.

TABLE 95: LOCATION OF INJURY TREATMENT – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+) WHO WERE INJURED IN THE YEAR PRIOR TO THE SURVEY, 2008-10 RHS

	Children Per Cent (95% CI)	Youth Per Cent (95% CI)	Adults Per Cent (95% CI)
Hospital emergency room	47.4% (39.6-65.3%)	36.1% (26.7-46.7%)	53.2% (43.2-62.9%)
At home	35.8% (24.6-48.7%)[E]	25.9% (15.5-40.0%)[E]	13.1% (9.2-18.3%)[E]
Doctor's office	21.7% (13.6-33.0%)[E]	12.8% (7.0-22.2%)[E]	31.8% (25.7-38.7%)
At school	16.0% (9.1-26.6%)[E]	[F]	[F]
Walk-in clinic	10.3% (5.6-18.4%)[E]	11.2% (6.7-18.2%)[E]	12.5% (7.6-19.9%)[E]
Community health centre	9.1% (5.1-15.6%)[E]	[F]	5.5% (3.2-9.3%)[E]
Traditional healer	5.6% (3.5-9.1%)[E]	[F]	[F]
By telephone	5.5% (3.3-9.0%)[E]	[F]	[F]
At work	4.6% (2.9-7.2%)[E]	[F]	[F]
Didn't seek any medical treatment	[F]	25.3% (15.7-38.2%)[E]	[F]
Other	[F]	[F]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Almost twenty per cent (19.8% [95% CI: 9.6-36.7%][E]) of injuries reported among youth occurred while they reported being under the influence of alcohol (see Figure 47). Among injured adults, 26.5% (95% CI: 19.1-35.5%) of injuries reported occurred while they reported being under the influence of alcohol.

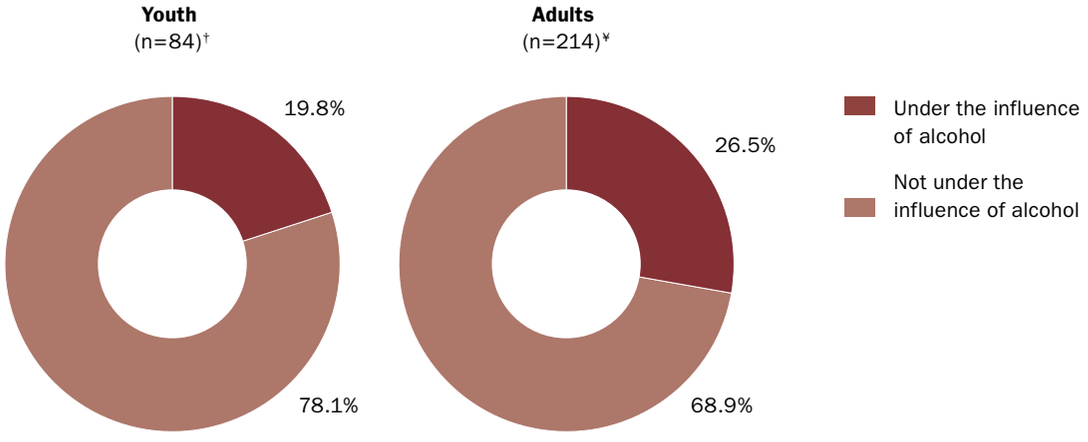


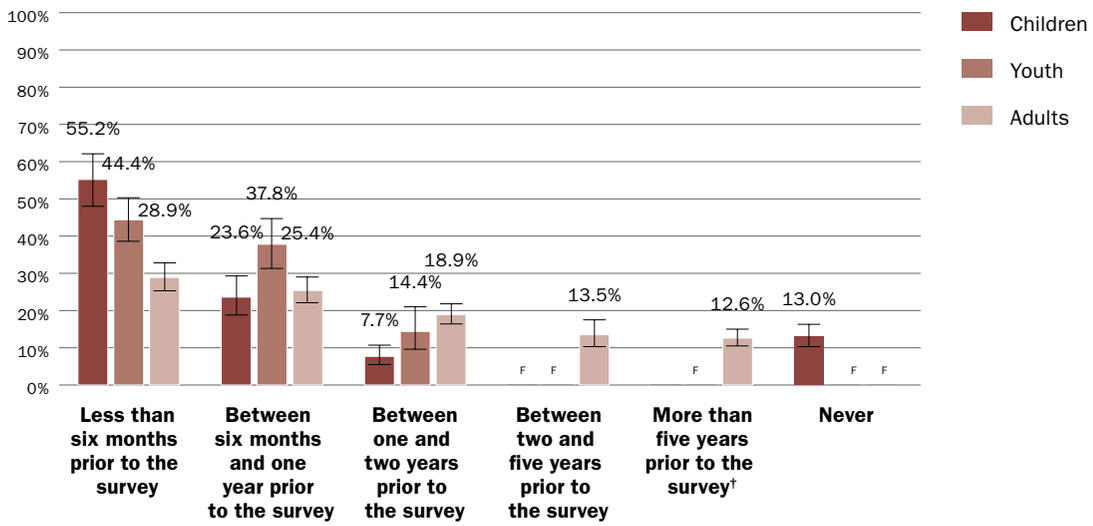
FIGURE 47: THE INFLUENCE OF ALCOHOL, MARIJUANA AND OTHER SUBSTANCES ON INJURIES – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

† The categories of "Marijuana" is suppressed because of small sample size.
¥ The categories of "Marijuana" and "Other Substances" are suppressed because of small sample size.

10.7 Dental Health

Access to adequate and affordable dental care can be a significant issue in First Nations communities. As a result, many individuals may only seek out dental care in emergency situations.

Figure 48 displays when BC on-reserve First Nations children, youth and adults reported last receiving dental care. The majority of children (55.2%) were reported to have received dental care within the past six months. A smaller percentage of youth (44.4%) and adults (28.9%) reported having received dental care during the same time period.



E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).
† The category "More than five years ago" was not asked in the Children's survey.

FIGURE 48: LAST TIME RECEIVED DENTAL CARE† – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), YOUTH (AGE 12-17) AND ADULTS (AGE 18+), 2008-10 RHS

Children

Nearly seventy-nine per cent (78.8% [95% CI: 74.3-82.7%]) of BC First Nations on-reserve children age 0-11 were reported to have received dental care within the year prior to the survey, 8.2% (95% CI: 5.8-11.4%) were reported having received dental care between one and five years prior to the survey, and 13.0% (95% CI: 10.3-16.3%) were reported to have never received dental care (see Figure 49).

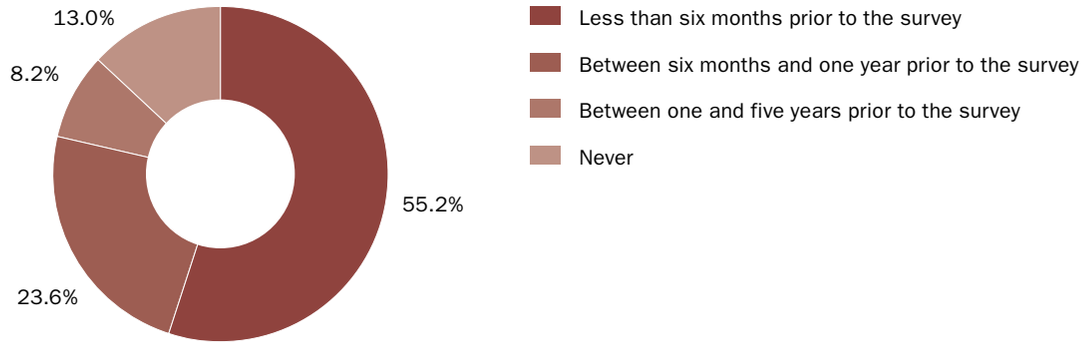


FIGURE 49: WHEN WAS THE LAST TIME THE CHILD RECEIVED DENTAL CARE? – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), 2008-10 RHS

The average age of children was lower among those who were reported to have never received dental care (1.9 years of age), than among children who were reported to have received dental care less than a year prior to the survey (6.3 years of age) or between one and five years prior to the survey (7.2 years of age) (see Table 96).

TABLE 96: AVERAGE AGE OF CHILD BY LAST DENTAL CARE VISIT – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), 2008-10 RHS

	Average age of the child
Never received dental care	1.9 (SE: 02)
Received dental care within the year prior to the survey	6.3 (SE: 0.1)
Received dental care between 1-5 years prior to the survey	7.2 (SE: 0.4)

The most commonly reported dental needs among BC on-reserve First Nations children were maintenance (66.2%), followed by filling cavities or other restorative work (37.1%) and fluoride treatment (29.1%) (see Table 97).

TABLE 97: CURRENT DENTAL NEEDS – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), 2008-10 RHS

	Per Cent (95% CI)
Maintenance (e.g. check-ups or teeth cleaning)	66.2% (60.6-71.5%)
Cavities filled or other restorative work (e.g. fillings, crowns, bridge)	37.1% (30.0-44.8%)
Fluoride treatment	29.1% (24.2-34.6%)
None	29.0% (23.0-35.8%)
Extractions (taking teeth out)	7.6% (5.1-11.3%)[E]
Orthodontic work (e.g. braces)	7.3% (5.5-9.7%)
Periodontal (gum) work	[F]
Prosthetics (e.g. denture, including repair and maintenance)	[F]
Urgent care (dental problems requiring immediate attention)	[F]

E – High sampling variability (CV>0.16). Interpret with caution.

Baby Bottle Tooth Decay

Also known as early childhood tooth decay, baby bottle tooth decay is a severe type of tooth decay that can affect the upper front teeth in particular if foods left from feeding are left in the mouth. The longer and more frequently food is left in the mouth, the greater the chance of developing baby bottle tooth decay.

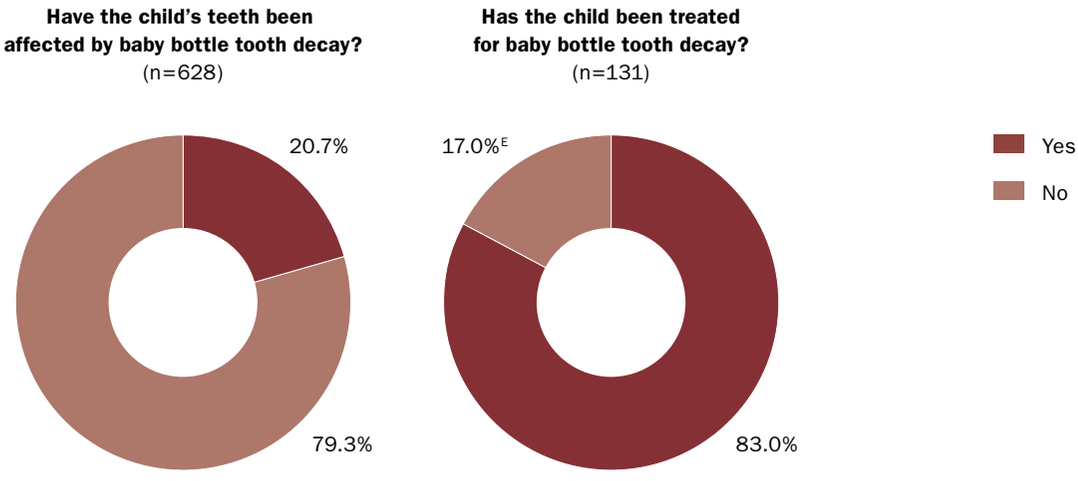
Signs of baby bottle tooth decay include brown, yellow or "chalky" spots on the teeth, or pitting on the front teeth.

Baby bottle tooth decay can be prevented by cleaning a child's mouth after they eat, not letting them sleep with a bottle, filling bottles with water only, not dipping soothers in honey and getting sealants placed on teeth.

If any signs of baby bottle tooth decay are evident, a dental professional should be seen as soon as possible (Health Canada, 2009).

Baby Bottle Tooth Decay

Baby bottle tooth decay is a form of tooth decay that occurs in children age five years and under. Over twenty per cent (20.7% [95% CI: 16.3-26.0%]) of BC on-reserve First Nations children age 0-11 were reported to have been affected by baby bottle tooth decay. Of these children, 83.0% (95% CI: 74.4-89.2%) were reported to have been treated (see Figure 50). There was no difference in the percentage of male or female children reportedly affected by or treated for baby bottle tooth decay.



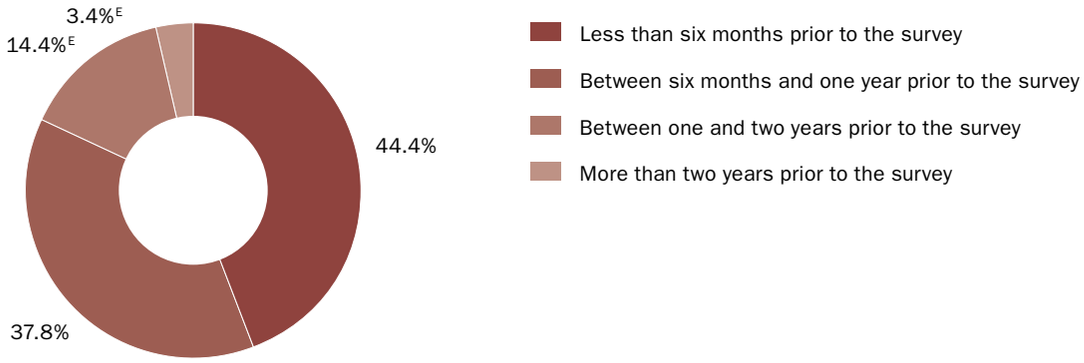
E – High sampling variability (CV>0.16). Interpret with caution.

FIGURE 50: BABY BOTTLE TOOTH DECAY AND TREATMENT – BC ON-RESERVE FIRST NATIONS CHILDREN (AGE 0-11), 2008-10 RHS

Youth

Over eighty-two per cent (82.2% [95% CI: 76.2-86.9%]) of BC on-reserve First Nations youth age 12-17 reported receiving dental care within the year prior to the 2008-10 RHS, 14.4% (95% CI: 9.6-21.0%)[E] reported last receiving dental care between one to two years prior to the survey and 3.4% (95% CI: 1.9-6.2%)[E] reported last receiving dental care more than two years prior to the survey (see Figure 51). There was no difference across genders in the breakdown of when First Nations youth reported last receiving dental care.

FIGURE 51: WHEN WAS THE LAST TIME YOU RECEIVED DENTAL CARE? – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS



E – High sampling variability (CV>0.16). Interpret with caution.

The majority (83.1% [95% CI: 78.0-87.2%]) of BC First Nations youth age 12-17 reported not having experienced any problems with their teeth or experienced any dental pain in the month prior to the survey. A higher percentage of female youth reported problems with their teeth or dental pain in the month prior to the survey than male youth (24.3% [95% CI: 18.0-32.0%] versus 10.4% [95% CI: 6.3-16.7%][E]).

Collaboration Between UBC Dental Students and Penelakut First Nation

In 2010 and 2011 UBC dentistry students and their mentors have been donating their time and skills to conduct a dental clinic with the Penelakut First Nation. In 2010, the clinic treated close to 70 Penelakut residents.

The volunteers transport all the necessary supplies and equipment to and from Penelakut Island, and set up a triage-style clinic in the elementary school gymnasium using portable dental chairs, bottles of sterile water and air compressors to power up equipment such as dental drills.

"Being invited back into this community builds on the trust in the friendship and it's a different kind of dentistry. The whole family is involved and present during treatment." *Part-time clinical instructor and UBC alumnus Dr. Gary Sutton*

Source: *http://www.dentistry.ubc.ca/features/penelakut_kuper.asp* and *http://www.publicaffairs.ubc.ca/2011/07/07/ubc-dentistry-team-serves-penelakut-first-nation/*.

The most commonly reported dental need by BC on-reserve First Nations youth in the 2008-10 RHS was maintenance (58.6%), followed by filling cavities or other restorative work (45.6%), and orthodontic work (20.8%) (see Table 98). There was no difference in reported dental needs among youth by gender.

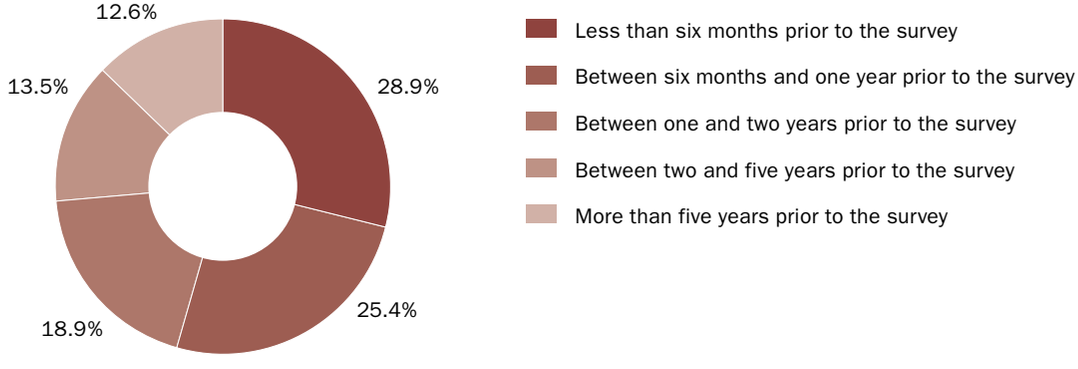
TABLE 98: CURRENT DENTAL NEEDS – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

	Per Cent (95% CI)
Maintenance (e.g. check-ups or teeth cleaning)	58.6% (51.5-65.4%)
Cavities filled or other restorative work (e.g. fillings, crowns, bridge)	45.6% (39.3-52.1%)
Orthodontic work (e.g. braces)	20.8% (15.1-27.9%)
None	15.8% (10.8-22.6%)[E]
Fluoride treatment	12.6% (7.2-21.3%)[E]
Extractions (taking teeth out)	7.6% (5.0-11.4%)[E]
Periodontal (gum) work	2.1% (1.5-3.1%)[E]
Prosthetics (e.g. denture, including repair and maintenance)	[F]
Urgent care (dental problems requiring immediate attention)	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Adults

Almost twenty-nine per cent (28.9% [95% CI: 25.3-32.8%]) of BC on-reserve First Nations adults age 18+ reported receiving dental care less than six months prior to the 2008-10 RHS, 25.4% (95% CI: 22.1-29.0%) reported receiving dental care between six months and one year prior to the survey, 18.9% (95% CI: 16.4-21.8%) reported receiving dental care between one and two years prior to the survey, 13.5% (95% CI: 10.3-17.5%) reported receiving dental care between two and five years prior to the survey and 12.6% (95% CI: 10.5-15.0%) reported receiving dental care more than five years prior to the 2008-10 RHS (see Figure 52).



† The category "Never" is suppressed due to small sample size.

FIGURE 52: LAST RECEIVED DENTAL CARE† – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=1,329)

> "A lot of dentists… you have to pay upfront and then you get reimbursed so a lot of people don't go to the dentist. Also there's a fee for service on top of that – the full amount isn't covered by Non-Insured [Health Benefits]. Maybe the parents can't afford to pay upfront. Some communities are getting their own dentist, which is really helping them."
> ***RHS Steering Committee member***

There was no difference by gender in terms of when BC on-reserve First Nations adults reported last receiving dental care. Elders were more likely to report last receiving dental care more than five years prior to the survey or never having received dental care (35.9% [95% CI: 29.6-42.7%]) than adults age 18-24 (4.8% [95% CI: 2.7-8.3%][E]), adults age 25-39 (3.4% [95% CI: 1.9-5.8%][E]), and adults age 40-54 (10.0% [95% C: 6.9-14.4%][E]). Similarly, Elders age 55+ were less likely to report having received dental care in the year prior to the survey (35.8% [95% CI: 29.4-42.9%]), compared to adults age 18-24 (62.5% [95% CI: 54.5-69.9%]), adults age 25-39 (58.3% [95% CI: 50.0-66.2%]), and adults age 40-54 (59.7% [95% CI: 52.0-66.9%]).

The majority (85.6% [95% CI: 83.0-87.9%]) of BC on-reserve First Nations adults age 18+ reported having one or more of their own teeth[20]. There was no difference in the per cent of male (86.0% [95% CI: 82.2-89.1%]) or female adults (85.3% [95% CI: 82.0-88.1%]) who reported having one or more of their own teeth. The percentage of adults who reported having one or more of their own teeth was consistently high amongst adults age 18-24 (97.4% [95% CI: 91.9-99.2%]), adults age 25-39 (97.6% [95% CI: 95.4-98.8%]) and adults age 40-54 (91.6% [95% CI: 86.7-94.8%]). However, the percentage dropped among Elders age 55+, with 55.2% (95% CI: 48.6-61.6%) of individuals reporting having one or more of their own teeth.

Over thirty-three per cent (33.3% [95% CI: 30.4-37.0%]) of BC on-reserve First Nations adults reported wearing full or partial dentures, false teeth, bridges or dental plates to replace missing permanent teeth. There was no significant difference by gender in the per cent of male (29.7% [95% CI: 25.7-34.1%]) or female adults (37.8% [95% CI: 33.6-42.3%]) who reported wearing full or partial dentures, false teeth, bridges or dental plates to replace missing permanent teeth. The percentage of adults who reported wearing full or partial dentures, false teeth, bridges or dental plates increased in each successively older age group: the percentage among adults age 18-24 was too small to report, 18.9% (95% CI: 14.0-24.9%) of adults age 25-39 reported wearing full or partial dentures, false teeth, bridges or dental plates, 33.3% (95% CI: 26.9-40.3%) of adults age 40-54 and 76.5% (95% CI: 70.4-81.6%) of Elders age 55+ reported wearing full or partial dentures, false teeth, bridges or dental plates to replace missing permanent teeth.

Almost twenty-three per cent (22.7%) of BC on-reserve First Nations adults reported that they required no dental care (see Table 99). The highest percentage of adults responded that they were in need of maintenance (57.2%), followed by cavities filled or other restorative work (52.6%). There was no difference in dental needs reported by gender. A higher percentage of adults age 18-54 than Elders age 55+ reported that they required maintenance, cavities filled and fluoride treatment. A higher percentage of Elders reported that they required prosthetics or did not require any dental care services.

TABLE 99: CURRENT DENTAL NEEDS BY GENDER AND ADULT AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Total (95% CI)	Gender Per Cent (95% CI)		Adult Age Group Per Cent (95% CI)	
		Males	Females	Adults (Age 18-54)	Elders (Age 55+)
Maintenance (e.g. check-ups or teeth cleaning)	**57.2% (52.4-61.9%)**	52.9% (46.0-59.6%)	61.4% (56.5-66.1%)	62.2% (57.6-66.6%)	35.8% (27.5-45.0%)
Cavities filled or other restorative work (e.g. fillings, crowns, bridge)	**52.6% (48.6-56.6%)**	50.2% (44.7-55.7%)	54.9% (49.5-60.3%)	58.5% (54.1-62.7%)	27.1% (19.7-36.1%)
None	**22.7% (19.3-26.6%)**	26.6% (21.9-32.0%)	18.6% (15.2-22.5%)	17.7% (14.4-21.6%)	38.8% (31.7-46.4%)
Fluoride treatment	**16.1% (12.9-19.9%)**	11.9% (8.5-16.3%)	20.2% (16.1-25.0%)	18.4% (14.9-22.5%)	6.1% (3.5-10.5%)[E]
Prosthetics (e.g. denture, including repair and maintenance)	**15.9% (13.4-18.8%)**	17.8% (13.5-23.0%)	14.1% (11.7-17.0%)	9.3% (7.2-12.1%)	44.3% (36.4-52.6%)
Extractions (taking teeth out)	**13.5% (11.1-16.2%)**	16.4% (12.9-20.8%)	10.6% (8.0-13.9%)	14.3% (11.6-17.6%)	9.7% (6.5-14.4%)[E]
Urgent care (dental problems requiring immediate attention)	**5.8% (4.4-7.7%)**	6.6% (4.4-9.8%)[E]	5.1% (3.7-7.0%)	5.5% (3.8-7.9%)[E]	7.3% (4.5-11.7%)[E]
Periodontal (gum) work	**5.4% (3.9-7.4%)**	4.8% (2.9-7.9%)[E]	6.0% (4.3-8.4%)	6.0% (4.2-8.3%)	3.1% (1.8-5.3%)[E]
Orthodontic work (e.g. braces)	**4.5% (2.9-6.9%)[E]**	[F]	5.7% (3.6-8.8%)[E]	5.2% (3.3-8.0%)[E]	[F]
Other	**1.2% (0.7-2.1%)[E]**	[F]	[F]	[F]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Barriers to Dental Care Access

Among BC on-reserve First Nations adults age 18+, the four most commonly reported barriers to dental care services were: the waiting list being too long (27.2%), followed by the direct cost of care (25.6%), services not being covered by NIHB (24.4%) and prior approval for services under NIHB being denied (22.1%) (see Table 100). A higher percentage of female adults reported that childcare costs were a barrier to dental care access than male adults (8.4% [95% CI: 6.3-11.2%] versus 3.3% [95% CI: 1.8-6.0%][E], respectively). There was no difference in the percentage of individuals reporting barriers to dental care access by adult age group (ages 18-54 and 55+). There has been no significant change in the barriers to dental care access reported by adults age 18+ since the 2002-03 RHS.

TABLE 100: BARRIERS TO DENTAL CARE ACCESS – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS AND 2002-03 RHS

	2008-10 RHS Per Cent (95% CI)	2002-03 RHS Per Cent (95% CI)
Waiting list too long	27.2% (20.5-35.1%)	19.1% (13.3-26.6%)[E]
Direct cost of care	25.6% (21.1-30.7%)	25.5% (18.3-34.3%)
Service not covered by NIHB	24.4% (19.9-29.5%)	26.9% (20.5-34.5%)
Prior approval for services under NIHB was denied	22.1% (18.2-26.6%)	20.8% (14.8-28.4%)
Dental services not available in my area	20.0% (14.1-27.5%)	14.6% (9.4-22.0%)[E]
Felt dental services were inadequate	17.8% (14.3-22.0%)	22.0% (17.5-27.4%)
Transportation costs	17.5% (14.2-21.4%)	21.3% (15.4-28.7%)
Other costs	8.3% (6.0-11.4%)	9.3% (6.0-14.1%)[E]
Childcare costs	5.8% (4.2-7.9%)	10.8% (7.5-15.3%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

10.8 Sexual Health

As is the case with all populations, sexually transmitted infections impact First Nations people of all ages. Sexual health is part of physical, mental, emotional and spiritual health that requires respect for sexuality and relationships, as well as knowledge on how to keep yourself healthy (NAHO, n.d.).

Youth

Overall, 22.8% (95% CI: 18.0-28.5%) of BC on-reserve First Nations youth age 12-17 reported being sexually active[21] while 13.5% (95% CI: 9.7-18.6%) of youth preferred not to say whether they were sexually active (see Table 101). It may appear that there is a difference in the percentage of male and female youth who reported being sexually active, however this is not a significant difference and may be due to chance or small numbers.

The youth population was broken down into two age groups (age 12-14 and age 15-17) because of the differences in sexual activity observed between these two age groups. A higher percentage of youth age 15-17 reported being sexually active than youth age 12-14 (38.6% versus 4.0%[E]).

TABLE 101: SEXUALLY ACTIVE BY GENDER AND AGE GROUP – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

	Sexually Active Per Cent (95% CI)	
	Yes	Preferred not to Answer
Total	**22.8% (18.0-28.5%)**	**13.5% (9.7-18.6%)**
Gender		
Female	28.1% (21.1-36.5%)	12.7% (7.5-20.7%)[E]
Male	17.9% (11.1-27.6%)[E]	14.3% (9.9-20.1%)[E]
Age Group		
Youth (Age 12-14)	4.0% (2.0-7.7%)[E]	16.1% (9.3-26.3%)[E]
Youth (Age 15-17)	38.6% (29.2-48.9%)	11.4% (7.6-16.7%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

Almost twenty-one per cent (20.9% [95% CI: 16.5-26.2%]) of BC on-reserve First Nations youth age 12-17 reported having sexual intercourse[22] in the 12 months prior to the 2008-10 RHS, 63.6% (95% CI: 56.2-70.5%) of youth reported not being sexually active and 13.9% (95% CI: 10.0-18.9%) of youth preferred not to answer the question.

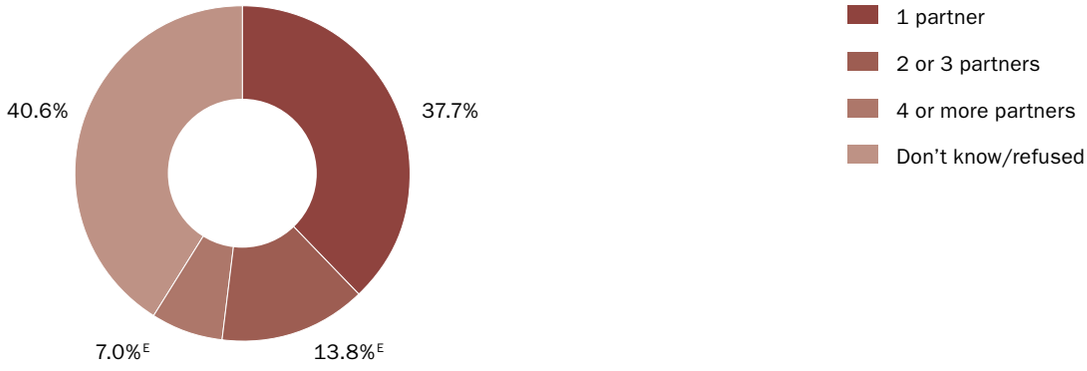
YouthCO offers workshops by and for Aboriginal youth on HIV, Hep C, sexual self-esteem, colonization and health.

Workshops include fun and interactive art and games, and can be hosted in school, drop-in centres, youth groups, after-school programs, summer camps, alternative schools, detention centres, treatment centres and even living rooms.

For more information contact *ayp@youthco.org*.

As displayed in Figure 53, 37.7% (95% CI: 27.4-49.3%) of sexually active BC on-reserve First Nations youth age 12-17 reported having sexual intercourse with one partner in the 12 months prior to the survey, 13.8% (95% CI: 8.2-22.4%)[E] reported having sexual intercourse with two or three partners in the 12 months prior to the survey, and 7.0% (95% CI: 3.9-12.2%)[E] reported having sexual intercourse with four or more partners in the 12 months prior to the survey. Just over forty per cent (40.6% [95% CI: 31.4-50.6%]) of sexually active youth didn't know or preferred not to report the number of sexual partners they had in the 12 months prior to the 2008-10 RHS.

FIGURE 53: HOW MANY PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE WITH IN THE 12 MONTHS PRIOR TO THE SURVEY? – BC ON-RESERVE† FIRST NATIONS YOUTH WHO REPORTED BEING SEXUALLY ACTIVE (AGE 12-17), 2008-10 RHS (N=121)



E – High sampling variability (CV>0.16). Interpret with caution.
† The category "None" is suppressed because of extreme sampling variability (CV>0.33) or small sample size (n≤5).

The most commonly reported method of birth control or protective method among sexually active BC on-reserve First Nations youth age 12-17 was condoms (55.9%), followed by birth control pills (24.6%) (see Table 102). Over thirty-seven (37.2%) of youth preferred not to say what methods of birth control they use. The 2008 Adolescent Health Survey[23] conducted by the McCreary Centre Society found that sexually active Aboriginal youth living on-reserve were more likely to use no method of protection the last time they had sex (22%) than Aboriginal youth living off-reserve (9%), and that Aboriginal youth living off-reserve were more likely to have used condoms (64%) than Aboriginal youth living on-reserve (54%) the last time they had sex (The McCreary Centre Society, 2012, p. 50).

TABLE 102: WHICH BIRTH CONTROL OR PROTECTIVE METHOD DO YOU USE?[24] – BC ON-RESERVE FIRST NATIONS YOUTH WHO REPORTED BEING SEXUALLY ACTIVE (AGE 12-17), 2008-10 RHS (N=128)

	Per Cent (95% CI)
Condom	55.9% (46.1-65.3%)
Birth control pills	24.6% (13.9-39.7%)E
Depo-Provera	F
Other	F
None	F
Withdrawal	F
Don't know	F
Rhythm (natural family planning)	F
Refused/Preferred not to say	37.2% (28.8-46.52%)

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Extract from "Ten Things to Know About Sexually Transmitted Infections" (NAHO, n.d.)

- Anyone can get an STI
- Stay healthy by getting tested for STIs
- STIs don't always cause any symptoms so they can be spread through genital-to-genital contact and through unprotected oral, vaginal or anal sex without knowing it
- Condoms protect you from STIs
- Bacterial STIs, like chlamydia, gonorrhea and syphilis can be cured with antibiotics
- There is no cure for many viral STIs and they can be hard to treat
  - Genital herpes and HIV can't be cured, but there are treatments
  - There is a vaccine that can help prevent hepatitis B
  - There is no treatment for human papillomavirus (HPV) but vaccines can prevent infection
- STIs caused by parasites, such as public lice, can be cured
- All women over 18 should get Pap tests

The highest percentage of BC on-reserve First Nations youth reported using birth control[25] for the primary purpose of preventing pregnancy (9.6% [95% CI: 5.6-16.0%][E]), followed by both preventing pregnancy and protection from STIs (8.8% [95% CI: 5.6-13.8%][E]) and protection from STIs only (2.7% [95% CI: 1.5-4.7%][E]).

Just over forty-five per cent of sexually active BC on-reserve First Nations youth age 12-17 (45.1%) reported that they always use condoms and 8.4%[E] reported that they use condoms most of the time (see Table 103). The percentage of sexually active youth who reported that they use condoms occasionally or never is too small to report. Thirty-eight per cent of sexually active youth preferred not to report how frequently they wear a condom.

TABLE 103: HOW OFTEN DO YOU WEAR A CONDOM? – BC ON-RESERVE FIRST NATIONS YOUTH WHO REPORTED BEING SEXUALLY ACTIVE (AGE 12-17), 2008-10 RHS (N=128)

	Per Cent (95% CI)
Always	45.1% (34.8-55.9%)
Most of the time	8.4% (4.4-15.3%)[E]
Occasionally	[F]
Never	[F]
Refused/Preferred not to answer	38.0% (29.7-47.1%)

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5)

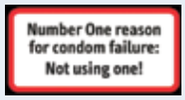
Just over eighty-five per cent (85.1% [95% CI: 68.6-93.7%]) of sexually active BC on-reserve First Nations youth age 12-17 reported having ever been tested for STIs and 76.9% (95% CI: 55.5-89.9%) of sexually active BC on-reserve First Nations youth reported having ever been tested for HIV. There was no difference by gender in the percentage of youth reporting being ever tested for STIs or HIV in the 2008-10 RHS.

Less than five per cent (4.4% [95% CI: 2.5-7.4%][E]) of BC on-reserve First Nations youth age 12-17 reported ever being pregnant or getting someone pregnant and 13.5% (95% CI: 9.7-18.6%)[E] of youth preferred not to answer this question. The average number of children that youth reported giving birth to or fathering is too small to report, and 32.0% (95% CI: 24.8-40.2%) of youth preferred not to answer this question. There were too few responses to report the average age that BC on-reserve First Nations youth had their first child.

A series of films have been created by Haisla, Halalt, Malahat, Chemainus, Stó:lō and Nak'azdli youth as a teaching tool to talk to Aboriginal youth about sexual health and HIV. The films were made by youth after participating in a two-day sexual health workshop. The videos can be used as teaching tools to help normalize conversations on these important youth issues.

By My Name was produced by Nak'azdli youth and speaks about the importance of people choosing what they want to be called, knowing your culture and knowing the facts.

Stand True was produced by Haisla youth and discusses how STIs can spread as easily as rumours.



Step Up was filmed by Chemainus youth and talks about what to expect when getting tested for STIs. The messages are "Don't stress the test. If you're having sex, get tested, support your friends, be strong and stand together."

Strong Path was filmed by Stó:lō youth and talks about HIV and unprotected sex. The messages include: "Our communities are worth protecting", "If you love me use a condom", "Most STIs can be treated or cured if you know you have them", "Choose the strong path", "Communication is the strong path", "Make a healthy choice" and "You're strong".

All videos are available at *http://campaigns.hellocoolworld.com/index.cfm?campaign_id=2&campaign_page_id=47*.

Adult

Overall, 54.4% (95% CI: 50.2-58.6%) of BC First Nations adults age 18+ reported being sexually active in the 2008-10 RHS[26] (see Table 104). Almost nineteen per cent (18.9% [95% CI: 15.2-23.3%]) of adults preferred not to say whether they were sexually active. On average, adults who reported being sexually active reported having sexual intercourse with 2.4 (SE: 0.0) partners in the 12 months prior to the 2008-10 RHS.

TABLE 104: SEXUALLY ACTIVE AND NUMBER OF SEXUAL PARTNERS IN THE PAST TWELVE MONTHS BY GENDER AND AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Sexually Active Per Cent (95% CI)	**Preferred Not to Answer** Per Cent (95% CI)	**Number of Sexual Partners** in the Past 12 Months
Total	**54.4% (50.2-58.6%)**	**18.9% (15.2-23.3%)**	**2.4 (SE: 0.0)**
Gender			
Female	51.0% (46.1-55.8%)	18.4% (14.5-23.2%)	2.3 (SE: 0.0)
Male	57.6% (52.3-62.8%)	19.4% (14.8-25.0%)	2.4 (SE: 0.1)
Age Group			
Adults (Age 18-24)	69.6% (61.5-76.6%)	15.7% (10.6-22.6%)[E]	2.7 (SE: 0.1)
Adults (Age 25-39)	67.3% (59.2-74.4%)	20.0% (14.1-27.6%)	2.4 (SE: 0.1)
Adults (Age 40-54)	56.6% (50.7-62.4%)	19.3% (13.7-26.4%)	2.2 (SE: 0.1)
Elders (Age 55+)	24.9% (19.3-31.5%)	19.8% (16.0-24.3%)	2.2 (SE: 0.1)

E – High sampling variability (CV>0.16). Interpret with caution.

Just over fifty-one per cent (51.2% [95% CI: 47.2-55.3%]) of BC on-reserve First Nations adults age 18+ reported having sexual intercourse[27] in the 12 months prior to the survey. Almost twenty-seven per cent (26.7% [95% CI: 22.9-30.8%]) of adults reported that they were not sexually active, and 20.2% (95% CI: 16.4-24.7%) of adults preferred not to answer the question.

Just under two per cent (1.9% [95% CI: 1.2-3.2%]) of BC on-reserve First Nations adults age 18+ self-identified as being homosexual, bisexual or two-spirited and almost five per cent (4.6% [95% CI: 2.7-7.5%]) did not know or preferred not to answer the question.

Among sexually active BC on-reserve First Nations adults age 18+, condoms were the most commonly reported method of birth control used (28.4%), followed by birth control pills (10.3%) and surgery (8.8%)[28] (see Table 105). Just over twenty-two per cent (22.4%) of adults reported using no method of birth control. Just over twenty-five per cent (25.8%) of adults preferred not to answer the question of which birth control methods they used.

TABLE 105: WHICH BIRTH CONTROL METHOD[28] DO YOU USE – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=958)

	Per Cent (95% CI)
Condom	28.4% (24.7-32.4%)
Refused/preferred not to answer	25.8% (21.1-31.2%)
None	22.4% (18.4-27.0%)
Birth control pills	10.3% (7.8-13.3%)
Surgery (hysterectomy, vasectomy, tubes tied)	8.8% (6.6-11.6%)
Withdrawal	3.3% (1.9-5.4%)[E]
Other	4.0% (2.4-6.4%)[E]
Depo-Provera	2.7% (1.7-4.0%)[E]
Rhythm	[F]
Don't know	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5)

For the majority of BC on-reserve First Nation adults age 18+, preventing pregnancy was reported as the primary purpose for their use of birth control (41.5% [95% CI: 35.1-48.2%]), followed by both birth control and protection from sexually transmitted diseases (37.8% [95% CI: 30.8-44.6%]), protection from sexually transmitted diseases (15.1% [95% CI: 11.1-20.4%]) and other reasons (5.9% [95% CI: 3.7-9.3%][E]).

Just over eighteen per cent of sexually active BC on-reserve First Nations adults age 18+ (18.4% [95% CI: 15.5-21.8%]) reported always use condoms, 8.1% (95% CI: 5.9-10.9%) reported using condoms most of the time, 8.6% (95% CI: 6.7-11.0%) reported using condoms occasionally and 34.3% (95% CI: 29.7-39.1%) reported never using condoms (see Figure 54). Another 30.7% (95% CI: 26.2-35.5%) of adults preferred not to answer the question.

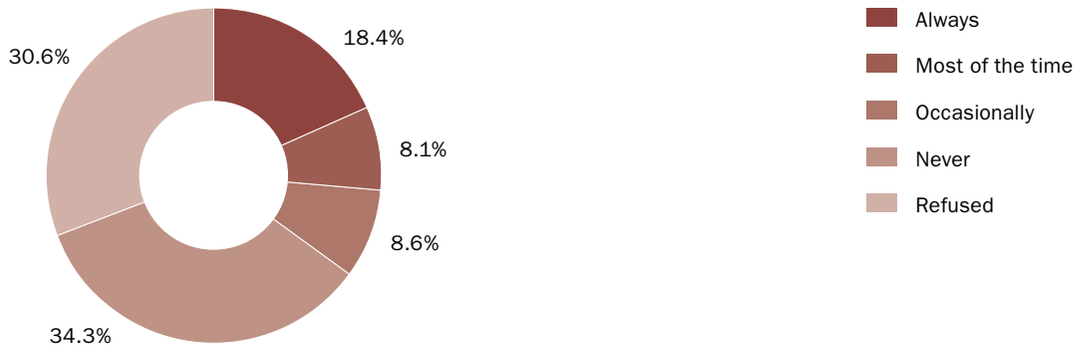


FIGURE 54: HOW OFTEN DO YOU WEAR A CONDOM? – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=958)

Among sexually active BC on-reserve First Nations adults age 18+ who reported that they did not always use a condom, the main reasons reported were[29]: being with a steady partner (41.8% [95% CI: 34.9-48.9%]), partner didn't want to use one (7.0% [95% CI: 4.6-10.6%][E]), other (6.0% [95% CI: 4.2-8.5%][E]), didn't have a condom at the time (2.9% [95% CI: 1.5-5.3%][E]), were under the influence of alcohol or drugs (2.6% [95% CI: 1.6-4.2%][E]), didn't think of using a condom (1.7% [95% CI: 0.9-3.2%][E]), the respondent or their partner wanted to get pregnant (1.6% [95% CI: 0.9-3.0%][E]), the respondent's partner didn't have HIV/AIDS (1.4% [95% CI: 0.9-2.4%][E]), and preferred not to answer the question (31.6% [95% CI: 25.7-38.2%]).

Seventy-four per cent (74.0% [95% CI: 69.1-78.3])[30] of sexually active BC on-reserve First Nations adults age 18+ reported having ever been tested for sexually transmitted infections and 74.2% (95% CI: 68.3-79.3%) of adults reported having ever been tested for HIV/AIDS[31].

On average, BC on-reserve First Nations adults age 18+ reported having given birth to or fathered 2.2 (SE: 0.1) children. The average number of children reportedly given birth to or fathered was higher among older age groups: 0.6 (SE: 0.1) children, on average, for adults age 18-24, 2.0 (SE: 0.1) children for adults age 25-39, 3.1 (SE: 0.1) children for adults age 40-54 and 3.7 (SE: 0.4) children for Elders age 55+. On average, BC Fist Nations adults reported being 21.4 years old when they had their first child.

> "The data might be a bit iffy. Any data on a taboo subject is worth having a discussion about. It may not be reflective of the most accurate information but having it prefaced with that… It's a hard subject to broach. But I think it is important information for us to have as HIV rates are climbing in the First Nations women population."
> ***RHS Steering Committee member***

10.9 Preventative Health Care and Screening

Screening is one part of the spectrum of disease prevention and can help detect adverse health conditions early. Access to health services is necessary for screening to take place.

Adults

As displayed in Table 106, blood pressure tests were the most commonly reported medical exam or test reported by BC on-reserve First Nations adults age 18+ in the 2008-10 RHS (55.2%), followed by vision or eye exams (50.7%), blood sugar tests (40.2%), physical exams (30.4%) and cholesterol tests (27.3%).

TABLE 106: MEDICAL TESTS AND EXAMS BY AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Total Per Cent (95% CI)	Age 18-24 Per Cent (95% CI)	Age 25-39 Per Cent (95% CI)	Age 40-54 Per Cent (95% CI)	Age 55+ Per Cent (95% CI)
Blood pressure Test	**55.2% (51.8-58.5%)**	31.7% (24.8-39.4%)	39.3% (32.2-47.0%)	62.7% (55.0-69.8%)	81.5% (76.3-85.8%)
Vision or eye exam	**50.7% (47.2-54.2%)**	37.2% (30.0-44.9%)	42.7% (36.1-49.5%)	53.4% (46.9-59.8%)	67.0% (61.4-72.2%)
Blood sugar test	**40.2% (37.1-43.5%)**	18.7% (12.9-26.3%)[E]	27.8% (22.2-34.3%)	46.4% (39.6-53.4%)	63.5% (57.8-69.0%)
Complete physical exam	**30.4% (26.2-35.1%)**	13.8% (7.6-23.8%)[E]	24.7% (19.7-30.5%)	35.3% (29.4-41.7%)	44.1% (38.1-50.2%)
Cholesterol test	**27.3% (24.5-30.3%)**	8.1% (4.2-15.2%)[E]	13.8% (9.9-19.0%)	32.4% (27.0-38.3%)	51.3% (45.3-57.3%)

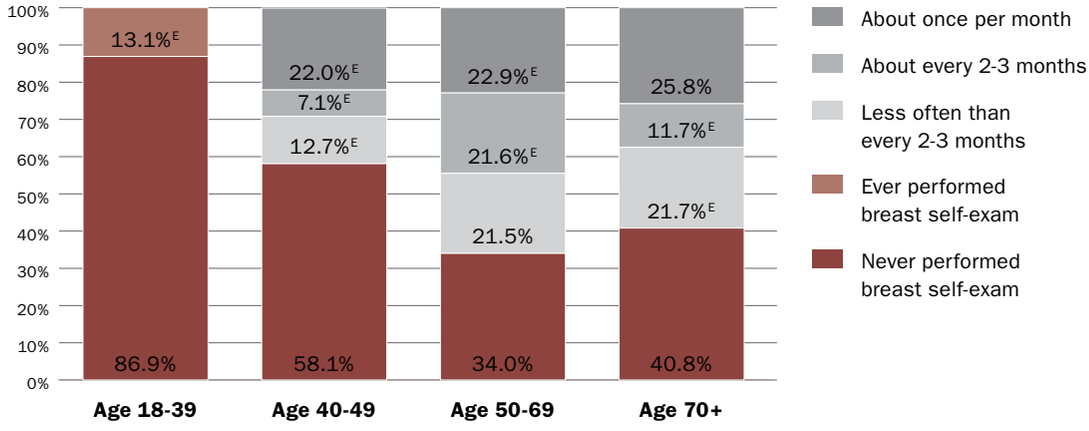
E – High sampling variability (CV>0.16). Interpret with caution.

Women were more likely than men to report having cholesterol tests (31.6% [95% CI: 27.7-35.8%] versus 23.3% [95% CI: 19.7-27.3%], respectively), and blood sugar tests (46.2% [95% CI: 40.9-51.5%] versus 34.6% [95% CI: 29.3-40.4%], respectively). There was no difference in the per cent of women and men reporting having vision or eye exams (53.5% [95% CI: 49.2-57.7%] versus 48.1% [95% CI: 42.9-53.3%], respectively), blood pressure tests (58.9% [95% CI: 53.7-63.9%] versus 51.7% [95% CI: 47.2-56.1%], respectively), or complete physical examinations (32.1% [95% CI: 27.3-37.3%] versus 28.9% [95% CI: 23.4-35.1%], respectively).

Compared to the 2002-03 RHS, there has been no significant change in the percentage of BC on-reserve First Nations adults age 18+ reporting having received any medical exams or tests.

Breast Cancer Screening

As displayed in Figure 55, the vast majority of BC on-reserve First Nations women age 18-39 reported never having performed a breast self-exam (86.9% [95% CI: 77.8-92.6%]). Among women age 40-49, 41.8% (95% CI: 32.7-51.7%) reported ever having performed a breast self-exam, 22.0% (95% CI: 15.4-30.5%)[E] of which conducted a breast self-exam approximately once a month. Women in the 50-69 age group were the most likely to report having ever conducted a breast self-exam (66.0% [95% CI: 55.7-75.0%]). While there is no definitive evidence that self-breast exams reduce a woman's likelihood of dying from breast cancer (Weiss, 2003), they still allow women to know their breasts and become familiar with normal changes over time.



E – High sampling variability (CV>0.16). Interpret with caution.

FIGURE 55: FREQUENCY OF PERFORMING BREAST SELF-EXAMINATION BY ADULT AGE GROUP – BC ON-RESERVE FIRST NATIONS FEMALE ADULTS (AGE 18+), 2008-10 RHS

The BC Women's Hospital & Health Centre, Aboriginal Health Program has created a toolkit to discuss breast health with Aboriginal women. The breast health screening tool, called *Affirming Life: Breast Health Screening Education Tool for Aboriginal Women* is being sent to all health centres to assist in discussing breast health (BC Women's Hospital & Health Centre, 2012). This project was funded by the Canadian Breast Cancer Foundation BC-Yukon Branch. It was piloted in four First Nations communities and has been vetted by many others experts in the field and grassroots community members.

The key messages communicated throughout the toolkit include:

- "Our strength is in our knowledge of ourselves and our bodies; mind, body and spirit."
- **Screening:** the better we know and listen to our bodies, the better we get at noticing any changes that may be of concern.
- **Early detection:** the sooner changes that might be of concern are noticed and reported to a health professional the better our chances for dealing with diseases or illnesses and recovering from them.
- **Action:** live a healthy lifestyle including eating a healthy diet, being physically activity and maintaining a healthy body weight.
- **Breast changes to be aware of:** a dimple, change in size, redness, thickening or hardening of the skin, a change in the nipple, blood or clear discharge coming from the nipple, or a new lump in the breast or under the arm.

As shown in Figure 56, 9.8% (95% CI: 6.5-14.4%)[E] of BC on-reserve First Nations women age 18-39 reported ever having had a mammogram, compared to 51.6% (95% CI: 42.1-60.9%) among women age 40-49, 76.5% (95% CI: 68.8-82.8%) among women age 50-69 and 61.8% (95% CI: 45.6-75.7%) among women 70+.

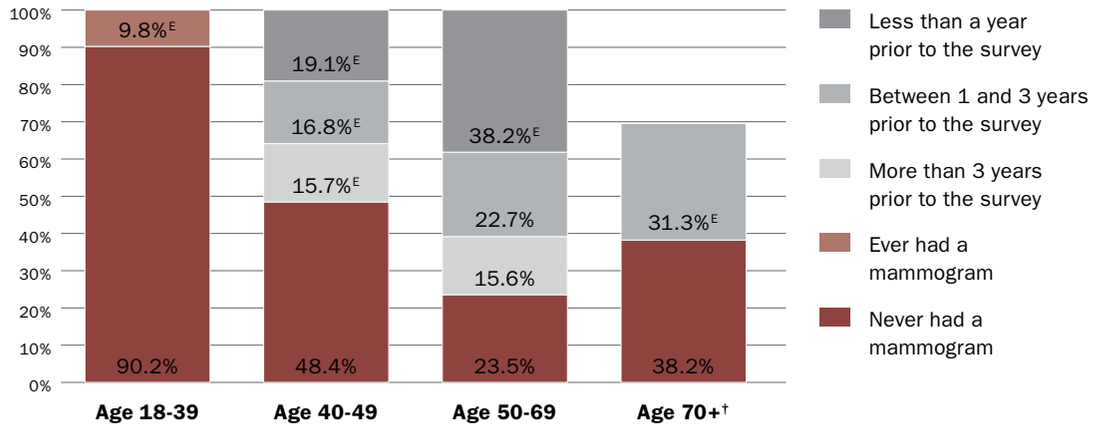


FIGURE 56: LAST MAMMOGRAM BY ADULT AGE GROUP – BC ON-RESERVE FIRST NATIONS WOMEN (AGE 18+), 2008-10 RHS (N=716)

E – High sampling variability (CV>0.16). Interpret with caution.

† The categories "Less than a year ago" and "More than 3 years ago" are suppressed because of extreme sampling variability (CV>0.33) or small sample size (n≤5).

Screening Saves Lives

By age 50, it is recommended that women receive mammograms every two years. Women between the ages of 40 and 79 can book a screening mammogram directly through the Screening Mammography Program without a doctor's referral. For more information see: *http://www.smpbc.ca/Program/default.htm*

The BC Cancer Agency's Screening Mammography Program has several mobile vans that conduct screening throughout the province. To find out when the van is next in your area visit: *http://www.smpbc.ca/Program/Locations+and+Mobile+Services.htm*

Cervical Cancer Screening

Among all BC on-reserve First Nations women age 18+, 21.4% (95% CI: 17.9%-25.%) reported having a Pap smear less than six months prior to the 2008-10 RHS, 23.9% (95% CI: 20.7-27.3%) reported having a Pap smear between six months and a year prior to the survey, 24.7% (95% CI: 21.4-28.3%) reported having a pap smear between one and three years prior to the survey, 6.3% (95% CI: 4.3-9.1%)[E] reported having a pap smear between three and five years prior to the survey, 9.3% (95% CI: 6.9-12.4%) reported having a pap smear more than five years prior to the survey and 14.4% (95% CI: 11.2-18.6%) reported never having had a Pap smear (see Figure 57).

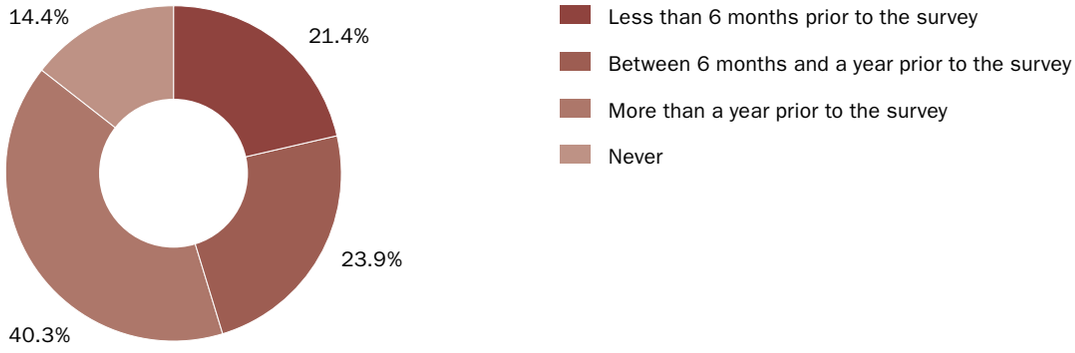


FIGURE 57: LAST PAP SMEAR – BC ON-RESERVE FIRST NATIONS WOMEN (AGE 18+), 2008-10 RHS

BC on-reserve First Nations women age 25-39 had the highest proportion (62.3%) of individuals who reported having had a Pap smear within the year prior to the 2008-10 RHS (see Table 107). The highest percentage of women who reported having a Pap smear more than three years prior to the survey or never having a Pap smear was among women age 55+, followed by women age 18-24. This is troubling as women age 18-24 were also the most likely to report having two or more sexual partners in the 12 months prior to the 2008-10 RHS (16.7% [95% CI: 9.5-27.6%][E] of women age 18-24 reported having two or more partners and 20.8% [95% CI: 13.0-31.7%][E] of women age 18-24 preferred not to say the number of sexual partners they had in the twelve months prior to the survey).

TABLE 107: LAST HAD A PAP SMEAR BY ADULT AGE GROUP – BC ON-RESERVE FIRST NATIONS FEMALE ADULTS (AGE 18+), 2008-10 RHS

	Age 18-24 Per Cent (95% CI)	**Age 25-39** Per Cent (95% CI)	**Age 40-54** Per Cent (95% CI)	**Age 55+** Per Cent (95% CI)
Less than a year prior to the survey	51.1% (40.9-61.2%)	62.3% (54.8-69.3%)	39.9% (31.5-49.0%)	22.6% (16.4-30.3%)
1-3 years prior to the survey	17.7% (11.2-26.8%)[E]	24.5% (19.2-30.6%)	31.4% (24.3-39.5%)	22.9% (16.6-30.8%)
More than three years prior to the survey or never	31.2% (23.1-40.7%)	13.2% (8.3-20.2%)[E]	28.7% (21.7-36.9%)	54.5% (46.5-62.3%)

E – High sampling variability (CV>0.16). Interpret with caution.

Among women 18+ who reported having two or more sexual partners in the twelve months prior to the 2008-10 RHS, 25.7% (95% CI: 13.3-43.9)[E] reported never having a Pap smear or having one more than three years prior to the survey, 24.8% (95% CI: 12.2-43.9%)[E] reported having a Pap smear 1-3 years ago and 49.5% (95% CI: 33.6-65.4%) reported having a Pap smear within the year prior to the survey. This is a population that may be at higher risk for cervical cancer and of which less than half are meeting the current screening guidelines.

The LACE Campaign – Live Aware. Create Empowerment. Don't forget what's inside!

Cervical cancer is one of the most preventable cancers, and the Pap test is one of the most effective screening tests ever devised. LACE is a grassroots campaign to raise awareness and promote Pap testing.

What is a Pap test? A Pap test is a routine screening test that detects cervical cancer early. If caught soon enough, the cure rate for cervical cancer and pre-cancer is very high.

Who needs a Pap test? Women should start getting pap tests at age 21 or approximately three years after first sexual contact. Sexual contact includes touching and intercourse because the human papillomavirus (HPV) is transmitted through sexual contact, not just sexual intercourse.

How often do you need a Pap test? Women should receive a pap test once a year until they have three normal results in a row. After that pap tests should be done every two years (BC Cancer Agency, 2010).

Sign up for a reminder for you next pap smear at
http://campaigns.hellocoolworld.com/index.cfm?campaign_id=13&campaign_page_id=168.

Prostate Cancer Screening

Prostate cancer is the third leading cause of cancer death in men in Canada. Current Canadian guidelines state that prostate cancer screening should be offered to men 50 years of age with at least a 10-year life expectancy (BC Cancer Agency, 2012).

Among BC on-reserve First Nations men age 18+, 10.1% (95% CI: 8.0-12.7%) reported ever having had a physical prostate check or prostate-specific antigen blood test. The percentages of men age 18-24 and 25-39 who reported ever having had a prostate check were too variable to report, however 29.5% (95% CI: 21.8-38.5%) of men age 40-54 and 35.4% (95% CI: 25.8-46.3%) of men age 55+ reported ever having a prostate check. These lower percentages could be the result of men not presenting to health care providers, not having access to screening services or not being screened by their health care provider. In the 2002-03 RHS, 13.0% (95% CI: 10.6-15.9%) of BC on-reserve First Nations males reported having ever had a rectal exam[32].

> "Cultural forces and the often stoic nature of men in our community frequently results in the ignoring of symptoms and a reluctance to seek medical care until treatable conditions are in their end stages... we must continue to improve the access to care for these men and address disease prevention with focuses on blood pressure, diabetes, cholesterol control, depression and prostate cancer screening."
> ***Daniel Molina, MD, Assistant Medical Director, Oklahoma City Indian Clinic.***

Youth

Almost forty-eight per cent (47.9%) of BC on-reserve First Nations youth age 12-17 reported having had a vision or eye exam, 24.1% reported having had a blood pressure test, 15.0% reported having had a complete physical exam, 9.8%[E] reported having had a blood sugar test, and 2.4%[E] reported having had a cholesterol test (see Table 108).

TABLE 108: PREVENTATIVE TESTS OR EXAMS – BC ON-RESERVE FIRST NATIONS YOUTH (AGE 12-17), 2008-10 RHS

	Per Cent (95% CI)
Vision or eye exam	47.9% (41.2-54.7%)
Blood pressure test	24.1% (20.2-28.6%)
Complete physical exam	15.0% (11.0-20.1%)
Blood sugar test	9.8% (6.7-14.0%)[E]
Cholesterol test	2.4% (1.2-4.7%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

Almost thirteen per cent (12.8% [95% CI: 7.7-20.6%][E]) of BC on-reserve First Nations female youth age 12-17 reported ever having had a Pap smear. The percentage of females reporting ever having a Pap smear was higher in older age groups, with 21.3% (95% CI: 13.1-32.7%) of female youth age 15-17 reporting having had a Pap smear. The percentage of female youth age 12-14 who reported ever having had a Pap smear was too small to report.

10.10 Immunizations

Receiving proper and timely immunizations are important for preventing communicable diseases. An awareness and understanding of the needs, benefits and possible side effects of immunizations is important. To have optimal vaccine coverage in communities, there must be easy access to vaccine as well as education about which immunizations are needed and when for children, youth, adults and Elders.

Children

The majority (98.4% [95% CI: 96.5-99.2%]) of BC on-reserve First Nations children age 0-11 were reported to have received their routine vaccinations/immunizations. For those children who were not vaccinated, the primary reason offered for not immunizing the child was forgetting/failing to remember[33]. However, as noted by the RHS Steering Committee, this question is based on respondent's understanding of what "routine" vaccinations are, which can be quite complicated.

The respondent's understanding of "routine" may be confused with "complete" or "on time". Most vaccinations require doses timed at different ages for optimal protection. First Nations and Inuit Health, Health Surveillance Unit, BC Region collects administrative data regarding the immunization of on-reserve children. Local nurses collect information for children who are 1, 2 and 6 years of age who live on-reserve at least six months of the year. This information is submitted by approximately 75% of First Nations communities in BC. In 2008 and 2009, 80% of 1-, 2- and 6 year-old children living on-reserve in BC received the required number of doses of each vaccine in the BC immunization schedule. This is higher than the provincial average.

It may be that 98.4% of children received a portion of the vaccines in the B.C. immunization schedule, as reported by children's caregivers in the 2008-10 RHS, however this percentage may not reflect whether the immunizations were complete or up to date for the child's age.

Youth

Over thirty-five per cent (35.5% [95% CI: 27.9-44.0%]) of BC on-reserve First Nations female youth age 12-17 reported receiving the HPV vaccine[34]. Among girls age 12-14, 27.9% (95% CI: 17.2-41.8%)[E] reported having received the HPV vaccine, and among girls age 15-17, 41.3% (95% CI: 31.2-52.2%) reported having received the HPV vaccine.

10.11 Health Care Services Access

Jurisdictional barriers, lack of funding, governance issues, health care practitioner shortages and geographical isolation are all factors that have contributed to the difficultly many First Nations communities face in accessing health care services and Non-Insured Health Benefits (NIHB).

It is important to note that health care services are currently provided to BC First Nations by both the provincial and federal governments. As individuals may access health care services from both the federal and provincial government, it is not possible to know whether individuals are reporting barriers to federal or provincial health care services.

Adults

Level of Access Compared to Canadians Generally

Forty-nine per cent (49.0% [95% CI: 43.4-54.7%]) of BC on-reserve First Nations adults age 18+ reported believing that their level of access to health care services is the same as compared to Canadians in general (see Figure 58). Just over thirty-seven per cent (37.3% [95% CI: 29.6-45.6%]) reported believing that they have less access to health care services than Canadians generally and 13.7% (95% CI: 9.8-18.9%) reported believing that their level of access is better than other Canadians. There was no variation by either gender or adult age group.

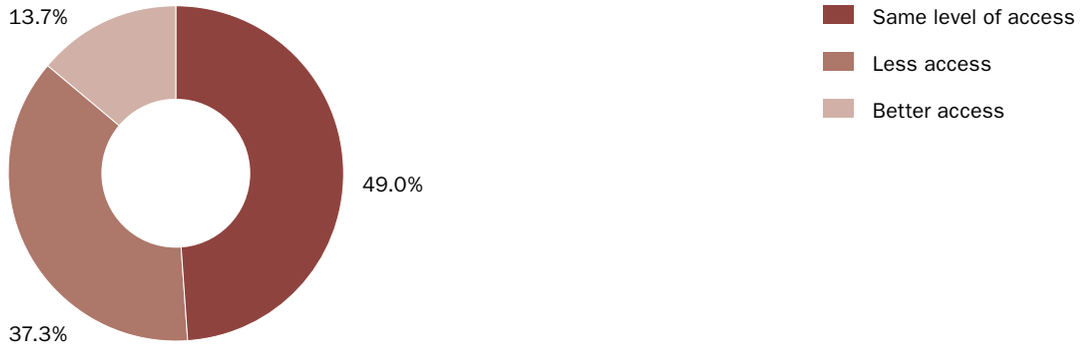
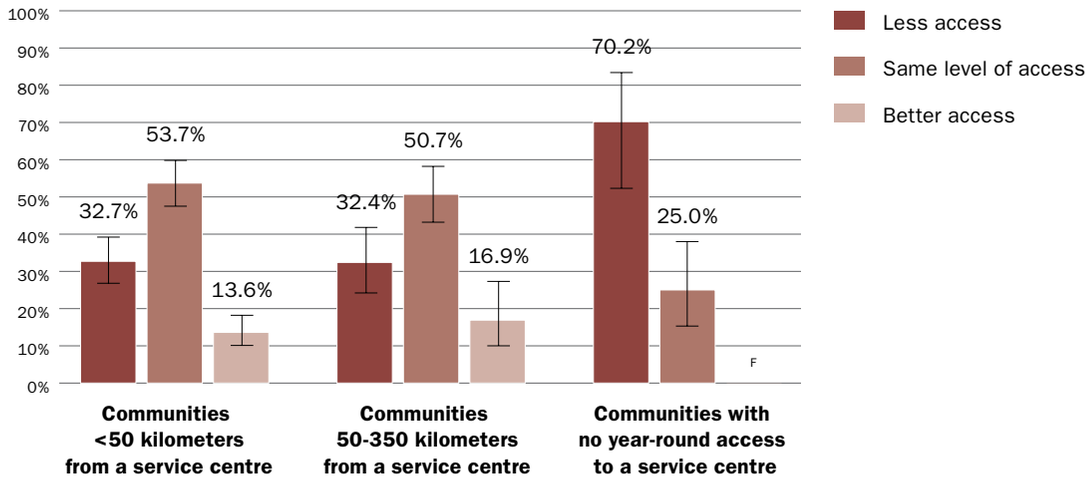


FIGURE 58: HEALTH CARE SERVICES ACCESS BELIEVED TO BE THE SAME OR BETTER COMPARED TO CANADIANS IN GENERAL – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

Figure 59 depicts the level of access to health care services reported by BC on-reserve First Nations adults depending on the remoteness of their community of residence. Adults who live in communities with no year-round access to a service centre were more likely to state that they believe that they have less access to health care services compared to Canadians in general (70.2% [95% CI: 52.5-83.4%]) than adults in communities 50-350 kilometers from a service centre (32.4% [95% CI: 24.2-41.8%]) or communities less than 50 kilometers from a service centre (32.7% [95% CI: 26.8-39.2%]).



E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

FIGURE 59: HEALTH CARE ACCESS BELIEVED TO BE THE SAME OR BETTER COMPARED TO CANADIANS IN GENERAL BY REMOTENESS OF COMMUNITIES – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=1,145)

Among BC on-reserve First Nations adults age 18+, the majority (57.0% [95% CI: 50.5-63.4%]) reported having had no change in their primary health care provider (whether their family physician, registered nurse or nurse practitioner) in the year prior to the 2008-10 RHS. Almost twelve per cent (11.7% [95% CI: 9.6-14.1%]) reported having their primary health care provider change once in the year prior to the survey and 16.6% (95% CI: 12.7-21.4%) reported having their primary health care provider change two or more times in the year prior to the survey[35].

Home Care Services

The majority of BC on-reserve First Nations adults age 18+ reported that they did not need any home care services. The most frequently reported home care service required was home maintenance, required by 15.4% of adults, followed by light housekeeping (12.0%), meals prepared or delivered (4.9%), care from a nurse (4.9%) and personal care (grooming, washing etc.) (3.0%) (see Table 109). A higher percentage of male and female Elders age 55+ reported the need for home maintenance and light housekeeping than male and female adults age 18-54.

TABLE 109: HOME CARE SERVICES REQUIRED BY GENDER AND ADULT AGE GROUP – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Total Per Cent (95% CI)	**Adults Age 18-54** Per Cent (95% CI)		**Elders Age 55+** Per Cent (95% CI)	
		Male	Female	Male	Female
Home maintenance	**15.4% (13.2-17.9%)**	6.8% (4.6-10.0%)[E]	13.1% (10.0-17.0%)	22.0% (15.7-29.8%)	45.0% (37.1-53.1%)
Light housekeeping	**12.0% (10.1-14.3%)**	5.4% (3.2-9.1%)[E]	7.4% (4.7-11.5%)[E]	19.3% (13.7-26.6%)	40.7% (33.9-47.8%)
Meals prepared or delivered	**4.9% (3.3-7.0%)[E]**	[F]	[F]	8.2% (4.6-14.2%)[E]	16.7% (10.5-25.6%)[E]
Care from a nurse	**4.9% (3.4-6.8%)[E]**	[F]	[F]	10.1% (6.2-16.1%)[E]	15.7% (10.5-22.6%)[E]
Personal care (grooming, washing, etc.)	**3.0% (2.0-4.5%)[E]**	[F]	[F]	[F]	9.0% (5.2-15.2%)[E]
Palliative care (terminally ill)	[F]	[F]	[F]	[F]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

For many home care services, the majority of individuals who reported needing services reported that they received the home services. The lowest percentage was for home maintenance, which only 35.1% (95% CI: 28.8-41.9%) of individuals who reported needing the services stated that they were currently receiving the service. Forty-eight per cent (48.0% [95% CI: 40.0-56.2%]) of individuals who reported that they required light housekeeping stated that they currently receive such services. Sixty-three per cent (63.0% [95% CI: 43.6-78.9%]) of individuals who reported that they require care from a nurse stated that they currently receive such services. Almost sixty-six per cent (65.9% [95% CI: 45.6-81.5%]) of individuals who reported that they require personal care stated that they currently receive such services. Over seventy-five per cent (75.7% [95% CI: 60.2-86.6%]) of individuals who reported that they require meals prepared or delivered stated that they currently receive such services.

Aboriginal Patient Liaisons

Across the province, Aboriginal Patient Liaisons work to facilitate Aboriginal people's access to culturally and linguistically appropriate health care services, to help "navigate" clients through the health care system and to liaise with family and community health care services.

Aboriginal Liaisons can:

- Accompany patients to medical appointments
- Support and comfort patients
- Network with on-site health care teams
- Provide information on the Non-Insured Health Benefits program
- Connect patients with Elder or spiritual support
- Connect patients and families to other provincial hospitals and services
- Assist with complaints
- Connect patients to Aboriginal and community resources
- Access emergency clothing, laundry soap and provide care packages
- Support discharge planning
- Supporting homeless individuals at discharge
- Provide cultural support for patients
- Provide support during crisis situations
- Support families with critical illness or death

The benefits of Aboriginal Patient Liaisons to patients are increased comfort and satisfaction, increased knowledge and understanding and improved continuity of care. To providers, Aboriginal Liaisons improve communication with their patients, increase their awareness of Aboriginal health issues and increase cultural competence. From a health systems perspective, Aboriginal Patient Liaisons increase collaboration, address gaps in care and improve the use of resources (NHA, 2011).

Home Care Assistance Provided to Family and Friends

Nearly twenty per cent (19.6% [95% CI: 16.0-23.7%]) of BC on-reserve First Nations adults age 18+ reported that they helped a family member or friend with home care (e.g. dressing, bathing, meals, housekeeping, travel) because he/she has a chronic condition or disability. There was no difference by gender in the percentage of adults who reported helping with home care (22.7% [95% CI: 17.9-28.4%] of women versus 16.6% [95% CI: 12.7-21.3%] of men). Female adults reported spending more hours per week providing support to friends and family than male adults (an average of 30.2 (SE: 13.1) hours per week for females versus 22.9 (SE: 7.6) hours for males).

Table 110 outlines the types of home care assistance provided by gender.

TABLE 110: TYPE OF HOME CARE ASSISTANCE PROVIDED BY GENDER – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS (N=252)

	Total Per Cent (95% CI)	**Male** Per Cent (95% CI)	**Female** Per Cent (95% CI)
Housekeeping (cleaning, laundry, etc.)	**74.2% (66.3-80.9%)**	62.8% (48.9-74.9%)	83.1% (73.5-89.8%)
Food preparation	**60.5% (53.2-67.3%)**	49.7% (37.4-62.1%)	68.9% (60.1-76.4%)
Running errands	**52.3% (44.3-60.2%)**	51.4% (37.9-64.6%)	53.1% (43.4-62.6%)
Home maintenance (minor repair, shovelling driveway)	**34.3% (28.2-41.0%)**	49.4% (37.8-61.1%)	22.6% (15.4-31.9%)[E]
Personal care (grooming, washing, etc.)	**31.7% (24.7-39.6%)**	21.9% (12.7-35.0%)[E]	39.3% (31.4-47.8%)
Other	**10.3% (6.3-16.4%)[E]**	13.6% (7.6-23.1%)[E]	[F]

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Barriers to Health Care Access

Barriers to health care access reported by BC on-reserve First Nations adults age 18+ are presented in Table 111. The five most commonly reported barriers include the waiting list being too long (33.2%), the service not being covered by NIHB (22.8%), not being able to afford the direct cost of care (22.8%), felt that the health care provided was inadequate (21.6%) and could not afford transportation costs (21.0%).

Indigenous Cultural Competency Training Program

"How is treating everyone the same a problem in health care?"

This is an example of one of the important issues that many Canadians wrestle with when looking at training specifically designed to learn about Indigenous people. In the Provincial Health Services Authority *Indigenous Cultural Competency* (ICC) training program, these are the kind of questions that are welcomed and addressed. Created in response to the *Transformative Change Accord: First Nations Health Plan*, ICC Training addresses the requirement to increase cultural competency within health authorities. To date, the program has trained over 7,000 people.

TABLE 111: BARRIERS TO HEALTH CARE ACCESS – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Per Cent (95% CI)
Waiting list too long	33.2% (26.6-40.6%)
Not covered by Non-insured Health Benefits (NIHB)	22.8% (18.8-27.3%)
Could not afford direct cost of care, service	22.8% (18.5-27.7%)
Felt health care provided was inadequate	21.6% (17.7-26.1%)
Could not afford transportation costs	21.0% (17.8-24.6%)
Unable to arrange transportation	19.4% (16.0-23.3%)
Service was not available in my area	18.0% (14.2-22.5%)
Prior approval for services under NIHB was denied	17.2% (13.7-21.5%)
Doctor or nurse not available in my area	16.9% (12.7-22.2%)
Felt service was not culturally appropriate	14.8% (11.6-18.8%)
Health facility not available (e.g. nursing station or hospital)	14.4% (10.8-18.9%)
Difficulty getting traditional care (e.g. healer, medicine person, or Elder)	14.1% (11.1-17.8%)
Chose not to see health professional	11.8% (9.2-15.0%)
Could not afford childcare costs	7.2% (5.4-9.6%)

E – High sampling variability (CV>0.16). Interpret with caution.
F – Extreme sampling variability (CV>0.33) or small sample size (n≤5).

Female adults were more likely to report that prior approval for services under NIHB being denied as a barrier to health care access than male adults (22.2% [95% CI: 17.3-28.1%] vs. 12.6% [95% CI: 9.5-16.5%], respectively). There were no other significant differences in barriers to health care access reported by gender. Barriers reported were similar across adult age groups with no differences between adults age 18-54 and Elders age 55+.

The ICC training is a facilitated, online educational program that increases knowledge, enhances self-awareness and develops skills that will enable service providers to work in a more critically-informed and effective way with Indigenous people. The training is comprehensive and there are several courses available including Core Health and Core Mental Health, as well as three more coming in late 2012.

These courses are of interest to anyone working in Indigenous health and wellness settings. The training is designed for health authority, Ministry of Health and other professionals working in the health care field, however anyone is eligible to take the training. Anyone directly employed by a provincial health authority or the Ministry of Health or health care workers who work for an Aboriginal organization are qualified to take the training without paying a fee. Anyone else can take the training for a fee.

For more information please visit *http://www.culturalcompetency.ca/home*.

Youth

Contact with Health Care Providers

The majority of BC on-reserve First Nations youth age 12-17 reported having visited a doctor or community health nurse within the 12 months prior to the 2008-10 RHS (57.0% [95% CI: 49.1-64.6%]), 10.6% (95% CI: 6.8-16.0%)[E] reported having visited a doctor or a community health nurse one to two years prior to the survey, and 10.8% (95% CI: 6.9-16.5%)[E] of youth reported they couldn't remember the last time they last visited a doctor or community health nurse. The number of youth who reported visiting a doctor or nurse over two years prior to the survey is too small to report. Over twenty per cent (20.3% [95% CI: 14.5-27.8%]) of youth reported never visiting a doctor or community health nurse. There was no significant difference in the frequency of seeing a doctor or community health nurse by gender: 64.8% (95% CI: 54.5-73.9%) of female youth reported visiting a doctor or community health nurse in the year prior to the survey compared to 50.0% (95% CI: 41.2-58.8%) of male youth. Just over twenty-seven per cent (27.2% [95% CI: 18.9-37.5%][E]) of male youth reported never having visited a doctor of community health nurse versus 12.7% (95% CI: 7.8-19.8%)[E] of female youth.

> "Almost all follow up for any kind of health issue [at the health centre} I have to make sure I've got their cell phone and mark down specifically is this phone for texting or can it receive calls because there's two different plans or financial burdens with that and it's predominately texting."
>
> ***RHS Steering Committee member***

The majority (68.9% [95% CI: 62.0-75.1%]) of youth age 12-17 reported never having had any counselling, psychological testing or other mental health services. It is unknown whether this is because the majority of youth do not require counselling, psychology testing or other mental health services, or if this percentage is reflective of a lack of access to such services. Over sixteen per cent (16.1% [95% CI: 11.5-22.0%]) of youth reported having had counselling, psychological testing or other mental health services in the past year prior to the survey, 4.3% (95% CI: 2.4-7.9%)[E] reported having used such services one to two years prior to the survey, and 2.4% (95% CI: 1.2-4.7%)[E] reported having used such services over two years prior to the survey. Over eight per cent (8.2% [95% CI: 5.2-12.7%][E]) of youth don't remember when they last had counselling, psychological testing or any other mental health service. The percentage of youth who reported accessing mental health services in the year prior to the survey was similar between both female (16.9% [95% CI: 10.0-27.1%][E]) and male (15.4% [95% CI: 10.8-21.3%][E]) youth.

10.12 Barriers to Non-Insured Health Benefits

The Non-Insured Health Benefits Program is Health Canada's national, medically necessary health benefits program that provides coverage for benefit claims for a specified range of drugs, dental care, vision care, medical supplies and equipment, short-term crisis intervention, mental health counselling and medical transportation for eligible First Nations people and Inuit (FNIHB, 2012).

The majority (63.3%) of BC on-reserve First Nations adults age 18+ reported that they had not experienced any barriers in accessing Non-Insured Health Benefits (see Table 112). For those who reported experiencing barriers, the largest percentage of adults reported barriers in accessing dental care (17.2%), followed by medication (15.1%), vision care (14.0%) and transportation services or costs (10.8%). There were no differences in barriers to NIHB reported by gender or by adult age group (ages 18-54 and 55+).

"It's so much around perception though and the seeking out of health supports. If you don't seek out health supports there's no barriers."

RHS Steering Committee member

TABLE 112: BARRIERS TO NON-INSURED HEALTH BENEFITS – BC ON-RESERVE FIRST NATIONS ADULTS (AGE 18+), 2008-10 RHS

	Per Cent (95% CI)
No difficulties	63.3% (58.3-68.0%)
Dental care	17.2% (13.7-21.4%)
Medication	15.1% (12.1-18.7%)
Vision care	14.0% (11.0-17.8%)
Transportation services or costs (air or road)	10.8% (7.7-14.8%)
Escort travel	6.9% (4.6-10.2%)[E]
Don't know	4.4% (3.4-5.8%)
Other medical supplies	3.4% (2.3-5.0%)[E]
Hearing aid	3.1% (2.1-4.5%)[E]
Other	2.3% (1.4-3.9%)[E]

E – High sampling variability (CV>0.16). Interpret with caution.

Notes

1. There are many ways of defining a "good diet" and there is still debate on this point in the nutrition field.
2. Respondents could select multiple factors.
3. Interpreted by respondent.
4. Listed in descending order of the percentage of children reportedly affected by the health condition in the 2008-10 RHS.
5. Chronic ear infections are defined as recurring frequently or lasting a long time.
6. Question was "Does the child take the following medications?"
7. Listed in descending order of the percentage of youth reporting the health condition in the 2008-10 RHS.
8. Listed in descending order of the percentage of adults reporting the health condition in the 2008-10 RHS.
9. Age-standardized to the 1991 Canadian population aged 18+.
10. The question does not differentiate between osteoarthritis, rheumatoid arthritis and other types of arthritis. A separate question is asked for rheumatism.
11. RHS phrases the question "Have you been told by a health care professional that you have any of the following health conditions?" The CCHS asks respondents to report long-term conditions that are expected to last or have already lasted six months or more and that have been diagnosed by a health professional.
12. The RHS phrases the question "Have you been told by a health care professional that you have any of the following health conditions?: *Chronic back pain, excluding arthritis*" The CCHS asks respondents to report long-term conditions that are expected to last or have already lasted six months or more and that have been diagnosed by a health professional. The question relating to back pain is phrased as, "*Do you have back problems, excluding fibromyalgia and arthritis?*".
13. Obesity is defined as individuals aged 18 years or older with a Body Mass Index (BMI) of 30 or higher. Overweight is defined as a BMI between 25-29.9. BMI is calculated as BMI = (Weight in kilograms)/(Height in meters)^2, where both weight and height are self-reported. Pregnant women are excluded. For persons aged 2 through 17 years, obesity is defined using age- and gender-specific BMI thresholds (Source: Age and gender Cole TJ, Bellizzi MC, Flegal KM, Dietz WH. Establishing a standard definition for child overweight and obesity: worldwide international survey. Br Med J 2000; 320:1240.).
14. There is no way to confirm how effective these treatments are in controlling respondent's diabetes, whether these measures were suggested by a health care professional or whether the measures adhere to current guidelines.
15. The question in the survey actually asks whether the respondent's diabetes has "Affected your circulation other than your health?". It is assumed that this is a typo and meant to read "Affected your circulation other than your heart?"
16. Listed in descending order of the percentage of adults reporting the reason for not attending a diabetes clinic.
17. The 2002-03 RHS question wording asked about "injuries experienced in the past 12 months requiring the attention of a health care professional", whereas the 2008-10 RHS asked if the individual had been injured in the past 12 months.
18. Whether the injury took place inside or outside the home is not asked in the question.
19. It is unknown whether this response would include food gathering. Interpretation of the category was left up to individual respondents.

20. Permanent adult teeth, not false teeth.
21. No definition of sexual activity is given in the questionnaire.
22. No definition of sexual intercourse is given in the questionnaire (anal, oral or vaginal).
23. The Adolescent Health Survey is conducted in classrooms by trained public health nurses in school districts across BC. The 2008 survey had over 31,000 respondents. There were over 3,300 self-identified Aboriginal students in the survey. Of these, 13% were currently living on-reserve and 23% had lived on-reserve at some point in their lives.
24. Respondents could select multiple birth control or protection methods.
25. The method of birth control is not asked in this question.
26. No definition of sexual activity is given in the questionnaire.
27. No definition of sexual intercourse is given in the questionnaire (anal, oral or vaginal).
28. Multiple responses possible.
29. Respondents were asked to select the answer that best described their situation. The percentage of respondents who answered "Thought you were safe" and "Couldn't afford to buy condoms" was too small to report.
30. 25.0% (95% CI: 12.8-43.1%)[E] preferred not to answer.
31. The per cent of sexually active adults who refused to say whether they have been tested for HIV is too variable to report.
32. Different wording was used in the 2002-03 RHS and 2008-10 RHS to capture prostate screening information: "Rectal exam" was used in the 2002-03 RHS and "Physical prostate check" was used in the 2008-10 RHS.
33. The number of children who were reported to not be vaccinated was low and therefore many of the possible reasons a primary caregiver could give for not vaccinating children had too few responses to report. Possible responses included: doctor or nurse not available in my area; immunization service not available in my area; scheduling problem/clinic waiting list too long; forgot/failing to remember; too many immunizations required; didn't want to immunize child for cultural reasons; don't think vaccines are safe; think local vaccine services are inadequate (i.e. poor refrigeration, out-of-date medications).
34. Male youth were not asked if they had received the HPV vaccine because at the time of the survey there were no publically-funded HPV immunization campaigns for males.
35. Over thirteen per cent (13.6 % [95% CI: 11.2-16.5%]) of First Nations adults age 18+ didn't know if their primary health care provider changed in the past year and 1.1% (95% CI: 0.6-2.0%)[E] preferred not to answer the question.

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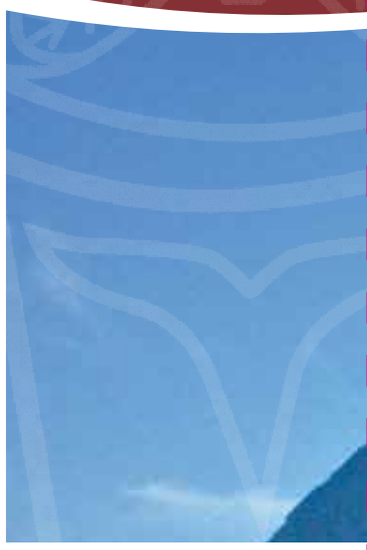

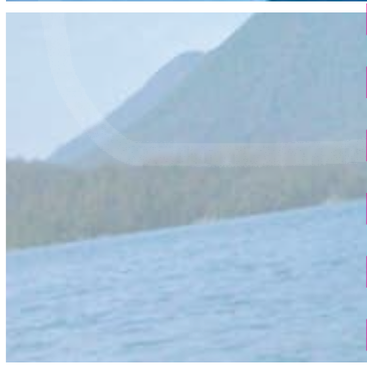

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