



FIRST NATIONS REGIONAL HEALTH SURVEY

PHASE 3 (2015–17)

BC Provincial Report



First Nations Health Authority
Health through wellness



First Nations Health Authority
Health through wellness

**First Nations Regional Health Survey Phase 3 (2015–17):
Provincial Report**

Published by:
First Nations Health Authority
501 - 100 Park Royal South
Coast Salish Territory
West Vancouver, BC
Canada V7T 1A2
www.fnha.ca | info@fnha.ca

Printed June 2019
ISBN 978-1-9995471-0-3

The BC Regional Health Survey Thunderbird artwork was designed by Andrew (Enpaauk) Dixel, Nlaka'pamux Nation.
©2019. First Nations Health Authority. Content may be reproduced without written permission provided the source is fully acknowledged.



FIRST NATIONS R E G I O N A L H E A L T H S U R V E Y

PHASE 3 (2015-17)

BC Provincial Report



Contents

ACKNOWLEDGMENTS	IX
SUMMARY OF INTEREST AREAS	1
Interest Area 1: Traditional Wellness	3
Interest Area 2: Mental Health and Wellness	4
Interest Area 3: Primary Health Care	6
INTRODUCTION	9
First Nations Perspective on Health and Wellness	10
Everything is Connected: Social Determinants of First Nations Health	11
Self-Determination and Health	11
Impact of Colonialism and Discrimination	13
First Nations Regional Health Survey: Background	14
DEMOGRAPHICS	17
Provincial Sampling and Response Rate	18
Participation Across BC	19
Survey Participation by Age	19
Provincial Representation by Age	19
Survey Participation by Gender	19
HEALTH DETERMINANTS	21
Community Wellness	22
What Makes You Healthy?	23
Traditional Wellness	25
Cultural Activities and Learning	25
Traditional Languages	27
Traditional Foods	28
Harvesting	30
Traditional Medicines	31
Healthy Living	32
Healthy Eating	32
Physical Activity	34
Screen Time	36
Body Mass Index	36
Education	37
Employment	40

Living Away from the Community	42
Basic Needs	43
Healthy Mothers and Babies	45
Gender Identity	46
Trauma	47
Residential School Attendance	47
Racism	47
Bullying, Aggression and Violence	48
HEALTH STATUS AND OUTCOMES	51
Perceived Health and Wellness	52
Mental Health and Wellness	52
Self-Reported Mental Health Status	52
Mental Health Conditions	54
Social Support	55
Suicide	58
Alcohol and Substance Use	60
Smoking	62
Diabetes	63
Cancer	65
Cancer Prevalence	65
Cancer Screening	66
Injury	67
PRIMARY HEALTH CARE ACCESS AND USE	69
Quality	70
Access and Health Needs	71
Limitations Due to Long-Term Conditions	72
Assisted Living and Supportive Care	73
CONCLUSION	75
REFERENCES	77
APPENDIX A: METHODS	89
APPENDIX B: RESULTS	93

List of Figures

FIGURE 1	First Nations Perspective on Health and Wellness	10
FIGURE 2	Social determinants of First Nations health.	11
FIGURE 3	First Nations health governance structure	12
TABLE 1	Age groups.....	15
FIGURE 4	Number and percentage of survey participants by region.....	18
FIGURE 5	Number and percentage of survey participants by age group	19
FIGURE 6	The social determinants of health and how they affect First Nations health	22
FIGURE 7	Percentage of adults reporting a strong sense of belonging in their community.....	23
FIGURE 8	Things that adults identified as helping to make them healthy by age group.....	24
FIGURE 9	Things that youth identified as helping to make them healthy	24
FIGURE 10	How often children and youth participated in traditional activities outside of school hours.....	25
FIGURE 11	Individuals identified as helping children and youth understand their culture.....	26
FIGURE 12	Participants' reported ability to understand and speak and read and write a traditional language at an intermediate or fluent level by age group	26
FIGURE 13	Percentage of participants who ate at least one traditional food often in the past year by age group	29
FIGURE 14	Percentage of participants reporting that they had often eaten traditional foods in the past year	29
FIGURE 15	Percentage of adults who harvested traditional foods in the past three months.....	30
FIGURE 16	Percentage of adults who used traditional medicine in the past year.....	31
FIGURE 17	Percentage of participants who said they eat from all four recommended food groups daily by age group	32
FIGURE 18	Percentage of participants who said they eat foods that are high in sugar or fast food daily by age group	33
FIGURE 19	Percentage of adults getting recommended amount of physical activity per week	35
FIGURE 20	Percentage of children aged 5 to 11 years meeting the recommended amount of physical activity	35
FIGURE 21	Average daily screen time (hours per day) by age group	36
FIGURE 22	Percentage of adults who have completed a high school diploma by males and females and age group	39
FIGURE 23	Percentage of children who have attended an AHSOR program	39
FIGURE 24	Percentage of adults who are currently working at a job or business for pay	40
FIGURE 25	Percentage of children with parents working for pay.....	41
FIGURE 26	Common reasons reported for moving away from their community among adults who had ever lived outside of their community by males and females	42
FIGURE 27	Percentage of adults who said they had struggled to meet their basic needs in the past year	43
FIGURE 28	Level of household food insecurity reported by adults.....	44
FIGURE 29	Percentage of adults who experienced racism in the past year	47
FIGURE 30	Adults who reported experiencing, seeking and receiving help for aggression or cyberbullying	48
FIGURE 31	Percentage of children and youth reported to having been bullied in the past year by males and females	49
FIGURE 32	Self-reported health for children, youth and adults.....	53
FIGURE 33	Self-reported mental health for youth and adults.....	53
FIGURE 34	Percentage of adults that feel they are in balance most of the time for each of the four aspects of their life.....	54
FIGURE 35	Percentage of youth and adults reporting that they have been told by a health care professional that they have an anxiety or mood disorder by age group	55

FIGURE 36	Social supports adults have seen or talked to on the telephone about their emotional or mental health in the past year by males and females	56
FIGURE 37	Social supports youth have seen or talked to on the telephone about their emotional or mental health in the past year.....	57
FIGURE 38	Percentage of adults who have ever seriously considered or attempted suicide by males and females.....	58
FIGURE 39	Percentage of adults who said they had used an illicit substance in the past year	60
FIGURE 40	Percentage of youth and adults who currently smoke cigarettes by age group	62
FIGURE 41	Percentage of adults told by a health care professional that they have diabetes, by males and females and age group	63
FIGURE 42	Percentage of adults reporting that a health care professional told them they have cancer, by males and females and age group.....	65
FIGURE 43	Percentage of participants injured in the past year by age group	67
FIGURE 44	How adults rated the quality of health care services available in their community	70
FIGURE 45	Barriers children and adults faced when accessing health care in the last year	71



EMOTIONAL TRIGGER WARNING

This report discusses culturally unsafe experiences in health care, traumatic experiences and health and wellness topics that may trigger memories of personal experiences or the experiences of friends and family. While the report's intent is to create knowledge to begin addressing these negative experiences, the content may trigger difficult feelings or thoughts. First Nations and other Indigenous peoples who require emotional support can contact the 24-hour KUU-US Crisis Line at 1-800-588-8717.

Acknowledgments

We acknowledge that this report was developed and published in Coast Salish territories – **xʷməθkʷəy̓əm** (Musqueam), **Skwxwú7mesh** (Squamish), **səlilwətaʔ4** (Tsleil-Waututh) – and data collection was possible with permission from Nations for First Nations Health Authority (FNHA) staff to conduct the survey in communities across British Columbia (BC).

Survey Participants

We thank the 122 First Nations communities in BC for granting permission for FNHA staff to conduct the survey and the 5,739 First Nations individuals in BC who participated in Phase 3 of the First Nations Regional Health Survey (RHS). We acknowledge and thank the participating First Nations and regional team members for welcoming us to work in collaboration on their lands and working together on this journey to create meaningful health information for First Nations in BC. We acknowledge and thank those Health Directors and Community Engagement Coordinators who championed the RHS in their communities.

FNHA Team

Current RHS Team

Kathryn Berry-Einarson, Manager, Surveys and Data Secretariat, Community Health and Wellness Services
 Ashley Henry, Data Analyst, Community Health and Wellness Services
 Ersin Asliturk, Statistical Analyst, Community Health and Wellness Services
 Jennifer May-Hadford, Regional Epidemiologist, Interior Region, Public Health Agency of Canada

Former RHS Team

Anya Smith, Manager, Surveys and Data Secretariat, Community Health and Wellness Services
 Barbara Gauthier, Senior Coordinator, Data Collection and Analysis
 Candy-Lea Chickite, Field Supervisor, Vancouver Island and Fraser Salish Region
 Geraldine Manossa, Senior Coordinator, Data Collection and Analysis, Interior Region
 Hertha Holland, Senior Coordinator, Data Initiatives
 Jasmine Thomas, Field Supervisor, Northern Region
 Jessica Guss, Survey Coordinator
 Katrina Wallace, Field Supervisor, Fraser Salish and Vancouver Coastal Regions
 Marshal German, Senior Survey Coordinator
 Meghann Brinoni, Manager, RHS
 Reginald Sam, Field Supervisor, Interior Region
 Vi Nguyen, Data Analyst, Community Health and Wellness Services

Thanks to the many dedicated data collectors and field coordinators across the province.

Innovation and Information Management Services Team

Communications and Public Relations Team

Amelia Nezil, Senior Communications Officer, Publications and Health Promotion
FNHA Communications Services Team

Regional Advisors

Brandi Trudell-Davis, Regional Planner, Northern Region
Brennan MacDonald, Executive Director, Vancouver Island Region
Cody Caruso, Senior Coordinator, Vancouver Island Region
Delaram Farshad, Regional Planner, Vancouver Coastal Region
Eunice Joe, Regional Manager, Vancouver Island Region
James George, Regional Health Liaison, Fraser Salish Region
Jodie Millward, Regional Manager, Mental Health and Wellness, Fraser Salish Region
Lisa Montgomery Reid, Executive Director, Interior Region
Naomi Williams, Regional Director, Vancouver Coastal Region
Nicole Cross, Executive Director, Northern Region
Trish Osterberg, Director, Learning and Development

Interior Region Technical Table

Connie Jasper, Tsilhqot'in Nation
Jamie Tanis, Dakelh Dené Nation
Jennifer Lewis, Syilx Nation
Jim Adams, Nlaka'pamux Nation
Lisa Montgomery Reid, Executive Director
Melanie Gould, Ktunaxa Nation
Shirley Anderson, Secwepemc Nation
Sue Wilson Cheechoo, St'át'imc Nation

Consultants

Anthony da Ros, Statistical Consultant
Dale McMurchy, Writing Consultant
Erica Westwood, Writing Consultant
Kate Jongbloed, Writing Consultant
Lynn Sully, Copy Editor
Robert Palmer, Statistics and Writing Consultant
Vince Lee, Graphic Design

In Memoriam

Reginald Sam

The FNHA Wolf Clan would like to pause and acknowledge the work contributions by former RHS Field Supervisor Reginald (Reg) Sam. Caring and trustworthy, Reg created meaningful relationships throughout the province with BC First Nations and various health system partners. Reg is Nuu-Chah-Nulth from the Tseshaht Nation [čišaaʔath], and his traditional name is Chimaoook, which translates to, “The one who cuts and distributes whale on the beach.” In honour of Reg’s footprints in the work, the FNHA offers continued wishes for health, healing and wellness to Reg’s loved ones.

Bernadette Joyce Jacob

The FNHA Wolf Clan would like to honour the work contributions of Bernadette Jacob, Field Coordinator and Data Collector in the Interior Region. Bernadette is from Ts’kw’aylaxw, St`at`imc Territory, and was raised for many years in Bonaparte. She cared deeply about her traditional values, youth-driven projects, and loved to hunt, fish and gather on the land. Known for being “like a ray of sunshine when she walked into the room,” she touched the lives of many. The FNHA extends wishes for continued healing to her family and loved ones, including parents, siblings, and nieces and nephews.



Letter from the FNHA Chief Medical Officer



First Nations communities across BC continue to improve in their health and well-being, and the 2015-2017 RHS reports provide concrete data to support these improvements.

This survey marks a milestone as the first RHS to incorporate a unique community engagement process that acknowledges self-determination as fundamental to health. The FNHA engaged the regions to determine what aspects of health and wellness to report on, and accordingly, to differentiate the findings regionally as well as provincially.

Communities have long asked that their health statistics be reflected back to them in meaningful ways. Part of the FNHA's commitment as a partner to First Nations is that communities should tell their own stories, that it is important for "us to report on us."

Data collection is sometimes thought of as mining: individuals are mined for information that is valuable, but those individuals may not see it again or benefit from it. With this in mind, we are committed to upholding the principles of OCAP® throughout the entire survey process, from engagement to how we share the data, ensuring that we are never simply "mining."

In order to transform the data collection system, the FNHA worked with communities to ask meaningful questions, which helped us gather meaningful data that can be shared back for planning. This community-delivered data gives concrete evidence about health and wellness topics that are relevant within each region.

At the same time, it is important to have variables that are comparable across the province. All five regions were clear about their need for data to better understand three provincial interest areas: mental health and wellness, traditional wellness, and primary health care services. As a public health physician, I am excited and hopeful about these three choices, as they reflect the themes I have come to recognize in my broader work across the province.

Another aim of the RHS was to focus on wellness indicators, not illness. Community members tell us that focusing on illness is a reductionist and negative colonial view of people's health, and is actually stigmatizing and insufficient. We should ask instead, what are the protective factors? What are the good things that we should be sharing with each other and celebrating?

The RHS shares stories about us and gives us a picture of where we are at. While some of the data tells us where we still need to improve, much of it represents the strength and resilience of our communities.

These reports are an example of what makes us unique within the BC health care system and beyond. Very few Indigenous jurisdictions in the world can gather, report on and control their data in this way, and we are honoured to be able to do this work.

As an organization, we raise our hands to everyone who worked hard to bring this RHS into being—communities, participants, data collectors, field staff and supervisors, and FNHA teams. Thank you for supporting us along this journey.

In Wellness,

Dr. Evan Adams
FNHA CMO

The Story Behind the RHS Reports

The acknowledgments section of this report gives thanks to all those who worked on Phase 3 of the RHS. Here, we shine a light on the dedicated RHS Data Collectors whose commitment to building relationships by going above and beyond brought the RHS to First Nations communities across BC in a good way.

Jessica Guss is from Old Massett, Haida Gwaii, and worked as a Field Supervisor during the implementation of the RHS, coordinating the work of RHS Data Collectors. In conversation, Jessica shared with us some of her experiences with communities.

One data collector sat with an Elder in his home, made him a meal and had tea, and the Elder gave him a feather. It didn't matter to us if a survey took an hour, like they say. It was really about respecting the people that were giving us information, and that was huge for us. – JESSICA GUSS

Jessica emphasized that building relationships with communities and individuals is essential when we ask First Nations in BC to trust us with their stories, and to trust us to take their stories to those who can use them for positive change. The RHS is indebted to the Data Collectors who travelled to communities across the province, worked long hours for weeks straight, and put their blood, sweat, and tears into bringing the voices of First Nations to this report.

This is what we have been asking for for so many centuries. And people who don't normally get included in having a voice, who feel that their voices don't matter, that they don't have opinions, that they have no impact—we gave them that [voice] and that's what drove us. – JESSICA GUSS

It was important to us that we demonstrated to RHS participants that we valued their time and knowledge—that we respected them, their cultures, and their communities. In every community RHS Data Collectors went to, a local Community Navigator was engaged to ensure that Data Collectors were aware of community protocols and that those protocols were respected at all times.

We made over 6,000 prayer tobacco ties and got little sacred coins, so if we were talking directly with an Elder we would have them on us. So we would give a tobacco tie or a sacred coin in exchange for the conversations, so things would still remain respectful on so many different levels. – JESSICA GUSS

Many First Nations cultures teach that knowledge is not given for free. In respect of that protocol, we offer this report as a first step in giving back to the communities and individuals who generously participated. We will continue to work to ensure that First Nations in BC benefit from sharing their stories with us.

Members of the RHS Team with FNHA
Chief Medical Officer Dr. Evan Adams,
May 2016.







SUMMARY OF INTEREST AREAS

Before writing this report, the First Nations Health Authority (FNHA) consulted with representatives from each region to identify their interests. This section summarizes key findings from the First Nations Regional Health Survey (RHS) that were identified as topics of interest by representatives from the five health regions: Fraser Salish, Interior, Northern, Vancouver Coastal and Vancouver Island.

Representatives of all five health regions identified that findings from the following health and wellness areas would be of interest to their communities:

- Traditional wellness;
- Mental health and wellness; and
- Primary health care.

To honour the contributions of participating First Nations communities and individuals across BC, it is the hope of the RHS team that these findings are used to inform positive change at provincial, regional, Nation and community levels. To spark these discussions, this section also shares future directions for our shared journey to healthy, self-determining and vibrant BC First Nations children, families and communities.



FNHA hosts a "Walk With Your Doc" event in 2016 to support community wellness and health literacy.

Background

Since time immemorial the health and wellness of First Nations peoples has been rooted in their connection to the land and their communities. Time spent connecting to the land, providing for and enjoying traditional diets and ceremonial practices continue to form the foundations of physical, mental, spiritual and emotional well-being. Today, First Nations in BC are creating opportunities for positive change in support of their health and wellness. In October 2013, Health Canada officially transferred its services, programs, employees and resources to the FNHA. This is the first provincial health authority created *by* First Nations, *for* First Nations in Canada. The conditions that contribute to healthy, self-determining and vibrant First Nations in BC will require us to bring together the best of traditional wellness approaches and western health services.

The RHS captures a snapshot of the health and wellness of First Nations peoples living on reserves across Canada. The FNHA is responsible for implementing the RHS in BC and sharing the knowledge gathered through the survey with First Nations in BC and other stakeholders. Over 5,700 participants in 122 communities contributed to the BC RHS Phase 3 (2015-17). Their responses reflect the voices and perspectives of First Nations peoples living on-reserve across the lifespan. Findings are presented in this Summary of Priority Areas and across the report for three age groups, which are children (0-11 years), youth (12-17 years) and adults (18+ years). Where possible, information for younger adults (18-54 years) and older adults (55+ years) is shown separately.

This report presents findings at the provincial level and supplemental reports share information at the regional level. You can find these reports on the FNHA website (www.fnha.ca).

Interest Area 1: Traditional Wellness

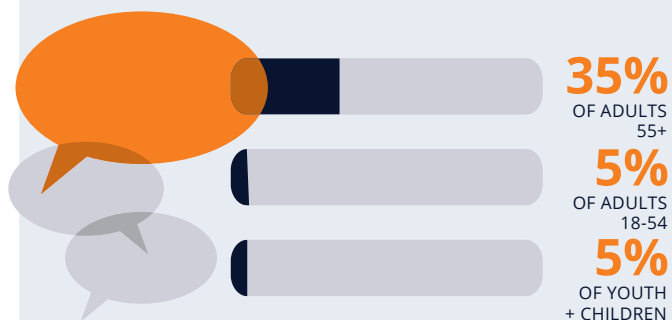
First Nations individuals, families, communities and Nations in BC have been sustained by their connection to the land since time immemorial. First Nations' cultures and teachings express their shared connection to the land through their traditional languages, foods, art, activities and medicines. Although colonialism systematically disrupted these practices, First Nations cultures have endured and these cultures continue to form the foundation of First Nations peoples' health and wellness.

KEY FINDINGS



43%
OF ADULTS

SAID THEY HAD USED TRADITIONAL MEDICINES IN THE PAST YEAR



CAN UNDERSTAND AND SPEAK A FIRST NATIONS LANGUAGE AT AN INTERMEDIATE OR FLUENT LEVEL

CULTURAL LEARNING



- **GRANDPARENTS** were a frequent source of cultural learning for both youth (58%) and children (68%).
- Other common sources of learning were **PARENTS** (47% among youth and 63% among children) and **SCHOOL TEACHERS** (37% among youth and 61% among children).
- Outside of school hours, 25% of children were reported to have participated in traditional activities such as **SINGING**, **DRUMMING** or **DANCING** at least once per week.

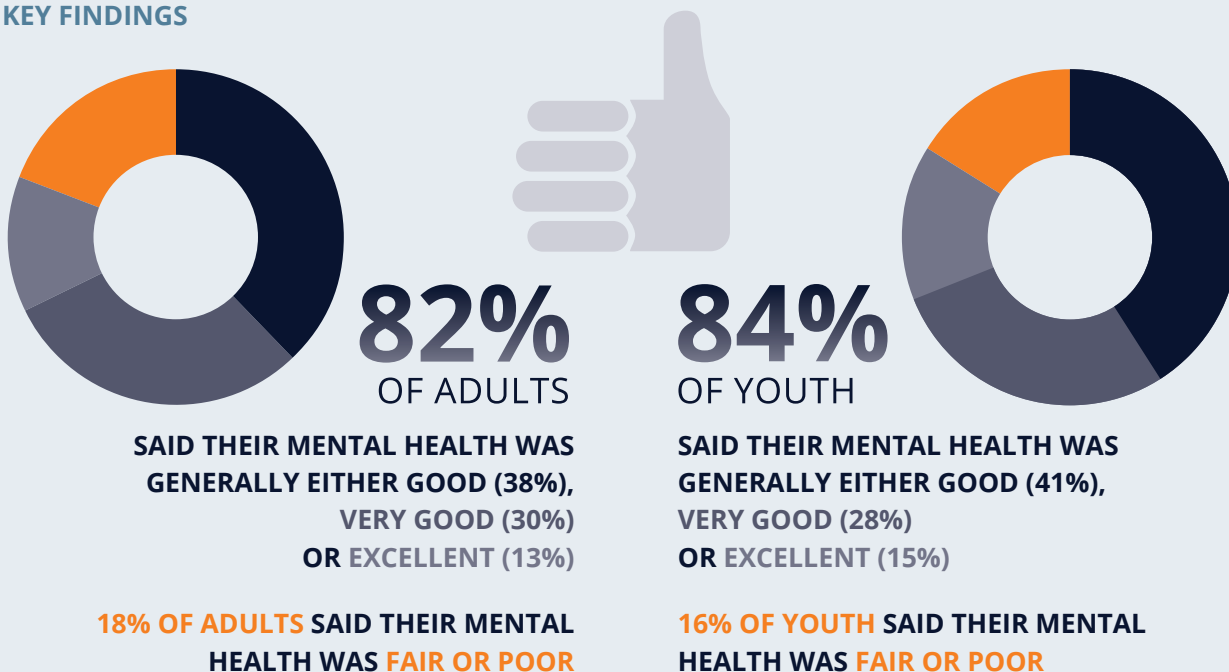
FUTURE DIRECTIONS

- Respect and promote a First Nations perspective on health and wellness that is grounded in cultural safety and humility and increased decision-making and control.
- Prioritize support for traditional healing and wellness practices that build on First Nations knowledge, beliefs, values, practices, medicines and models of health and wellness.
- Support and create opportunities for First Nations children, youth and their parents to learn their language(s), participate in traditional cultural activities and have sustainable access to traditional foods.
- Support and create opportunities for intergenerational culture and knowledge transmission between children, youth and Elders.
- Provide supports for a community-driven, Nation-based approach to health and wellness planning.

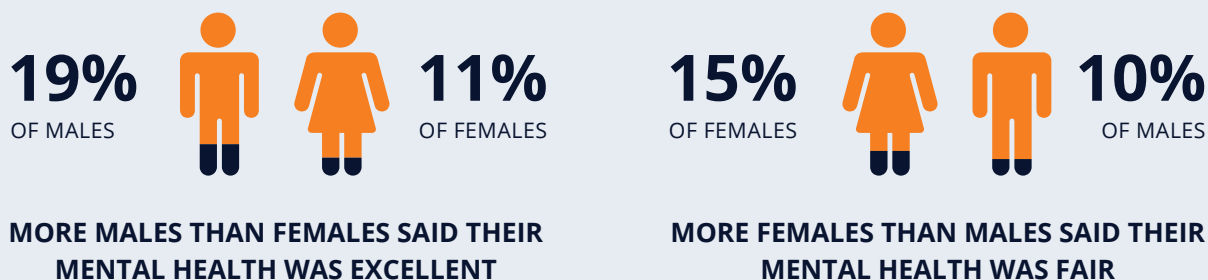
Interest Area 2: Mental Health and Wellness

First Nations in BC have identified mental health and wellness, rooted in community and family health and wellness, as a top priority. First Nations individuals, families, communities and Nations are on a journey to reclaim their mental health and wellness using traditional wellness practices to heal the traumatic impacts of colonialism, residential schools and the removal of children from their families and communities.

KEY FINDINGS



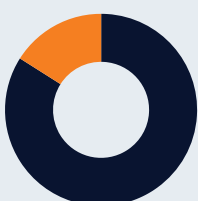
AMONG YOUTH



FUTURE DIRECTIONS

- Scale up rapid-access mental health and substance use services that are Nation-based, trauma-informed, wholistic and strengths-based. Include the best of western and traditional healing and wellness approaches and make sure services are equipped to meet the unique needs of all genders.
- Take action at all levels to address self-harm and suicide. This should include investing in supports to engage youth and males in mental health, scaling up services in rural and remote communities, building community capacity for crisis response and building cultural safety into emergency services.

BELONGING AND SOCIAL SUPPORT

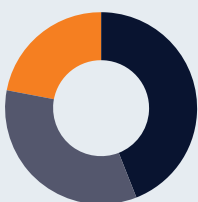


84% OF ADULTS
FELT A STRONG **SENSE
OF BELONGING** IN THEIR
COMMUNITY



88% OF ADULTS AND YOUTH
SAID THEY HAD **SOMEONE TO
CONFIDE IN OR LISTEN TO THEM**
some or all of the time.

Social Support Overall



78% OF ADULTS
SAID THEY TURN TO
FAMILY MEMBERS (44%)
AND FRIENDS (34%)
FOR EMOTIONAL AND
MENTAL HEALTH SUPPORT

Overall, 18% of adults and 12% of youth had **spoken to a health professional** about their emotional or mental health in the past year. However, **40% of adults and 43% of youth said they had not talked with anyone about their emotional or mental health in the past year.**



36% OF YOUTH
MOST COMMONLY
IDENTIFIED A FRIEND AS
THEIR SOCIAL SUPPORT

Social Support Among Males and Females

Over half of male adults (51%) and male youth (56%) said they had not reached out to anyone in the past year about an emotional or mental health problem, compared to 27% for female adults and 30% for female youth. Over the past year, 11% of adult males had spoken to a health professional about an emotional or health problem, compared to 26% of women. Fewer adult males than females reached out to family (35% and 54%, respectively) or friends (25% and 42%, respectively) for help.

SUICIDAL THOUGHTS AND ATTEMPTS

16% OF ADULTS REPORTED ATTEMPTING SUICIDE

Overall, **22% of adults said they had seriously contemplated suicide. Over half of adults said they had sought help from a health professional¹** after seriously contemplating (55%) or attempting suicide (57%).

11% OF YOUTH REPORTED ATTEMPTING SUICIDE

Of these, **51% said they had sought help from a health professional** after their attempt. The data for youth who reported contemplating suicide was not reliable enough to summarize because of the high number of missing values.

¹ This includes responses from individuals who reported turning to a family doctor, mental health professional, community health representative, nurse, social worker or crisis line worker for support.

- Deliver Nation-based, peer-led education for health care providers and community members on cultural safety, mental health and wellness, stigma and trauma-informed practice to build health care provider and community capacity to provide effective support.
- Include the perspective of those who have lived experience coping with mental health and/or substance use concerns in all changes to policy and programming. Invest in community-based, peer-delivered mental health and substance use services, such as peer support, peer navigation or peer-led support groups.

Interest Area 3: Primary Health Care

Many First Nations people in BC access quality health care services during periods of illness. However, it is often challenging for First Nations to access appropriate health services for many reasons including geographic availability and experiences of discrimination in health care. Efforts to eliminate barriers, such as embedding cultural safety and humility into the health care system, are underway, but it will take time to see their impacts reflected in the health care experiences of First Nations in BC.

KEY FINDINGS



50%
OF ADULTS
RATED THE QUALITY OF
HEALTH CARE SERVICES
IN THEIR COMMUNITY AS
GOOD (40%) OR
EXCELLENT (10%)



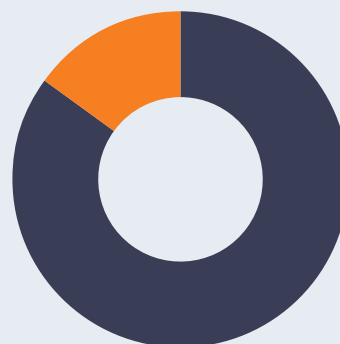
**MORE FEMALES THAN MALES SAID THEY
DID NOT GET ALL THE CARE THEY NEEDED**

16%
OF FEMALES



13%
OF MALES

**AMONG ADULTS WHO
REQUIRED HEALTH CARE
IN THE PAST YEAR**



85%



SAID THEY HAD
RECEIVED SUFFICIENT
CARE

15%



FELT THEY DID
NOT RECEIVE ALL THE
CARE THEY NEEDED

FUTURE DIRECTIONS

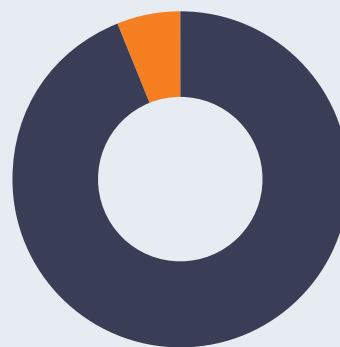
- Increase availability of mandatory and voluntary training opportunities for health professionals and trainees on First Nations histories, trauma-informed care and cultural safety and humility.
- Improve the availability of accessible, affordable, adequate and culturally appropriate health care for First Nations communities across BC.

57% OF **CHILDREN** REQUIRED HEALTH CARE IN THE PAST YEAR
(AS REPORTED BY PARENTS OR GUARDIANS). OF THOSE:

94% SAID THEY RECEIVED THE
CARE THEY NEEDED



6% SAID THEY DID NOT RECEIVE
THE CARE THEY NEEDED



BARRIERS TO CARE

ADULTS WHO RECEIVED HEALTH CARE IN THE PAST YEAR SAID THEY EXPERIENCED A **RANGE OF BARRIERS** TO RECEIVING CARE. THE MOST COMMON WERE:

- **LACK OF ACCESS** including where services or health professionals were unavailable or inaccessible due to wait times (47%);
- **COST** including the cost of services not covered by insurance (43%) and the cost of services enabling them to get care such as childcare or transportation (24%);
- **INADEQUATE HEALTH CARE** (26%); and
- **INABILITY TO ARRANGE TRANSPORTATION** (18%).

THE MOST COMMONLY
REPORTED BARRIERS FOR
CHILDREN INCLUDED:



- **LACK OF ACCESS** (37%);
- **COST**, including the cost of services not covered by insurance (25%) and the cost of services enabling them to get care such as childcare or transportation (19%);
- **CULTURALLY INAPPROPRIATE SERVICES** (18%);
- **INADEQUATE SERVICES** (16%); and
- **DIFFICULTY ARRANGING TRANSPORTATION** (14%).

- Work with partners to ensure that Jordan's Principle² is implemented to address the unique health, social, and education needs to all First Nations children and youth in BC.

- Identify and fill critical gaps in primary health care with wholistic service delivery models that are appropriate for First Nations communities, such as the Primary Care ++ model that includes oral health and traditional wellness supports.

² Jordan's Principle states that First Nations children and youth between the ages of 0 and 19 must receive the public care and services they need when they are needed and that any disputes between different levels of government or government agencies about who should pay for care be resolved later [1].

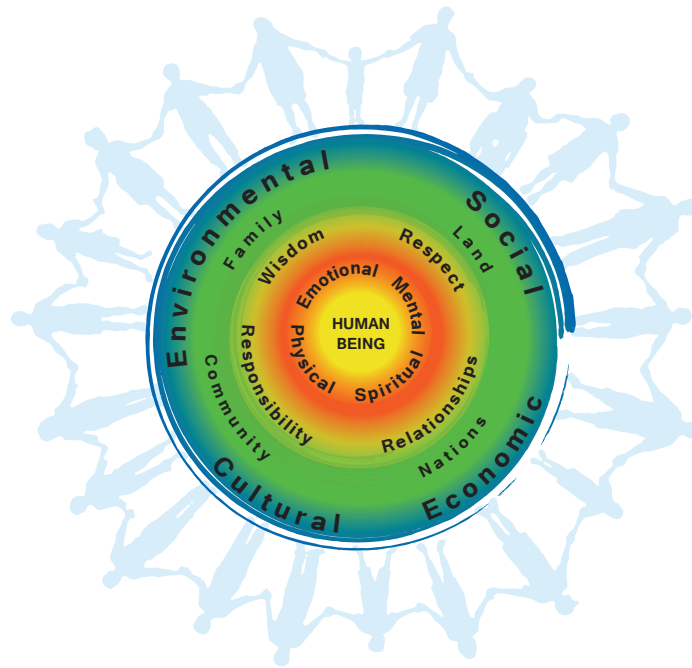




INTRODUCTION

Since time immemorial the health and wellness of First Nations peoples has been rooted in their connection to the land and their communities. First Nations individuals, families and communities draw on the physical, mental, spiritual and emotional aspects of their cultures to sustain wellness. Across BC there are 203 First Nations communities speaking 32 different languages [2]. While there are common threads between these Nations, First Nations across BC are diverse with unique cultures, languages, traditions and histories. Today, First Nations in BC are creating opportunities for positive change in support of their health and wellness. Achieving our shared vision of healthy, self-determining and vibrant communities will require the FNHA and First Nations in BC to work to bring together the best of traditional wellness approaches and western health services.

FIGURE 1
First Nations
Perspective on Health
and Wellness [3]



First Nations Perspective on Health and Wellness

The First Nations Perspective on Health and Wellness is wholistic and includes the physical, mental, spiritual and emotional aspects of well-being, as seen in Figure 1 [3-5]. Wellness goes beyond the individual to include the family, extended family, community and Nation [3]. A healthy, well and balanced life includes living in harmony with all of creation, including all living things and the spirit world [3]. Sustaining these relationships has formed the foundation of First Nations wellness for thousands of years [4].

*Cultural wellness
is a crucial aspect of the
First Nations Perspective
on Health and Wellness.*





FIGURE 2
Social determinants of
First Nations health.
Figure adapted from
First Nations Health
Council [8]

Everything is Connected: Social Determinants of First Nations Health

The health of a person is interconnected with all of their surroundings. Biology, environment, income and education, connections to culture and community and individual choices play a part in the wellness of First Nations people [6][7]. This report describes some conditions that promote health and wellness among First Nations in BC and others that pose a risk to health and wellness as challenges or barriers. These natural, social, political and economic factors are called the social determinants of health (Figure 2). You can read more about the social determinants of health on page 21.

Self-Determination and Health

All First Nations peoples have the right to control their lives and destinies and self-determination is vital to the health and wellness of First Nations peoples [3, 5]. Strengthening self-determination can help address the root causes of the health inequalities experienced by First Nations peoples in BC. Since the last RHS report was published in 2012, First Nations across the country have continued to assert their pre-existing rights to land, culture and self-determination with political action, activism and legal action. In 2015, the Truth and Reconciliation Commission of Canada released its report on the impacts of residential schools, including 94 calls to action[15]. Governments and health services organizations across the country have committed to pursuing action with these 94 calls. The current federal and provincial governments have taken steps to renew

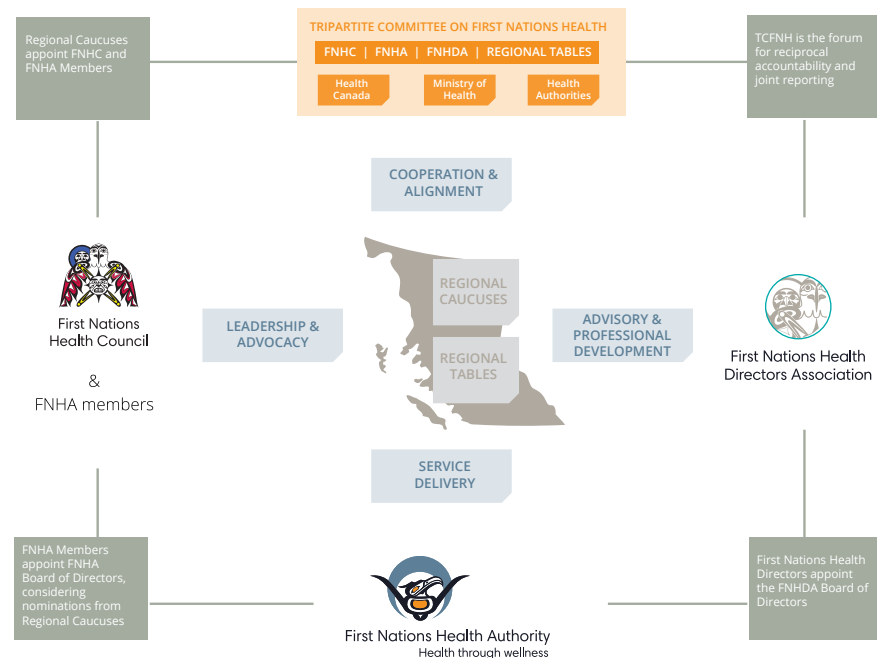
Nation-to-Nation relationships with Indigenous peoples by supporting Bill C-262 to implement the United Nations *Declaration on the Rights of Indigenous People* in Canadian law [9]³.

In October 2013, First Nations in BC took a major step to increase their decision-making and control over their health and wellness when Health Canada officially transferred its services, programs, employees and resources to the FNHA. This is the first provincial health authority created *by* First Nations, *for* First Nations in Canada [10]. Leaders of First Nations in BC came together to create the FNHA, voting for greater control over their own health care. This was a key milestone in the 10-year Tripartite First Nations Health Plan signed in 2007 by First Nations in BC, the Province of BC and the federal government [11].

Four groups came together to form the First Nations Health Governance Structure (Figure 3). The **FNHA** is responsible for the planning, management, service delivery and funding of health programs. The **First Nations Health Council (FNHC)** is the political arm that advocates for First Nations health and wellness priorities, supports health systems transformation and builds partnerships. The **First Nations Health Directors Association** is composed of health directors and managers working in First Nations communities and it provides technical advisory support and capacity development. Finally, the **Tripartite Committee on First Nations Health** brings together the FNHA, BC regional and provincial health authorities and BC Ministry of Health and Health Canada partners. Each group is joined by a shared vision of “*healthy, self-determining and vibrant, BC First Nations children, families and communities.*”

³ At the time of writing, Bill C-262 was being debated at a second reading in the Senate. If passed at this reading, the bill will go to a committee to be reviewed and possibly amended and then adopted.

FIGURE 3
First Nations health
governance structure





Truth and Reconciliation Commission walk to honour residential school survivors in Vancouver, June 11, 2015 | REUTERS/Ben Nelms.

Impact of Colonialism and Discrimination

First Nations peoples in BC continue to experience health inequities and gaps in health services compared to other BC residents. These differences are rooted in the ongoing impacts of colonialism that disrupted First Nations ways of life [12]. Imposition of foreign laws – including the *Indian Act* – took away First Nations land, rights and freedoms [13]. The well-being of First Nations was further eroded as children were removed from families and communities into the residential school system and into the child welfare system during the Sixties Scoop [14-17]. Communities and families continue to experience the collective burden of these harms and disconnections, including overrepresentation in BC's child welfare and health care systems [14-18].

Communities and families continue to experience the collective burden of the harms and disconnections resulting from colonialism.

Ongoing racism and discrimination are harmful to the health and well-being of First Nations in BC. Racism and discrimination can be both interpersonal (person-to-person) and systemic (policies and institutions) [19]. Discrimination prevents people from accessing the resources that are important to healthy living, including education, employment and health care. Some First Nations individuals may avoid seeking health services because they have experienced and expect to receive unfair treatment and discrimination. Painful memories of residential schools and Indian hospitals also contribute to a lack of trust and may cause people to delay seeking care [20, 21]. Today, far too many First Nations peoples experience culturally unsafe treatment when visiting a mainstream health provider [22-24].

Ongoing effects of colonialism and discrimination can contribute to mental and physical stress [3, 25]. Many First Nations in BC continue to feel the impacts of intergenerational and lifetime trauma [26-28]. Socio-economic inequality resulting from discrimination – such as poverty, food insecurity and housing insecurity – contributes to stress. Chronic stress impacts physical, mental, spiritual and emotional health and well-being [3, 4, 25]. The body's response to stress can prevent the immune system from protecting against disease and can contribute to chronic illness [29, 30]. Stress can also affect an individual's health by making them more likely to rely on coping mechanisms such as smoking, substance use and a sedentary lifestyle [30]. Strong social supports and cultural connection can minimize the impact of stress and enable people to be more resilient during stressful periods [31].

Despite the adversities they have faced, First Nations peoples are strong and resilient. Traditional territories, teachings and wellness practices continue to sustain individuals, families and communities. Hope and optimism for the future contribute to mental well-being and good physical health [30]. Throughout First Nations in BC, hope and optimism are strengthened by all those who are working hard to transform First Nations health, including families, communities and Nations.

First Nations Regional Health Survey: Background

The RHS is a unique national survey that increases the decision-making and control of First Nations peoples to collect, control and share their own health information. In the past, reliable information on the health and wellness of First Nations people was severely lacking, as on-reserve populations were excluded from major national health surveys [32]. The 2016 census estimated that approximately 30% of the 172,520 First Nations individuals living in BC lived on-reserve [33].

The RHS began as a way to fill this gap and it captures the self-reported health and wellness status of on-reserve First Nations peoples in BC. This survey provides information to inform programs and policies that target the health and wellness needs reported by First Nations living on-reserve.

The RHS is a national survey led by the First Nations Information Governance Centre (FNIGC), a First Nations organization promoting First Nations information needs. The FNHA is responsible for coordinating the administration, management and reporting of the survey in BC. An important foundation of the RHS is respect for the principles of Ownership, Control, Access and Possession of data (OCAP®). OCAP® principles outline that First Nations must have control over how data is collected within their communities and that they own and control how this information can be used. The Code of Research Ethics for the RHS was approved by the First Nations Information Governance Committee [34].

The FNHA and FNIGC are the data stewards for the First Nations participating in this phase of the RHS. These two organizations are responsible for holding and facilitating access to the data on behalf of First Nations. The RHS data will be used according to agreements with participating First Nations and First Nations individuals to further empower First Nations communities.

The FNHA values the information gathered by the RHS and has invested significantly in additional surveys implemented throughout BC. This process has enabled better estimates and allowed for accurate regional reporting. To complete the RHS, individual members of participating communities were invited to take part in the survey according to a carefully designed study methodology (see Appendix A for more details on the methods). Participants completed the RHS in their communities at a site of their choosing (e.g., band office, health centre, home) and could receive assistance from a survey administrator hired from local communities. The RHS has been completed nationally three times: Phase 1 in 2002-03, Phase 2 in 2008-10 and Phase 3 in 2015-17.

This report includes provincial results from Phase 3. Individuals who participated in Phase 1 or 2 had the same chance of being selected to participate in RHS Phase 3 as individuals who had not previously participated.

The next sections of this report share the results of the BC RHS Phase 3 (2015–17), focusing on demographics, health determinants, health status and outcomes and primary health care access and use.

ABOUT THE BC FIRST NATIONS REGIONAL HEALTH SURVEY

WHAT TO KEEP IN MIND AS YOU READ THIS REPORT

- Results apply to First Nations peoples living on their home reserve in BC.
- Comparisons are sometimes made between results from the current RHS and other reports or research. RHS results may not be directly comparable to other reports and studies because of different methods and ways of measuring results. These comparisons are meant to provide additional context for interpreting results from the RHS.
- Children, youth and adults completed different surveys. Age groups are listed in Table 1. A parent or caregiver was asked to respond on behalf of children aged 0-11. Youth between the ages of 12 and 17 responded to their own surveys with parental permission. Because the surveys for each age group were different, some statistics are available for all age groups and others are only available for one or two age groups.
- Some statistics are reported as "Interpret with caution due to moderate variability" (*). This means that although we can report these indicators, we are less confident in these results than other results from the RHS since a smaller number of participants responded to the question. In other cases, this statement tells you that some data is not reportable, as response rates were too low (denoted by E) or the estimate was unreliable due to high variability (denoted by **).
- Some priority areas are compared across the three RHS phases. In some cases, there have been significant changes between RHS phases (which we know from statistical testing). In other cases, although the changes over time may not be statistically significant, it is up to the reader to decide if these changes might be practically important. Results for these changes are summarized in each box.

TABLE 1
Age groups

Children	0-11 years
Youth	12-17 years
Adults	18+ years
Younger adults	18-54 years
Older adults	55+ years

INTERPRETING THE FINDINGS

- The RHS uses a randomly selected sample of survey participants to represent all First Nations people living on-reserve in BC. This allows the results to be generalized to the whole population.
- Percentages are presented for each question, representing the best possible estimates for First Nations peoples living on-reserve in BC.
- A 95% confidence interval is also presented with each estimate on the figures in this report. The range indicated by the confidence interval indicates the range that the true population value would fall within, with a 95% certainty. When we compare two groups, such as males and females, only if the confidence intervals do not overlap (include the same numbers), can we be sure that these groups are different. Appendix B presents the 95% confidence intervals for all reported estimates.
- See Appendix A for more details on the methods used in this survey.

THE PURPOSE OF THIS RHS REPORT IS TO:

- Return regional and provincial-level health and wellness information to First Nations in BC.
- Inform on-reserve First Nations prioritization, planning, evaluation, investment and transformation at the community, Nation, regional and provincial levels in BC.
- Enable evidence-based decision-making in health and wellness planning and policy.
- Produce a wholistic snapshot of on-reserve First Nations health in BC.
- Provide additional information for the FNHA's external health and wellness partners to inform collaborative planning.



Southern Stl'atl'imx, 2015.



DEMOGRAPHICS

In total, 5,739 on-reserve First Nations people in 122 communities across BC participated in the 2015-17 RHS. This included 3,026 adults, 1,198 youth and 1,515 children.

To put this in context, at the time of the 2016 census, 172,520 individuals living in BC identified themselves as First Nations people [33]. Of these, 135,835 were First Nations with Status and 82,913 lived on a reserve [33, 35]. There are 200 First Nations communities in BC.

The number of people who participated in the 2015-2017 survey was double that of the 2008-2010 survey, which had 2,476 participants [36].



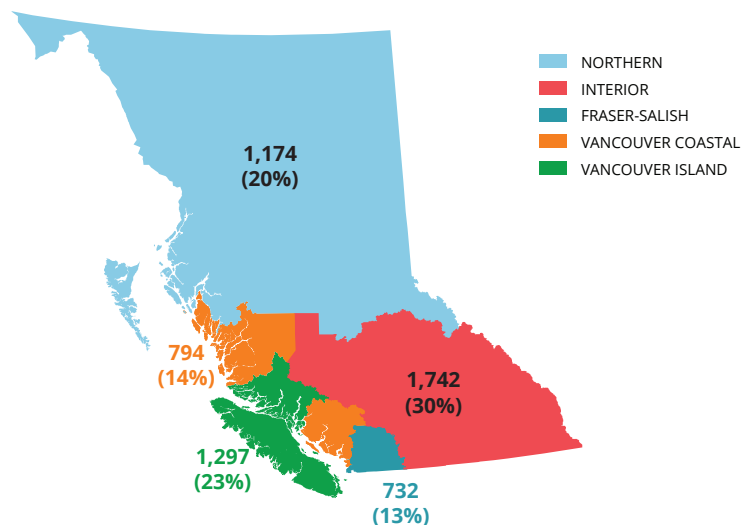
Health Benefits engagement session, Vancouver, 2018.

Provincial Sampling and Response Rate

One hundred and eighty First Nations communities were eligible to be included in the survey and among these communities, 153 were sampled, resulting in an 85% sampling ratio. First Nations individuals who lived on the reserve where they were registered as a band member were eligible to participate in the survey.

Of the 153 communities asked to participate, 122 agreed to participate (an 80% community response rate). There is not enough information to determine the individual response rate (the percentage of people approached who agreed to participate in the RHS). See Appendix A for more information on the methods used in RHS Phase 3 in BC.

FIGURE 4
Number and
percentage of survey
participants by region



Participation Across BC

Figure 4 shows the breakdown of survey participants by region.

Survey Participation by Age

The survey was completed by adults, youth and the parents and caregivers of children. There was approximately equal representation among the following groups: adults 55 and older, adults 18 to 54, youth 12 to 18 and children 0 to 11 years (Figure 5). The average age of all participants was 32 years.

Provincial Representation by Age

Participants represent a proportion of their age group across the province. When compared to the overall population across each age group in BC, participation in the RHS was as follows: 17% of children in the province, 25% of youth in the province, 6% of adults aged 18 to 54 in the province and 14% of adults aged 55 and older in the province.

Survey Participation by Gender

Across the province, slightly more males participated in the survey than females among all age groups: among both adults and children, 52% of participants in each age group were male and 48% in each age group were female. Among the youth participants, 51% were male and 49% female.⁴

These numbers reflect the participants' answers to the question "are you male or female?" This question did not differentiate between sex and gender, where sex is biologically determined and gender refers to how an individual self-identifies. As a result, throughout this report, the terms "male" and "female" refer to self-identified gender.

The survey did not ask participants to identify their gender beyond the binary of male or female. We acknowledge that this question did not include the multitude of gender identities that exist, which is a limitation of this survey.

⁴ Gender is discussed in more detail in "Gender Identity" on page 46.

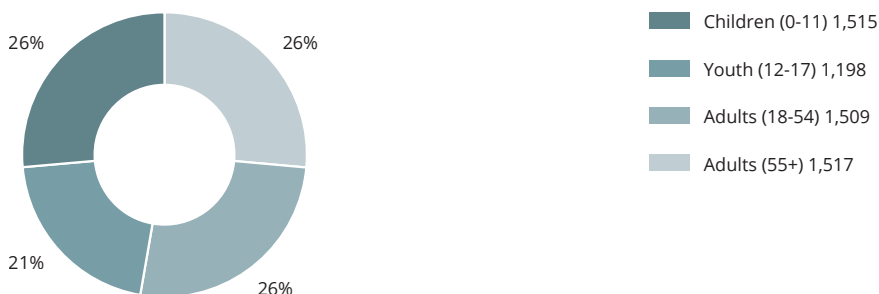


FIGURE 5
Number and percentage of survey participants by age group



HEALTH DETERMINANTS

Health has both biological and social components. Research suggests that biology (meaning genes) accounts for just 15% of overall health [6, 7]. Life circumstances – the social and economic environments in which people are born, live, play, work and go to school – play a much larger role in determining health [6, 7]. These are often known as the “social determinants of health.” They provide a strong foundation for the health and wellness of First Nations people in BC and include:

- Governance;
- Culture and language;
- Land, water and environment;
- Lifelong learning;
- Income and employment;
- Early life;
- Social support networks;
- Gender;
- Physical environment; and
- Personal health practices and coping skills.

FIGURE 6

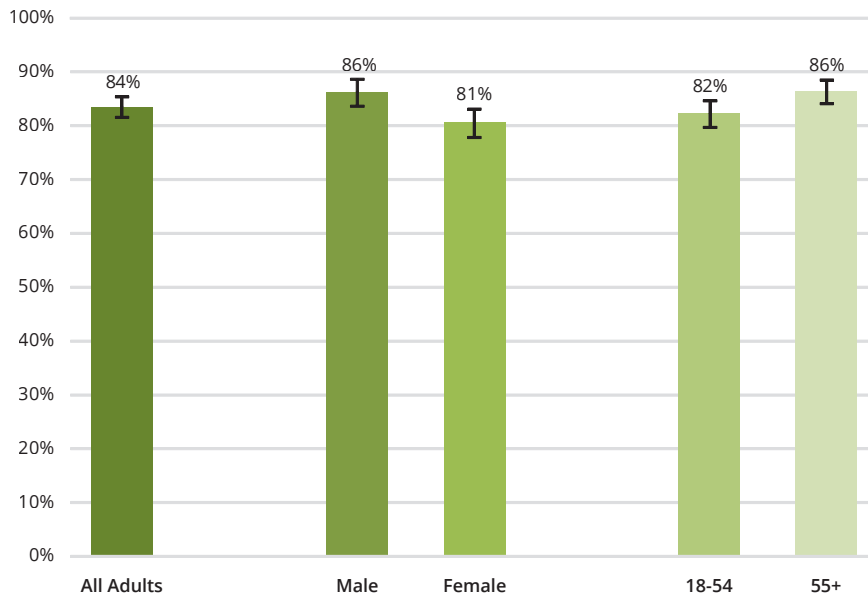
The social determinants of health and how they affect First Nations health [37]



Although housing, employment, income and education are not included in Figure 6, inequalities in society cause the health and wellness of First Nations to be negatively impacted by these factors more often than other groups [5]. The following section talks about important health determinants.

Community Wellness

Wellness includes relationships and interconnectedness with others. Community strength and connection are rooted in cultural traditions, including laws and governance, languages, ceremonies and arts [3]. A sense of belonging and cultural identity are key to health and well-being [3, 38-40].

**FIGURE 7**

Percentage of adults reporting a strong sense of belonging in their community

Adults – Most adults (84%) described a strong sense of belonging in their community (Figure 7). Both males (86%) and females (81%) said they felt a strong sense of belonging in their community.

This result suggests First Nations communities in BC foster a strong sense of community belonging. The 2012 Canadian Community Health Survey reported that among all residents across BC, 68% of individuals 12 years and older reported a sense of belonging to their local community [41].

What Makes You Healthy?

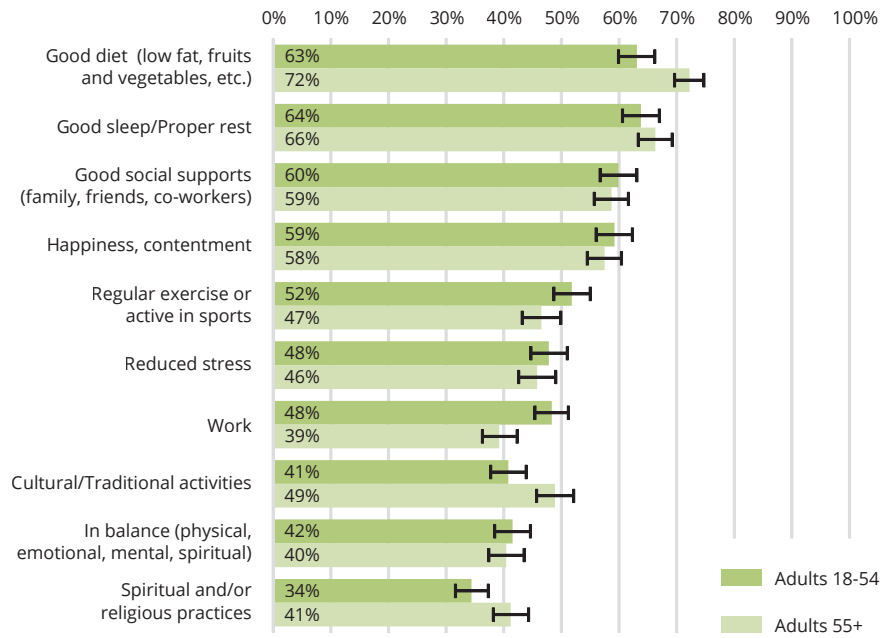
Adults – Adults were asked, “What things help make you healthy?” Among all adults, over half identified at least one of good diet (66%), proper sleep (65%), good social supports (60%) or happiness (59%). In addition, approximately half of males identified work (53%) as being key to their health, whereas this was mentioned by 38% of adult women.

There were some differences in the perspectives of what adults between the ages of 18 and 54 and adults 55 and older felt made them healthy (Figure 8). Nearly three-quarters (72%) of adults 55 and older identified a good diet as important to their health, compared to 63% of adults 18 to 54. It was also more common for adults 55 and older to identify cultural/traditional activities (49%) and spiritual and/or religious practices (41%) as important to health, compared to adults 18 to 54 (41% and 34%, respectively).

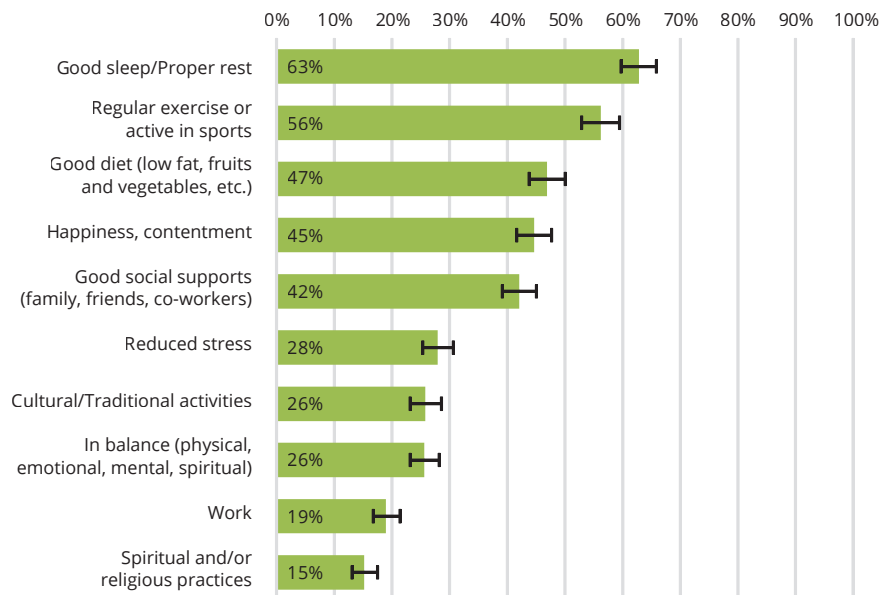
Youth – Youth said that good sleep (63%) and regular exercise (56%) were important to their health (Figure 9). Approximately half of female youth also reported that good social supports (48%) were important, which was reported by fewer male youth (37%).

FIGURE 8

Things that adults identified as helping to make them healthy by age group


FIGURE 9

Things that youth identified as helping to make them healthy



Traditional Wellness

First Nations individuals, families, communities and Nations in BC have been sustained by their connection to the land since time immemorial. First Nations' cultures and teachings express their shared connection to the land through their traditional languages, foods, art, activities and medicines. Land-based activities create wellness by connecting First Nations to nature, enhancing community connection and creating opportunities for language and traditional skills to be shared, used and practiced. Traditional wellness is wholistic and encompasses traditional medicines, practices, approaches and knowledge unique to each First Nation [42]. Cultural activities – like singing, drumming or dancing – and sharing traditional teachings benefit body and spirit while strengthening community and cultural connections. Although colonization systematically disrupted these practices, First Nations cultures continue to form the foundation of First Nations peoples' health and wellness.

On the FNHA journey with First Nations in BC to improve services, one of the strategic approaches is to protect, incorporate and promote First Nations wholistic models of health and wellness into health services. The *Traditional Wellness Strategic Framework*, developed through extensive consultation with traditional healers and First Nations, describes strategies and recommendations to promote and strengthen the role of traditional medicines and practices in the wholistic wellness of First Nations peoples in BC [42].

Cultural Activities and Learning

Children and youth represent the future. Opportunities for them to gain knowledge about their cultural identity are vital to their wellness and the strength and continuity of their communities' and Nations' cultures [43, 44]. Young Aboriginal⁵ people in BC who engage in weekly cultural activities are more likely to feel connected in their community and at school [45].

Youth and children – Outside of school hours, 25% of children participated in traditional activities, such as singing, drumming or dancing, at least once a week. Fourteen per cent of youth are engaging in these traditional activities outside school hours at least weekly, with the majority (62%) saying that they never participate in these activities outside of school (Figure 10). Children and youth were not asked to describe their participation in traditional activities during school hours.

⁵ The term Aboriginal was used for the BC Adolescent Health Survey and the associated report Raven's Children IV. This survey of students in BC asked participants to self-identify as Aboriginal and did not distinguish between First Nations, Métis or Inuit. Throughout this report, the term Aboriginal is used when associated with this reference.

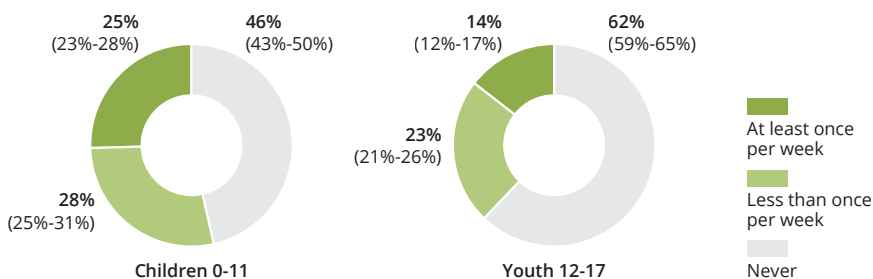
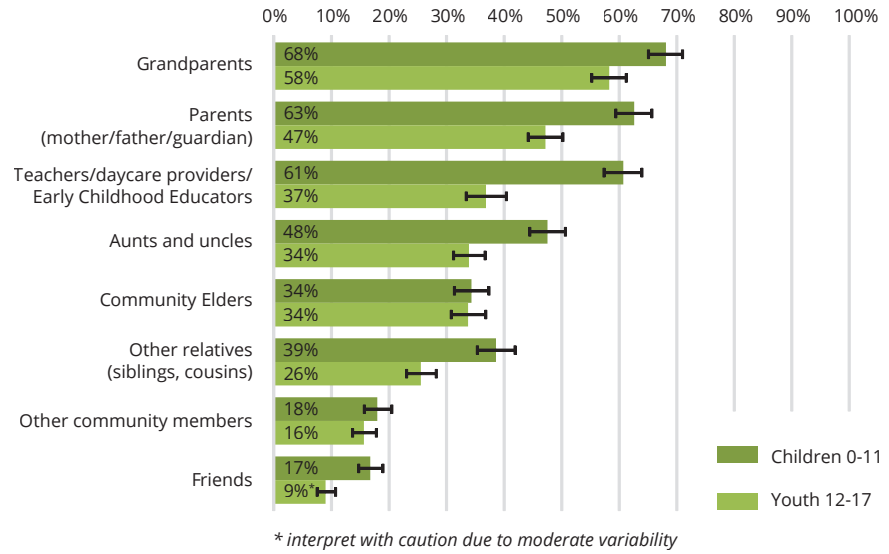


FIGURE 10

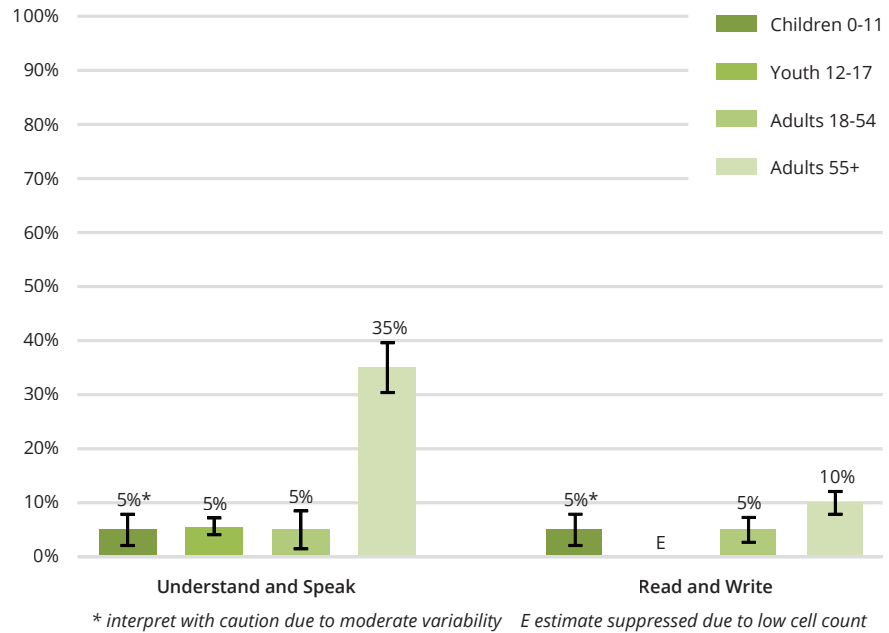
How often children and youth participated in traditional activities outside of school hours

FIGURE 11

Individuals identified
as helping children
and youth understand
their culture


FIGURE 12

Participants' reported ability
to understand and speak and
read and write a traditional
language at an intermediate
or fluent level by age group





Children learned about their cultures from grandparents (68%). Other important sources of cultural information for children included parents (63%) and school teachers/daycare (61%). For youth, grandparents were the most frequent source (58%) of cultural teachings and the most frequent answer for both male (56%) and female (61%) youth. Youth said that parents, school teachers, aunts and uncles, Elders and other relatives also play important roles in cultural learning. Answers for both children and youth are shown in Figure 11.

Children learn about their cultures from grandparents.

Traditional Languages

BC is home to 34 unique First Nations languages, accounting for 60% of First Nations languages across Canada [46]. Language is a fundamental part of identity, as traditional languages include the vocabulary needed to articulate cultural values and world views [3, 47]. Traditional languages were sought to be eliminated at residential schools, but First Nations language champions are hard at work to reclaim their voices [15, 46].

All ages – Traditional language speakers are aging. While 35% of adults 55 and older can understand and speak a First Nations language at an intermediate or fluent level. The same was true for 5% of adults between the ages of 18 and 54, youth and children (Figure 12). Additionally, 10% of adults 55 and older said they can read and write a First Nations language at an intermediate or fluent level, with 5% of adults aged 18 to 54 being able to do the same.

The low percentage of younger generations fluent in traditional languages is a cause for concern for maintaining First Nations culture and risk of language and knowledge system loss. Across the province, there are ongoing initiatives in pre-schools and schools for First Nations children and youth to become more immersed in their traditional languages [46]. For example, Aboriginal Head Start On-Reserve (AHSOR) programs include a language and culture component, giving First Nations children the opportunity to begin to learn their traditional languages [48].

Traditional Foods

First Nations territories, which cover every inch of what is now BC, are rich with traditional foods. Gathering, sharing, preparing and eating nutritious traditional foods are important to mind, body and spirit. These activities nurture and restore a connection to the land and promote self-reliance [49]. Traditional foods are an important aspect of health and wellness, as they nourish the body, provide medicinal benefits and are of fundamental importance to First Nations culture [4, 49, 50].

The FNHA has created a fact sheet on traditional foods that reviews some of the traditional foods harvested and eaten by First Nations in BC. The resource describes the nutritional benefits of these foods and offers some tips for preparing and sharing these culturally significant delicacies [50].

The RHS survey asked people about their consumption of traditional foods, including animals and plants from lands and waters.⁶ Bannock was not included in the analysis [51].⁷

Adults – Most (69%) adults said they had often eaten traditional food in the past year. See Figure 13 for responses by adult age groups. Figure 14 shows the most common traditional foods eaten often by adults in the past year, which included broth (meat, fish or vegetable), berries or wild vegetation, fresh water fish and land-based animals (e.g., moose, caribou, deer, bear, bison, etc.).

Youth and children – Over half of youth (62%) and children (71%) reported often eating traditional foods in the past year (Figure 14). Eating traditional foods has been linked with positive mental health and community connection among Aboriginal youth in BC [45]. Children and youth ate the same types of traditional foods as adults, as shown in Figure 14.

WHAT HAS CHANGED?
TRADITIONAL FOOD CONSUMPTION

ADULTS AND YOUTH WHO SAID THEY HAD OFTEN
EATEN TRADITIONAL FOODS IN THE PAST YEAR

	ADULT	YOUTH
RHS Phase 1 2002-03	70%	67%
RHS Phase 2 2008-10	55%	49%
RHS Phase 3 2015-17	69%	62%

- In RHS Phase 2, 55% of adults and 49% of youth reported often eating at least one traditional food. In RHS Phase 3, 69% of adults and 62% of youth said they often ate at least one traditional food, which was a notable increase for both age groups.
- There was no substantial change from RHS Phase 1 to Phase 3 for adults or youth.

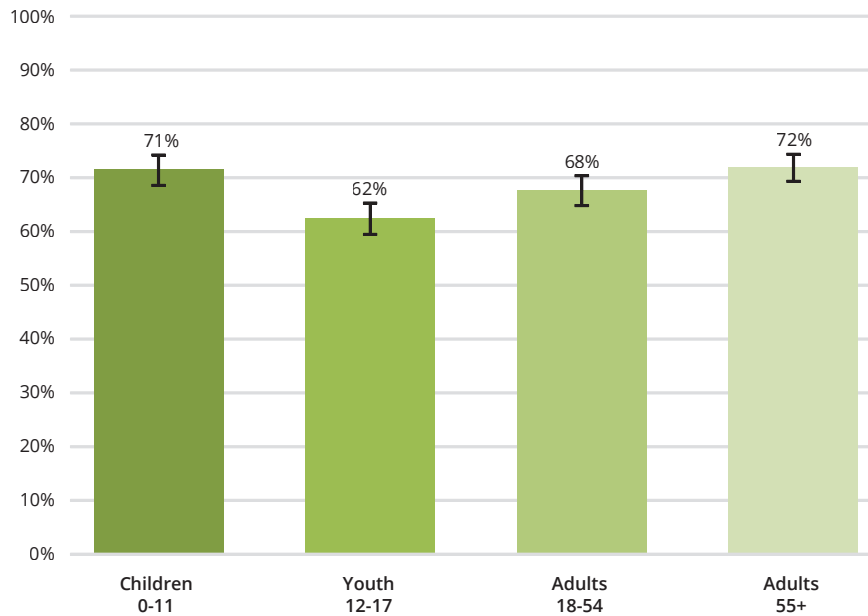
What does this mean?

Substantially more youth and adults reported eating at least one traditional food often now in 2015-17, than in 2008-10.

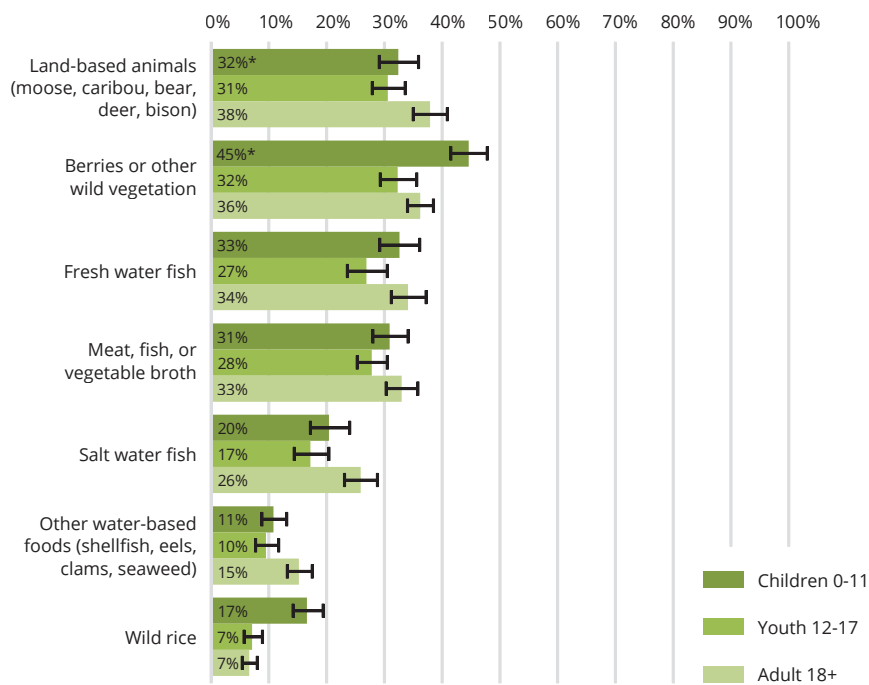


6 Participants were also able to select N/A, where the food was not a local traditional food. This is especially important for wild rice and corn soup.

7 While bannock is an important cultural treat for many First Nations in BC, it was first introduced by colonizers and it has changed over centuries from being cooked with camas and corn flour to often being fried using wheat flour. This analysis highlights the consumption of other traditional foods.

**FIGURE 13**

Percentage of participants who ate at least one traditional food often in the past year by age group



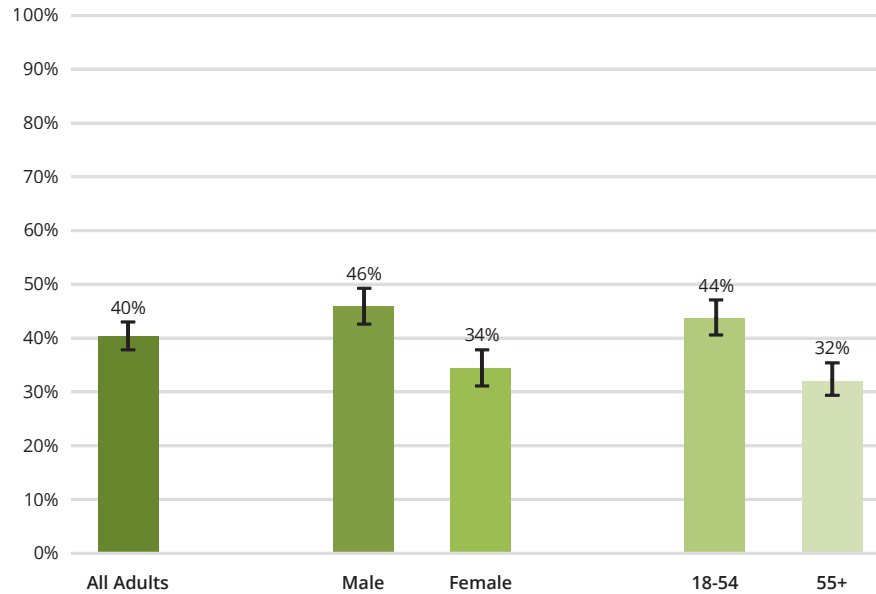
* interpret with caution due to moderate variability

FIGURE 14

Percentage of participants reporting that they had often eaten traditional foods in the past year by age group

FIGURE 15

Percentage of adults
who harvested
traditional foods in the
past three months



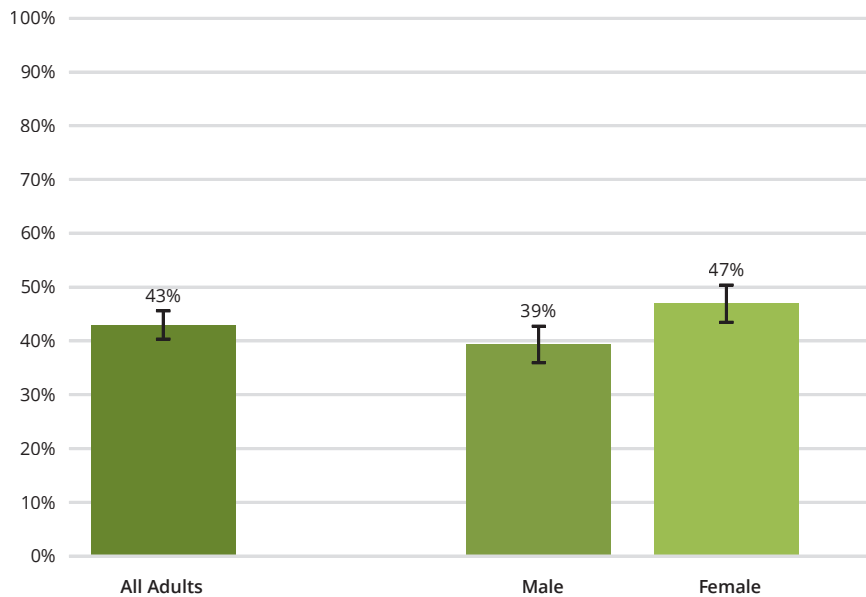
Harvesting

All ages – As well as being a healthy source of nutrition, hunting, gathering and fishing are important cultural skills and an opportunity for individuals to participate in learning and community. Four out of 10 (40%) adults said they had harvested traditional foods through berry picking or other gathering, fishing, hunting or trapping in the past three months (Figure 15).⁸ It was more likely for males (46%) to report participating in these harvesting activities than females (34%) and it was also more common for adults 18 to 54 (44%) than adults 55 and older (32%).

Additionally, 35% of youth said they had harvested traditional foods in the past three months, with the same reported for 42% of children.

In the 2012 Aboriginal Peoples Survey, approximately one-third of First Nations participants living off-reserve in BC had hunted, fished or trapped in the last year. One-quarter of individuals did not participate in these harvesting activities but expressed interest in doing so in the future [52], indicating that people are looking for opportunities to participate in these kinds of land-based activities.

⁸ It is important to note that the survey took place over several seasons (fall of 2015 to spring of 2017). The survey was the same throughout and did not take into account the seasonality of gathering traditional foods. There may be several other factors that also affect harvesting among adults, youth and children, such as other activities they participate in that compete for time (e.g., school or work). As such, these values may not be representative of all harvesting activities.

**FIGURE 16**

Percentage of adults who used traditional medicine in the past year

Traditional Medicines

First Nations peoples have used traditional medicines for millennia. Elders, healers and knowledge keepers carry knowledge of native plants, ceremonies, spiritual practices and cultural teachings. Traditional medicines are herbal remedies, spiritual therapies, assistance from healers or other practices linked to their culture. Today, many First Nations people draw from the strengths of both traditional and mainstream medicines as part of their wellness journeys.

Adults – In total, 43% of adults had used traditional medicines in the past year. Using traditional medicines was more commonly reported among females (47%) than males (39%; Figure 16). Among adults who had used traditional medicines, 65% reported no difficulties accessing them. Males (73%) were more likely than females (59%) to report having no difficulties accessing traditional medicines. These results show that traditional medicines continue to be an important part of the health and wellness journeys for many First Nations people in BC and that more needs to be done to facilitate access to them [42].



Elders, healers and knowledge keepers carry knowledge of native plants, ceremonies, spiritual practices and cultural teachings.

Healthy Living

The foods we consume, our level of physical activity and our sedentary behaviours (e.g., screen time) are all important factors that work together to influence our physical wellness. A healthy diet and physical activity promote positive health and can help prevent chronic diseases, like heart disease or obesity. These factors do not work alone; they come together to affect one's health and overall health and wellness.

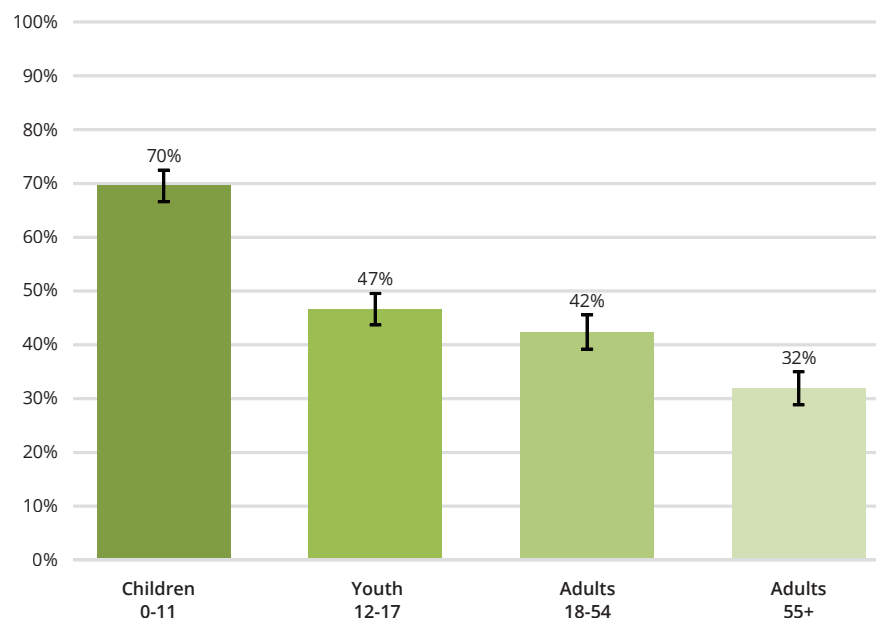
The FNHA supports the healthy living and physical wellness of First Nations in BC by providing information, programs and financial grants to promote wellness and support individuals and communities to increase their physical activity and improve their nutrition. The First Nations Act Now Initiative and the Aboriginal Diabetes Initiative are two examples of the FNHA's commitment to supporting health and wellness [53, 54]. For example, FNHA wellness grant funding has supported the H'ulh-etun Health Society Outrigger Canoe Club, which uses this team sport to improve physical fitness and build community [55].

Healthy Eating

Healthy eating is central to health and well-being. The arrival of European settlers marked major changes in diet for First Nations [49]. Diets rich in protein and nutrients were partly replaced by diets high in sugar, salt, simple carbohydrates and fats. Health consequences of changing diets include obesity, diabetes and other chronic conditions. The FNHA recommends avoiding sugary drinks and eating a balance of nutritional food groups in moderation to satisfy needs and maintain health and wellness [56].

Unaffordable and inaccessible nutritious food is a barrier to healthy eating. Fresh fruit, vegetables and meats can be expensive and these are especially difficult to access in Northern and remote communities [57]. Highly processed packaged and fast foods are often cheaper and more readily available. This contributes to inequitable impacts among First Nations, who may have less access to healthy foods. Additionally, processed foods and fast food are heavily advertised, which can influence food choices. This has been shown to be of particular concern for children [58, 59].

FIGURE 17
Percentage of participants who said they eat from all four recommended food groups daily by age group



Adults – In total, 39% of adults said they eat from all four recommended food groups (i.e., meat and alternatives, dairy,⁹ fruit or vegetables and grain products) each day [60]. It was more likely that adults 18 to 54 (42%) reported eating from all food groups than adults 55 and older (32%), as seen in Figure 17. However, 41% of all adults also said they eat fast food or sugary foods (e.g., pop, artificially flavoured juice, sweets and energy drinks) every day. It was more common for males (45%) than females (36%) to eat sugary foods or fast food each day. Eating foods that were high in sugar or fast food daily was also reported more frequently among adults 18 to 54 (44%) than adults 55 and older (32%) (Figure 18).

Youth and children – Almost half (47%) of youth reported eating from all four recommended food groups each day, and among children two years and older, 70% were reported to eat from all four recommended food groups per day (Figure 17).¹⁰ Almost half (46%) of youth also said they ate foods high in sugar or fast food at least once a day, which was also reported for 28% of children two years and older (Figure 18).

The BC Adolescent Health Survey included Aboriginal students in BC but did not separate them by First Nations, Métis or Inuit.¹¹ A report on this survey data found that Aboriginal students living on-reserve were more likely to consume pop, energy drinks and fast food than those living off-reserve. Students living on-reserve were also less likely to have eaten vegetables. Yet those living on-reserve were also more likely to have eaten traditional foods or those harvested by their families [45]. Creating a healthy food environment at home is one way to help children and youth maintain good habits as they continue to grow [49].

⁹ The category for dairy included soy products; however, there are other traditional foods that are dairy alternatives (e.g., wild plants, seaweed, fish with bones, nuts and beans, among others), which were not included. Respondents eating these alternatives may not have been included for this reason.

¹⁰ Differences between adults and children could mean that adults are prioritizing healthy meals for children over themselves or that among participants there were proportionally more adults without children, who are eating from fewer food groups daily. However, these results should be used with caution, as a reporting bias may be possible.

¹¹ These results – reported in *Raven's Children IV: Aboriginal youth health in BC* [45] – separated Aboriginal students into those who lived on-reserve and those who did not despite the fact that only First Nations, not Métis or Inuit, live on reserves.

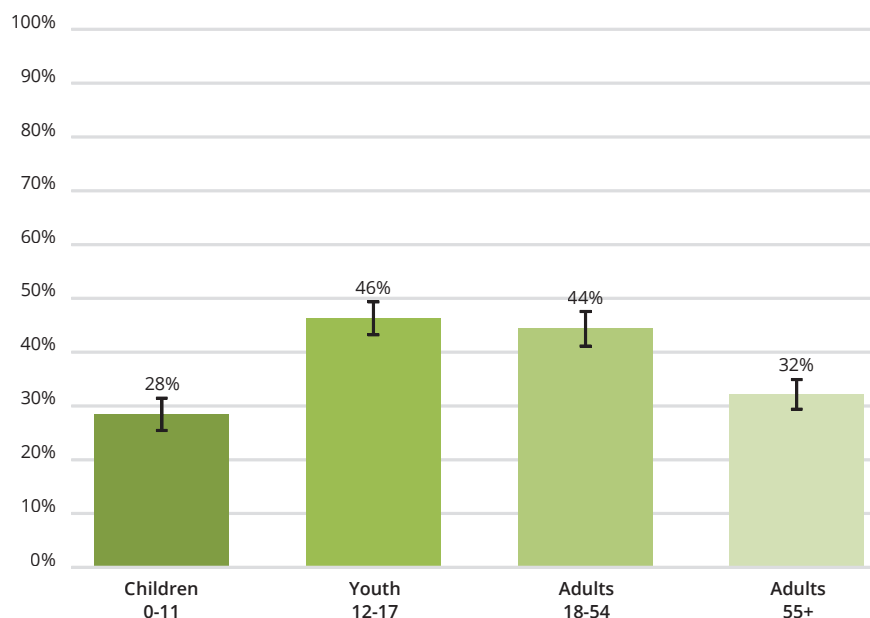


FIGURE 18
Percentage of participants who said they eat foods that are high in sugar or fast food daily by age group



Fraser Salish Region communities participate in a canoe journey, 2015.

First Nations in BC have long and rich histories of physical activity and athleticism.

Physical Activity

Physical activity is important for maintaining healthy, confident and resilient First Nations children, families and communities [61]. Being active can help reduce the risk of premature death, heart disease, stroke, high blood pressure, certain types of cancer, type 2 diabetes, osteoporosis and obesity [62]. It can also help maintain mental wellness [62].

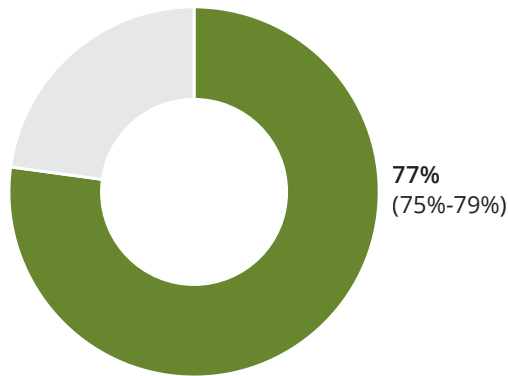
Physical activity benefits more than just physical health – it is a vital part of mind, body and spirit. Studies have shown that Aboriginal youth who exercise at least three times a week are more likely to say they have good mental health and self-worth. They are also less likely to self-harm or consider/attempt suicide [45].

First Nations in BC have long and rich histories of physical activity and athleticism [61]. However, the legacy of colonization has contributed to a major reduction in physical activity. Screen time has increased and conveniences like cars and supermarkets have had an impact. Reduced activity levels impact health and increase the risk of many chronic health conditions. This trend is common across all residents of Canada, including non-First Nations [63].

Adults – Canadian guidelines recommend that adults participate in at least 150 minutes of moderate to vigorous physical activity per week [62]. Overall, the RHS found that 77% of adults in BC said they get the recommended amount of 150 minutes of physical activity per week (Figure 19).

77%

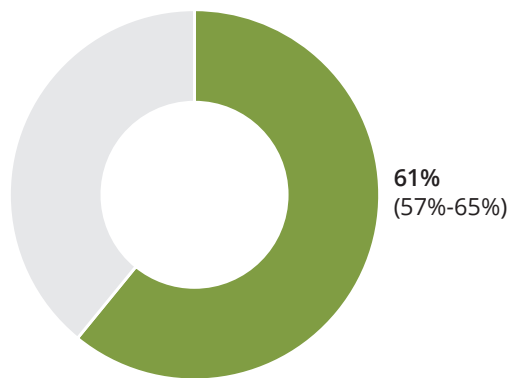
OF ADULTS
participate in the
recommended 150
minutes or more of
physical activity a week

**FIGURE 19**

Percentage of adults
getting recommended
amount of physical
activity per week

61%

OF CHILDREN
aged 5 to 11 years
participate in the
recommended 60 minutes
or more of physical
activity a day

**FIGURE 20**

Percentage of
children aged 5 to 11
years meeting the
recommended amount
of physical activity

This percentage appears higher than for all residents in BC. According to the 2015-16 Canadian Community Health Survey, 66% of all BC residents aged 18 and older get 150 minutes of physical activity per week [64]. Throughout First Nations in BC, wellness champions involved in sports and active recreation are leading the way to get communities moving [61].

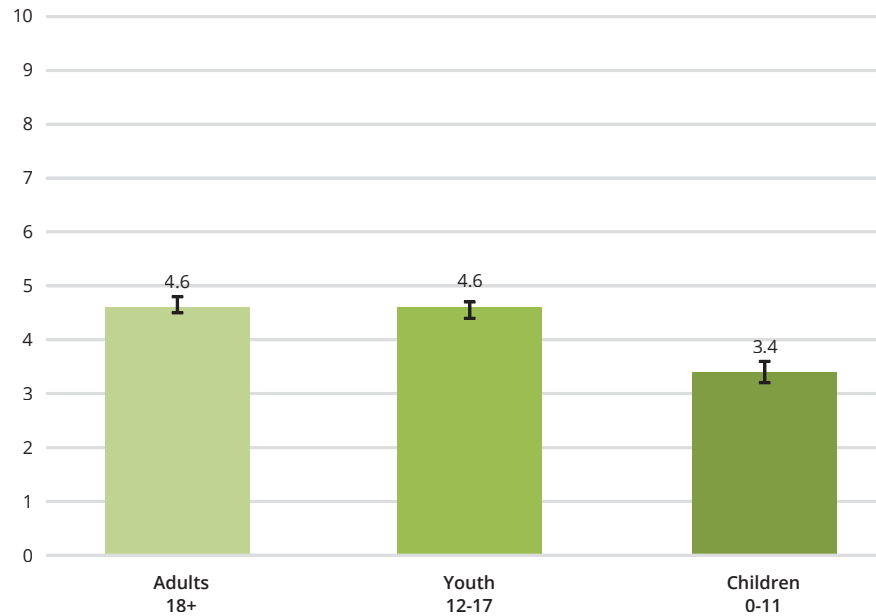
Youth and children – It is recommended that youth and children between the ages of 5 and 17 get an hour a day of heart-pumping physical activity, with no more than two hours of sitting time [65]. Although research shows that just 9% of all Canadian children are getting their recommended dose of activity [66], the BC average is much higher. The 2015-16 Canadian Community Health Survey found that 67% of all youth across BC said they got an average of 60 minutes of activity per day [64].

RHS survey data was not reportable for youth in the province. However, the RHS found that in a typical week, many (61%) First Nations children aged 5 to 11 get an average of 60 minutes of physical activity every day (Figure 20).¹² Staying active helps younger generations lead longer, healthier lives as they age. Family and community support for physical activity is needed to ensure that no children are left behind.

¹² Youth and children were only asked how much physical activity they get per week. To report data in line with Canadian guidelines, RHS data reports an average per day. However, most other data surveys report youth physical activity daily. It is hard to know how comparable these statistics are.

FIGURE 21

Average daily screen
time (hours per day)
by age group



Screen Time

There are growing concerns that too much screen time (including time spent on TV, computers, iPads, gaming systems or cellphones) may be harmful to health, especially among young children [67].

Zero screen time is recommended for children under two years old [67]. Less than one hour per day is recommended for children aged 2 to 5 and less than two hours per day is recommended for children and youth between the ages of 5 and 17 [66, 67].

All ages – Substantial daily screen time was seen across all age groups (Figure 21). Adults reported an average of 4.6 hours of screen time per day. On average, daily recommendations for screen time were exceeded by youth (4.6 hours/day) and children (3.4 hours/day). While the RHS data uses different age ranges than the previously mentioned recommendations, this still suggests that among First Nations in BC, all age groups are getting more screen time than what may be healthy. This is similar to trends seen for all residents of Canada [67].

Body Mass Index

Body mass index (BMI) is a way of measuring body composition using height and weight. A person's BMI may indicate that they are underweight, normal, overweight or obese. Obesity has been linked to major chronic diseases, such as arthritis, diabetes, cardiovascular diseases and cancer [31]. Although BMI is an imperfect indicator, as it does not distinguish between fat and muscle [68], it is useful for understanding weight categories and population health and wellness [69].

While BMI is the best available measure of healthy weight and obesity in the RHS data, it is important to recognize that healthy weight among First Nations in BC is more complex than this measure. Changes in First Nations cultures and lifestyles have affected healthy weight. Transitions from healthful traditional diets towards western diets may have contributed to increased obesity, as western foods may be less nutritional [57]. Traditionally, First Nations have led active lifestyles through activities such as hunting and gathering or playing traditional games. However, with colonialism and westernization, active traditional lifestyles have decreased and people are more sedentary [70]. These lifestyle changes are systematic and draw attention to the influence of health determinants on healthy weight.

Adults – Based on reported BMI measures, 1%^{13*} of adults were underweight, 21% were within a normal weight range, 36% were overweight and 42% were obese. More females (48%) than males (37%) were considered obese.

The 2011-14 Canadian Community Health Survey found that 32% of First Nations adults in BC living off-reserve and aged 18 and over were overweight and 30% were obese [71]. Among all BC residents, the 2015-16 Canadian Community Health Survey found that 36% were overweight and 21% obese [64]. In recent years, obesity has increased across Canada and the world, making it a public health concern for all populations [72, 73].

Youth and children – Data on BMI measures was not reportable for youth and children across the province.

The 2015-16 Canadian Community Health Survey found that 26% of all youth in BC aged 12 to 17 years old were overweight or obese [64]. Other research has found that 9% of Canadian children (aged 5 to 11) are obese [74]. Reducing childhood obesity among First Nations in BC is a priority identified in the Transformative Change Accord: First Nations Health Plan [69].

Education

Education is an important determinant of health. First Nations approaches to learning are lifelong, experiential, wholistic and communal. Formal and informal education can promote health in many ways. For example, it can introduce employment and income opportunities that support healthy living [31]. Education may also make it easier for people to access and understand health information. This ability to understand health information is known as “health literacy” and it can help individuals make healthy choices.

The following section talks about formal education. However, it does not include all the forms of learning that enrich the lives of First Nations people. For example, cultural education also supports health and wellness as individuals gain knowledge of traditional teachings. Sources of cultural education for children and youth were shown in Figure 11. It would be useful to explore other indicators to understand lifelong learning in First Nations communities. The First Nations Regional Early Childhood, Education and Employment Survey (FNREEES) was designed to collect information on formal and informal education, as well as employment, among First Nations [75].

The RHS offers a snapshot of formal education among First Nations people in BC. Barriers to formal education persist among First Nations due in part to historical and intergenerational trauma associated with residential school experiences. This history of abuse from residential schools has created mistrust of mainstream education. Poverty, discrimination and racism also exclude First Nations people from educational opportunities [31]. First Nations cultural values and ways of knowing are often not reflected in mainstream classrooms. Obstacles to formal education can contribute to poor health by limiting employment opportunities and increasing social exclusion [5].

13 * Interpret with caution due to moderate variability.

Adults – Among adults in BC, 49% said they had completed a high school diploma.¹⁴ Figure 22 shows the responses by males and females and adult age groups. More females (56%) than males (43%) said they had a high school diploma. It was also more common that adults aged 18 to 54 had completed a high school diploma (53%) than adults older than 55 (39%). These results are shown in Figure 22.

Among adults who did not complete a high school diploma, most (80%) had attended some or all high school grades.

Many adults said they had received education that was separate from high school. More than half of adult participants (57%) had completed at least some additional post-secondary, trade school or community college education. Of all adults, three out of 10 (30%) had pursued further education, 23% reported that they had finished a trade or community college diploma and 5% had completed a university degree.

The number of First Nations people who have graduated from high school and are pursuing post-secondary education is growing [76]. The 2016 Canadian Census found that the proportion of First Nations peoples across Canada who completed high school or post-secondary education increased from 62% to 70% over the previous 10 year period [77].

Among adults who had post-secondary education, 14% of adults had completed training in a health field such as nursing, medicine, laboratory technology, dentistry or epidemiology. It was more common that females (22%) than males (7%) had completed training in a health field. It was also more common that adults 55 and older (19%) had been trained in a health field than younger adults between 18 and 54 (12%). Increasing the number of First Nations health professionals at all levels is an important factor to support cultural safety in health services and meet the needs of First Nations people [79]. For this reason, it is an indicator of success in promoting cultural safety in health care identified in the Transformative Change Accord: First Nations Health Plan [78, 79].

WHAT HAS CHANGED?
AHSOR PROGRAMS

CHILDREN WHO WERE REPORTED TO HAVE EVER
ATTENDED AN AHSOR PROGRAM

	CHILDREN
RHS Phase 1 2002-03	46%
RHS Phase 2 2008-10	49%
RHS Phase 3 2015-17	56%

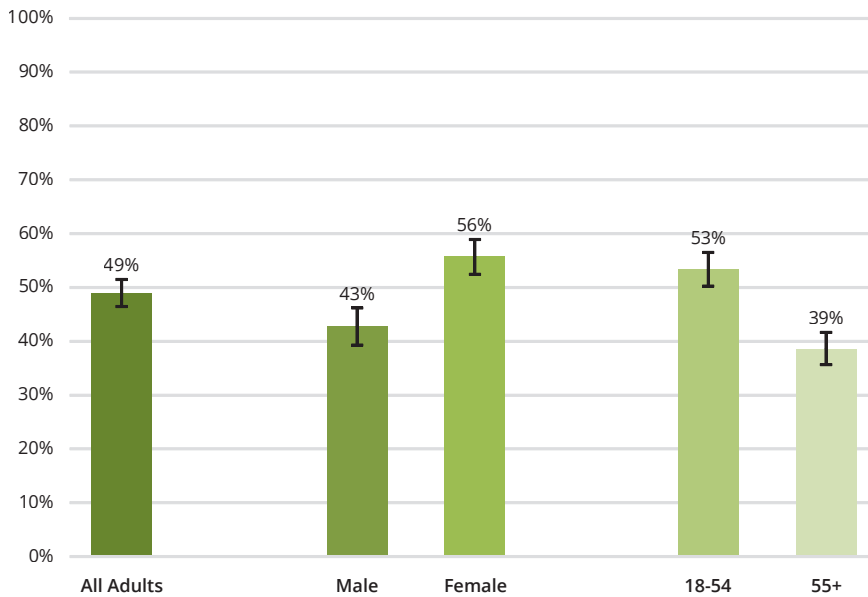
- In RHS Phase 1, 46% of children attended an AHSOR program. This increased to 56% in RHS Phase 3.

What does this mean?

Significantly more children are now attending AHSOR programs compared to 2002-03.



14 Participants who had upgraded their high school or completed an equivalent program such as General Educational Development or Adult Basic Education were included as having completed a high school diploma.

**FIGURE 22**

Percentage of adults who have completed a high school diploma by males and females and age group

**FIGURE 23**

Percentage of children who have attended an AHSOR program

Children – Locally controlled Aboriginal Head Start On-Reserve (AHSOR) programs are designed for children aged 0 to 6 years [80]. Each program includes six key components: culture and language, education, health promotion, nutrition, parent and family involvement and social support [80]. Emotional, spiritual, physical and intellectual needs of First Nations children are placed front and centre.

Over half (56%) of children had attended an AHSOR program (Figure 23). Because not all communities have AHSOR programs, some children may not have been able to attend an AHSOR program. Supporting children in their early years is essential for health and wellness throughout their lives, underlining the importance of these programs [43]. The FNHA is working to increase the number of Head Start programs for First Nations children living on- and off-reserve across BC [48].

Employment

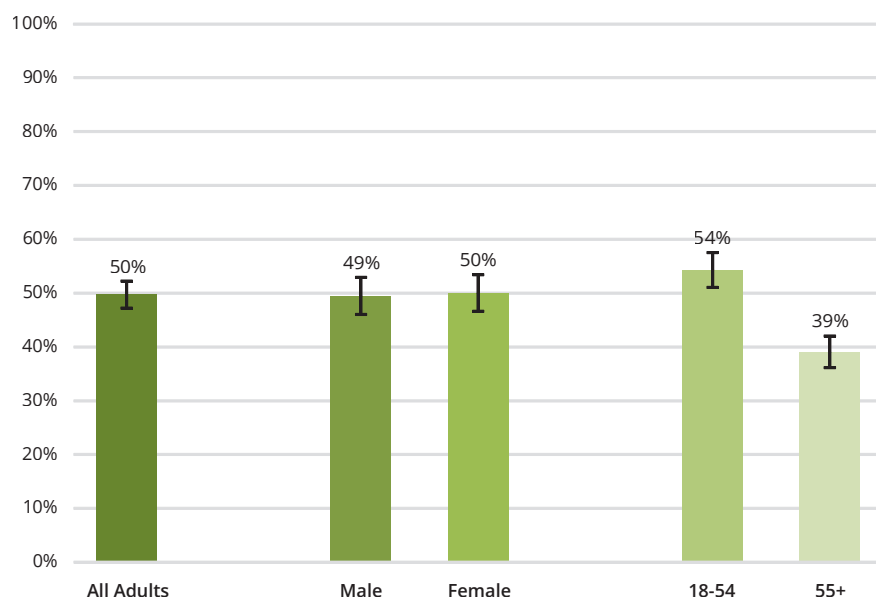
Employment plays an important role in an individual's self-worth, ability to fulfill family responsibilities and ability to lead a healthy life [5]. Income gained from employment – namely through the “wage economy” where money is exchanged for work – is also vital to accessing basic needs like food and shelter. In contrast, poverty has been shown to be harmful for health [31].

The “wage economy,” as described above, is not part of all First Nations histories. First Nations traditions have historically evolved from community values [81]. Previously, the distinction between home and work was not always as pronounced as it tends to be now and First Nations traditionally placed community needs over individual ones [82, 83]. As such, tasks and duties in many First Nations communities were and are performed without the expectation of financial reward. These services are important and provide physical and mental benefits to individuals that work for the benefit of their communities [84-86]. Although these services are not captured in employment statistics, they contribute to personal and community wellness. It is important to remember that these roles continue in communities today and that they are not reflected in the following employment statistics.

Some forms of work not captured by this survey could include hunting, fishing, caring for children and Elders and providing spiritual and healing care. First Nations adults, particularly in rural communities, may also be employed on a seasonal basis, which may not have been captured due to the timing of this survey [75].

Adults – Among adults, 50% said that they are currently working for pay. More adults 18 to 54 (54%) reported working for pay than adults 55 and older (39%), which would be expected given that retirees are included in the older age group. Results for both adult age groups and males and females are shown in Figure 24.

FIGURE 24
Percentage of adults
who are currently
working at a job or
business for pay
by males and females
and age group





The RHS results are similar to those in the 2011 Canadian National Household Survey from Statistics Canada, which reported 57% employment among First Nations peoples between the ages of 25 and 64 across Canada, compared to 76% among non-First Nations peoples [87].

First Nations traditionally placed community needs over individual ones.

Children – Approximately 80% of children had at least one parent or caregiver who was currently working for pay. Thirty-five per cent of children had two parents working for pay, while 25% of children's fathers were the only caregiver working for pay and 20% of children had only a mother working for pay (Figure 25).

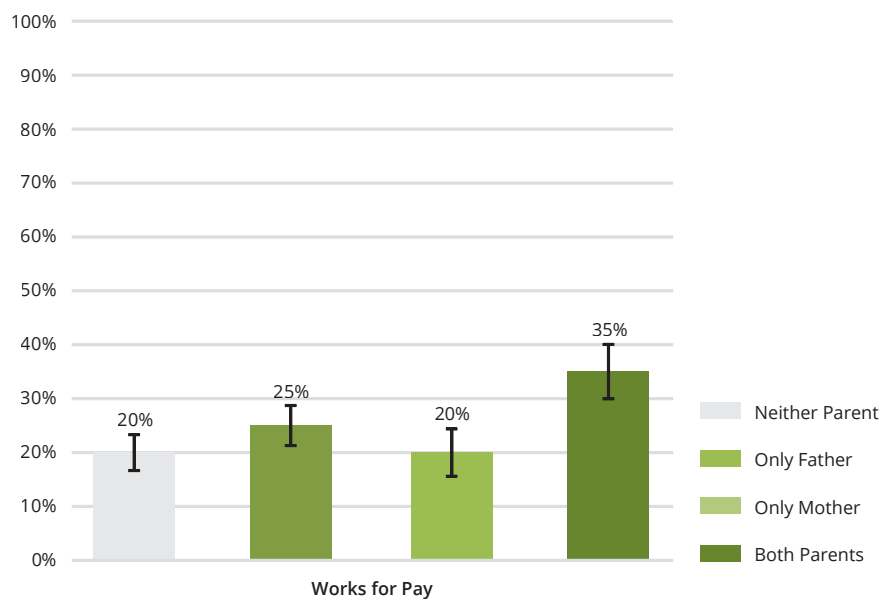


FIGURE 25
Percentage of children
with parents working
for pay



Vancouver, BC.

Living Away from the Community

Over 170,000 First Nations people live in BC [33]. While some live in cities, towns or rural areas, others live on-reserve in their home communities. Many First Nations people in BC maintain connections with their cultural traditions and home community, even when they live elsewhere.

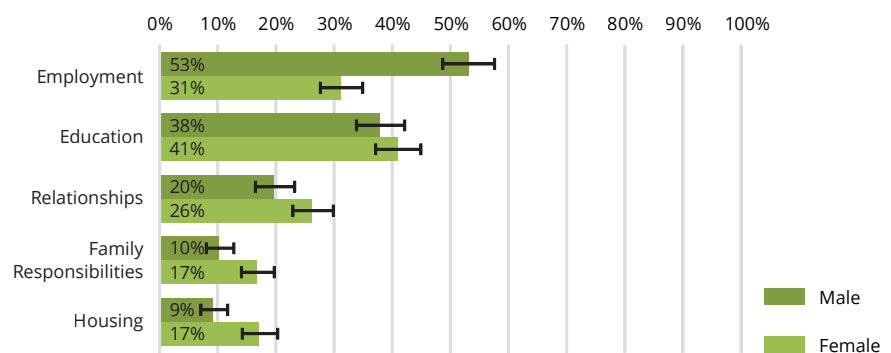
The most recent National Household Survey shows that 16% of First Nations peoples across Canada had moved at least once in the past year [87]. Moving frequently can disrupt access to social supports like neighbours, community and family [3]. The desire to seek employment and education opportunities, the need to leave unsafe situations and a desire to connect with family and culture are some reasons individuals decide to leave or stay in a community [3].

Adults – In the RHS, 67% of adults had lived outside of their First Nation community at some point in their life.¹⁵ Common reasons given for moving away from the community varied by males and females (Figure 26). For males, the main reason for moving was for employment and for females the main reason was to pursue educational opportunities. These numbers only reflect those who are currently living on-reserve and do not represent those who are still living outside of their community.

¹⁵ In the RHS, a participant's community was the reserve community where they are registered as a band member. However, the community where someone feels at home may be different and was not captured by the survey.

FIGURE 26

Common reasons reported for moving away from their community among adults who had ever lived outside of their community by males and females



Basic Needs

Education, employment and adequate income help families and individuals meet their basic needs, such as nutritious food and quality housing. When an individual cannot meet their basic needs, this **directly** impacts health by affecting their ability to survive and thrive. It also **indirectly** impacts health by causing stress, which takes a toll on the body over time. Finally, it **negatively impacts** other social determinants of health. For example, when an individual cannot meet their basic needs, this limits their ability to work, go to school or take care of health in other ways.

The FNHA recognizes the role of social and economic conditions in the journey to health and wellness. The FNHA Health Promotion and Prevention Healthy Living Unit supports improvements in these conditions for First Nations by funding community-based initiatives that focus on health promotion, including food security [88].

Adults – Adults were asked if they had struggled to meet their basic needs – including food, shelter, utilities, clothing and transportation – in the past year. Approximately half (54%) of adults said they **did not** struggle to meet their basic needs, 38% struggled to meet **some** needs (i.e., at least one basic need, but not all) and 9% struggled to meet **all** needs (Figure 27). **More** adults 55 and older (60%) said that they did not struggle to meet basic needs than adults 18 to 54 (51%).

The RHS found that almost half of adults struggled to meet at least one basic need. These are essential for individuals to lead healthful lives, but are often outside of an individual's control. These needs may not be easily available or accessible in communities, which has been described as an effect of colonialism and the loss of traditional resources and environments [89].

To learn about food security issues, the RHS asked adults if their household had experienced any of the following in the past year:¹⁶

- Food that was bought didn't last and didn't have the money to get more;
- Couldn't afford to eat balanced meals;
- Cut the size of meals or skipped meals because there wasn't enough money for food;

¹⁶ The RHS does not measure all aspects of food security, such as food accessibility and food availability; therefore, this data may not capture all experiences of food security.

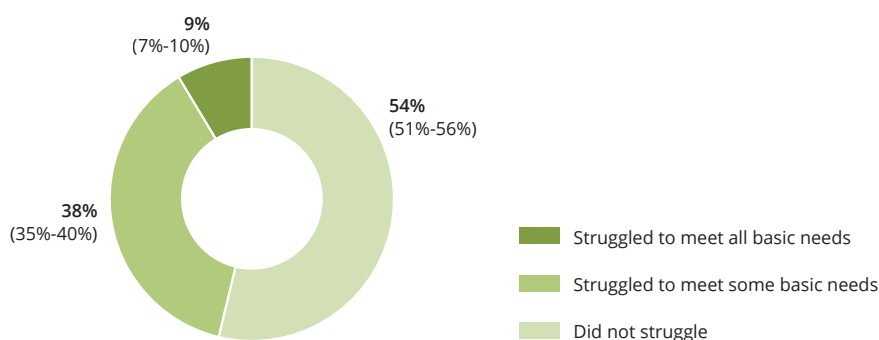
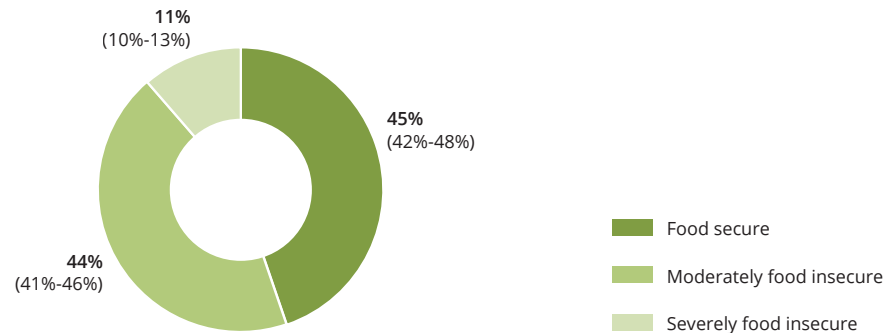


FIGURE 27

Percentage of adults who said they had struggled to meet their basic needs in the past year

FIGURE 28
Level of household
food insecurity
reported by adults



WHAT HAS CHANGED?
BASIC NEEDS

ADULTS WHO REPORTED BEING ABLE TO MEET
ALL BASIC NEEDS (I.E., FOOD, SHELTER, UTILITIES,
CLOTHING AND TRANSPORTATION)

	ADULTS
RHS Phase 1 2002-03	NA
RHS Phase 2 2008-10	37%
RHS Phase 3 2015-17	54%

- In RHS Phase 2, 37% of adults said they were able to meet their basic needs. This has since increased to 54% in RHS Phase 3.
- Data was not available for RHS Phase 1.

What does this mean?

More adults can meet their basic needs now in 2015-17 than in 2008-10.

- Hungry but didn't eat because there wasn't enough money for food; or
- Ate less than felt they should because there wasn't enough money to buy food.

While 45% of adults said that they *did not* experience food insecurity in the past year, 11% said their household experienced *all* the food insecurity issues listed above in the past year. This is considered *severe* food insecurity, as shown in Figure 28. Severe food insecurity was higher among adults between the ages of 18 and 54 (13%) than adults 55 and older (8%). In addition, 44% of all adults said that their household had experienced at least one but not all issues (i.e., *moderate* food insecurity). These results show that the ability to purchase and provide oneself and family with foods that nourish minds and bodies is not always available [6, 31, 49, 90].

Differences in the way food security is measured makes it difficult to compare this data to results from other surveys. However, Statistics Canada has reported that among First Nations people 12 years and older living off-reserve in Canada, 22% lived in households that experienced moderate or severe food insecurity [87]. This was approximately three times higher than non-Indigenous people in Canada [87].



Mothers and babies are honoured in First Nations cultures in BC.

Healthy Mothers and Babies

Mothers and babies are honoured in First Nations cultures in BC [91]. Birth is sacred, spiritual and life giving [92]. The well-being of mothers and children affects the health and well-being of families and communities [91].

Adults – Approximately 4%^{17*} of First Nations females aged 18 to 45 in BC were pregnant at the time of the RHS.¹⁸

Child – A healthy pregnancy is important for the long-term health of both a mother and child. A majority (84%) of parents or caregivers said that their child's mother had taken a prenatal vitamin containing folic acid or iron during pregnancy. The FNHA funds most of the First Nations in BC for the Prenatal Nutrition Program. This provides funds and resources for communities to design and deliver their prenatal nutrition programs [93].

Birth weight is an important indicator of infant health and development. The average birth weight, as reported by parents and primary caregivers of children in the RHS, was 3.4kg (7lbs, 8oz). Most babies (88%) had a moderate birth weight and 7% had a low birth weight.¹⁹ In Canada, 6.4% of infants born in 2016 had a low birth weight [94]. Although the Canadian data is not directly comparable to data in this survey because low birth weight is measured differently, this Canadian data provides some context for the RHS data [95].

¹⁷ * Interpret with caution due to moderate variability.

¹⁸ Female youth in the RHS were not asked if they were pregnant.

¹⁹ Note that preterm babies are included in the measure of low birth weight in the RHS. These babies would likely fall in the low birth weight category, but may not be considered low for their gestational age. Also, the RHS data is self-reported, while Statistics Canada data is not.

“Two-Spirit” is used by some Indigenous people across North America to refer to a broad range of sexual and gender identities.

Gender Identity

Gender identity and sexual orientation can play an important role in health and wellness, particularly due to reduced access to health and wellness services. Many First Nations cultures have histories of gender and sexual diversity. “Two-Spirit” is used by some Indigenous people across North America to refer to a broad range of sexual and gender identities. It may refer to people who have both masculine and feminine spirits or people who identify as lesbian, gay, bisexual, transgender or queer [96]. Although the RHS was not able to produce a reliable snapshot of sexual orientation for First Nations peoples living on-reserve, it must be acknowledged that sexual orientation influences health and wellness and may lead to increased discrimination and marginalization experienced both in daily life and in access to health services.

Adults – Three per cent (3%) of adults said they identify as Two-Spirit or transgender.²⁰ Two-Spirit people may face additional challenges as a result of discrimination and marginalization both in and outside First Nations communities in BC, which may contribute to underreporting. It is important to recognize the unique health needs of Two-Spirit people.

Youth – Among youth 15 and older, 2%^{21*} identified as Two-Spirit or transgender.

The BC Adolescent Health Survey from 2013 found that 1% of Aboriginal youth attending school in BC identified as transgender and 5% identified as Two-Spirit.²² This research with Aboriginal transgender and Two-Spirit youth in BC found that a majority feel positive about themselves and their overall health. However, alarming percentages of Aboriginal transgender and Two-Spirit youth reported experiencing physical and sexual abuse (29%), thinking about suicide (34%) and experiencing discrimination (36%) [45].

20 It is important to note that these terms are not equivalent and may not adequately capture sexual and gender diversity as an individual's expression may not be confined to these categories.

21 * Interpret with caution due to moderate variability

22 These results – reported in Raven's Children IV: Aboriginal youth health in BC [45] – separated Aboriginal students into those who lived on-reserve and those who did not despite the fact that only First Nations, not Métis or Inuit, live on reserves.

FNHA staff members march in the 2018 Vancouver Pride Parade wearing #TwoSpiritLove t-shirts.



Trauma

The impact of colonialism on First Nations has been described as a “soul wound” [97]. First Nations in BC continue to experience the impact of historical, intergenerational and ongoing traumas. Intergenerational effects of residential schools, as well as experiences of present day racism, violence and bullying, are barriers to health and healing [15]. With these wounds in mind, the FNHA works to foster cultural safety within the health system by advocating for spaces where the traumas and experiences of First Nations are heard and respected [98].

Residential School Attendance

Adults – Overall, 19% of adults said they had attended a residential school. A much higher percentage of adults 55 and older (48%) said they had attended a residential school than adults 18 to 54 (7%). These survivors and their descendants are part of the fabric of First Nations communities across the province. Their strength in the face of tremendous adversity is a powerful testament to their resilience [99].

Racism

Adults – Three in 10 (31%) adults reported personally experiencing racism at least once in the past year (Figure 29). As little data exists documenting how many First Nations people experience racism in their daily lives, this is an important finding.

WHAT HAS CHANGED? RACISM

ADULTS WHO EXPERIENCED RACISM IN THE PAST YEAR

	ADULTS
RHS Phase 1 2002-03	49%
RHS Phase 2 2008-10	33%
RHS Phase 3 2015-17	31%

- In RHS Phase 1, 49% of adults reported experiencing racism in the past year. This decreased to 31% of adults in RHS Phase 3.
- The difference between RHS Phase 2 and RHS Phase 3 is not substantial.

What does this mean?

In 2002-03, half of adults experienced racism in the past year. In 2015-17, this decreased to one-third of adults.

ALMOST

1 in 3

ADULTS

reported personally experiencing **racism** in the last year

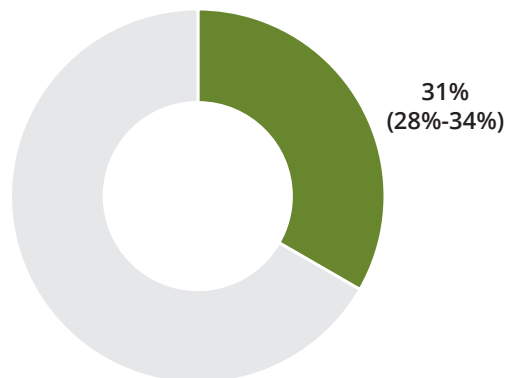


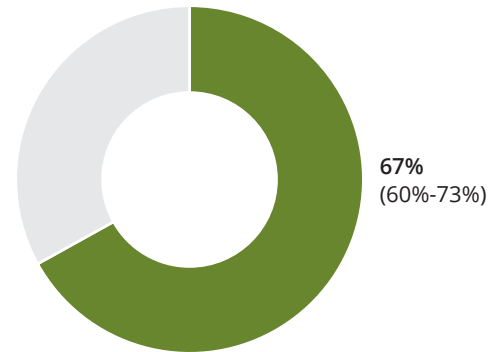
FIGURE 29

Percentage of adults who experienced racism in the past year

FIGURE 30

Adults who reported experiencing, seeking and receiving help for aggression or cyberbullying

ABOUT
2/3
OF ADULTS
who sought help in dealing with
aggression / cyber-bullying
in the past year reported
receiving the help they needed

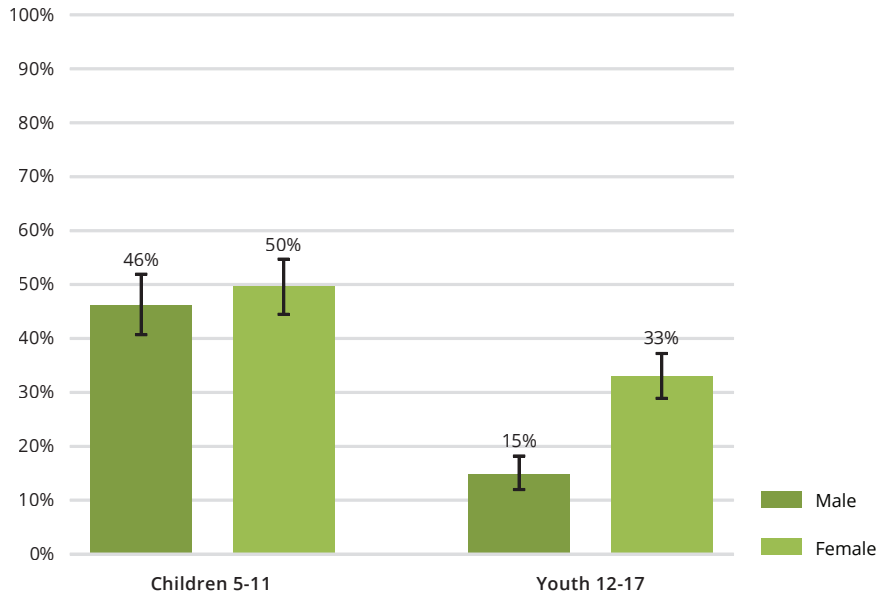


Bullying, Aggression and Violence

Adults – In the past year, 45% of adults said they had experienced physical (e.g., hitting, kicking, crowding, etc.) or verbal aggression (e.g., threats, insults, name calling, etc.). Aggression was experienced by more adults 18 to 54 (51%) than adults 55 and older (31%). Indigenous peoples across Canada are three times more likely to be victims of violent crime than non-Indigenous Canadians [100]. Disproportionate levels of violence experienced by Indigenous peoples are also reflected by the number of missing and murdered Indigenous women in BC and across Canada [101, 102]. However, increasing public awareness and activism are working to address the systemic injustices experienced by victims of violence in the legal system.

Adults who had experienced aggression were asked where the aggression occurred. Approximately half (51%) of adults said that they experienced aggression in the community. For 37% of adults, violence occurred in the home and for 18% it occurred at school or work. Online aggression was experienced by 14% of adults and of those, 22% had sought help. Seeking help was more common among females (28%) than males (16%). Among those who were bullied and sought help, two out of three (67%) felt they received all the help they needed (Figure 30).

The traumas and abuses experienced by many First Nations people in the past and present have created a legacy of violence within First Nations communities [103]. Ensuring that communities are safe and free from violence is an important part of healing and rebuilding in this era of reconciliation.

**FIGURE 31**

Percentage of children and youth reported to having been bullied in the past year by males and females

Youth – Overall, 24% of youth said they had been bullied in the past year. Bullying was defined as a purposeful act in which the bully uses their power to threaten, harass or hurt others. It includes physical, verbal, indirect and cyberbullying. Female youth (33%) were more likely than male youth (15%) to report having experienced bullying (Figure 31). The percentage of First Nations youth who reported being bullied in this RHS survey may be lower than that of all BC youth attending grades 7-12, among whom approximately half reported having been bullied in the past year [104].

Bullying experienced by youth has important implications for health and wellness [105]. Among Aboriginal youth in BC, experiencing bullying has been linked with missing out on extracurricular activities, feeling extreme despair and attempting suicide. However, when a young person who is bullied feels that their family pays attention to them, harmful outcomes are reduced [45].

Children – According to their parents or caregivers 44% of children between five and 11 years had been bullied in the past year.²³ The extent of reported bullying may highlight an area for attention, as bullying can be harmful to a child's health and well-being [105].

²³ A parent or guardian responded on behalf of children. These figures may underestimate the experiences if the parent or guardian was not aware of bullying in the child's life.



A woman with dark hair, wearing a white long-sleeved shirt with a yellow pattern, is laughing heartily. She is outdoors, standing next to a wooden post. In the foreground, there is a large fish being prepared on a wooden surface. The background shows green foliage and a blue rope hanging from above. The right side of the image has a yellow overlay with text.

HEALTH STATUS AND OUTCOMES

Each of the social determinants of health described in the previous section plays a role in shaping the health status of First Nations in BC. Understanding health status and outcomes requires recognizing a wholistic perspective of health and wellness that involves the whole person — physical, emotional, mental and spiritual — and extends beyond the individual to family, community and cultural traditions. The impacts of these health determinants are visible in perceived health and wellness, patterns of disease and individual behaviours. Some of these determinants buffer against poor health outcomes, while others put individuals in harm's way.

This section shares findings on the health and wellness status and outcomes reported by RHS participants.

WHAT HAS CHANGED? GENERAL HEALTH

ADULTS, YOUTH AND CHILDREN WHO WERE REPORTED TO HAVE EXCELLENT, VERY GOOD OR GOOD HEALTH

	ADULT	YOUTH	CHILDREN
RHS Phase 1 2002-03	80%	90%	93%
RHS Phase 2 2008-10	71%	91%	98%
RHS Phase 3 2015-17	70%	88%	96%

- In RHS Phase 1, 80% of adults rated their health as excellent, very good or good. This decreased to 70% in Phase 3.
- In RHS Phase 2, 98% of children were reported to have excellent, very good and good health, which decreased to 96% in RHS Phase 3.
- There were no other substantial changes between the other phases for adults or children and no substantial changes between RHS Phases for youth.

What does this mean?

Fewer adults rated their general health positively in the current RHS Phase than in Phase 1 from 2002-03. Likewise, fewer children were reported to have excellent, very good or good health in 2008-10 than now in 2015-17. There have not been substantial differences in how youth report their health status, with approximately nine out of 10 rating their health positively in all three RHS Phases.



Perceived Health and Wellness

All ages – Seven out of 10 (70%) adults said their health was generally good, very good or excellent. Compared to adults 18 to 54, adults 55 and older were more likely to report fair (20% and 33%, respectively) or poor (5% and 10%, respectively) health. Most youth (88%) and children (95%) were also reported to be in good, very good or excellent health. Figure 32 shows a breakdown of these results.

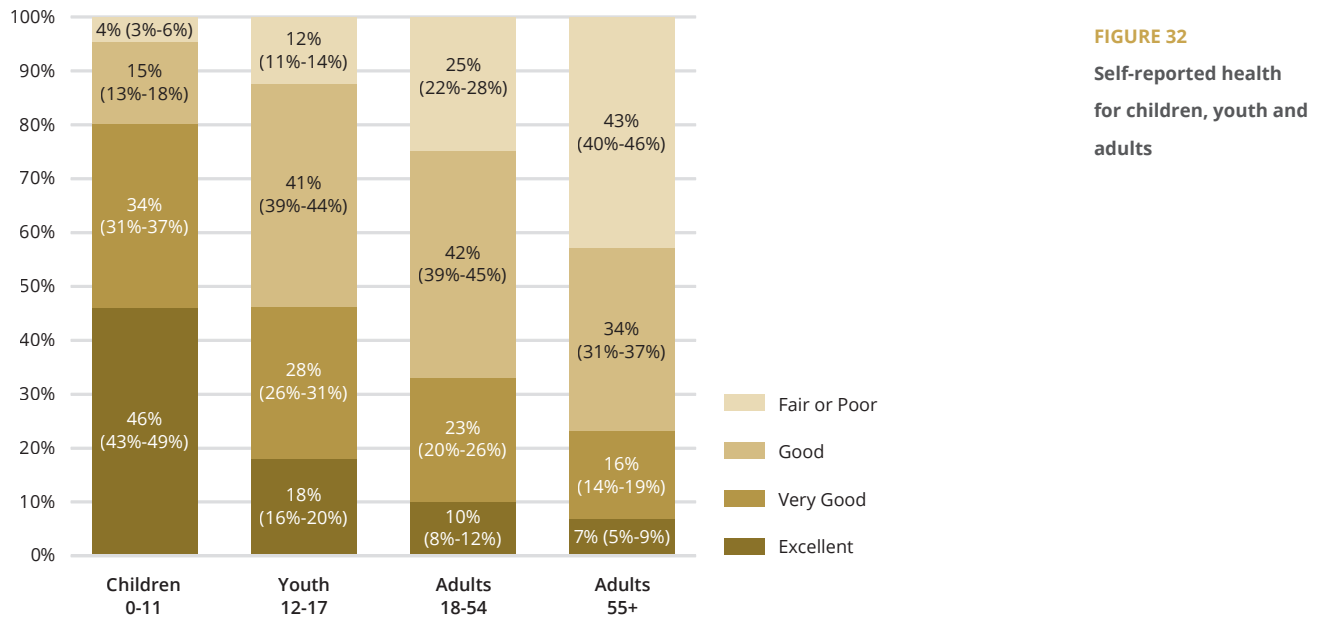
Mental Health and Wellness

First Nations communities in BC have consistently identified mental health and wellness as a top priority. Individual mental health and wellness is rooted in community and family wellness [106, 107]. Individuals, families and Nations are on a journey to reclaim their mental health and wellness by healing from the traumatic impacts of colonization, residential schools and the removal of children from their families and communities [106]. Personal resilience, community connectedness, traditional wellness practices and healthy relationships are essential. Supporting mental health and wellness is also key to addressing harmful substance use in First Nations communities in BC.

Addressing mental health conditions – such as anxiety or mood disorders – is one piece of this larger perspective [108-110]. A full spectrum of wholistic supports and services that address physical, emotional, mental and spiritual needs is crucial to support mental health and wellness among First Nations peoples [107]. Mental health and wellness initiatives must go beyond the individual to engage and support communities to take action [111]. Interventions must be accessible, acceptable and available when and where those who need them are ready to engage. The FNHA created the *Hope, Help and Healing Toolkit*, a resource for communities to strengthen their mental health prevention, intervention and post-intervention capacities [112].

Self-Reported Mental Health Status

Most adults (82%) said their mental health was good (39%), very good (30%) or excellent (13%) and 18% said that their mental health was fair or poor. Among youth, 84% reported good, very good or excellent mental health and 15% said that it was fair or poor. See Figure 33 for self-reported mental health for both adult age groups and youth. Among youth, it was more likely for boys than girls to say that they have excellent mental health (19% and 11%, respectively) and it was more common for girls than boys to say they have fair mental health (15% and 10%, respectively).



Adults – Adults were asked how often they felt physical, mental, emotional and spiritual balance. Overall, 53% of adults said they felt balanced in *all* these areas most or all the time. See Figure 34. More males than females (58% and 48%, respectively) and adults 55 and older than adults 18 to 54 (59% and 51%, respectively) said that they felt balanced in all areas.

In addition, when these areas (i.e., physical, emotional, mental and spiritual balance) were considered separately, over two-thirds of adults said they felt balanced in *each* of the four areas all or most of the time. Figure 35 shows more males than females reported feeling balanced in terms of their physical, emotional and mental health. More adults 55 and older said they felt balanced in their emotional, mental and spiritual health than adults 18 to 54.

Youth – Across BC, 71% of youth said they felt in balance physically most or all the time.

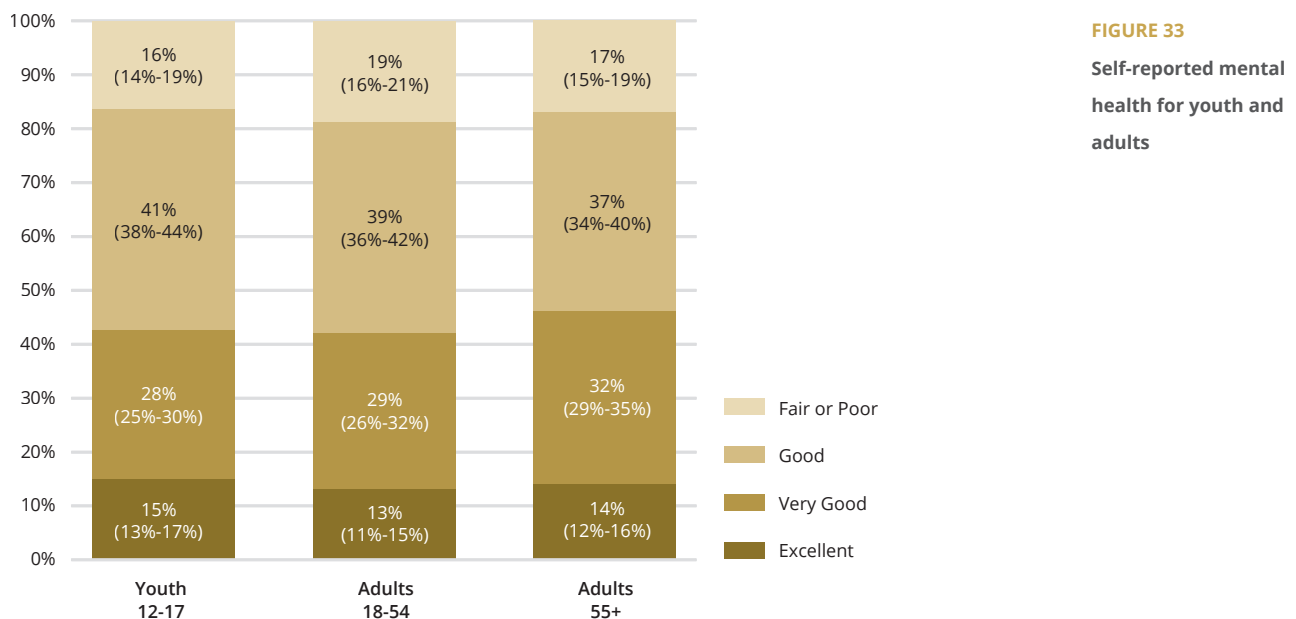
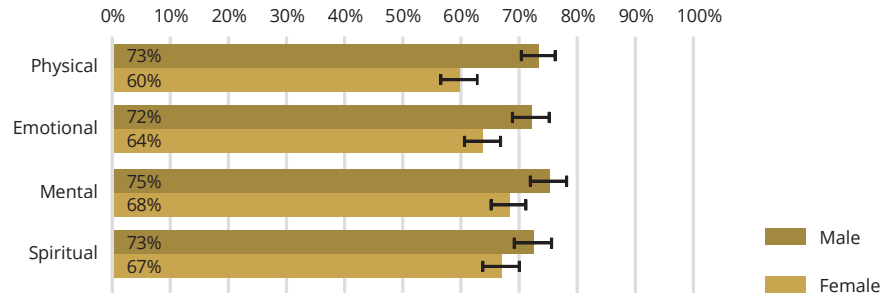


FIGURE 34

Percentage of adults that feel they are in balance most of the time for each of the four aspects of their life by males and females



WHAT HAS CHANGED? MENTAL HEALTH

YOUTH WHO REPORTED HAVING EXCELLENT, VERY GOOD OR GOOD MENTAL HEALTH

	YOUTH
RHS Phase 1 2002-03	NA
RHS Phase 2 2008-10	92%
RHS Phase 3 2015-17	84%

- In RHS Phase 2, 92% of youth reported having excellent, very good or good mental health. This decreased to 84% in RHS Phase 3.

- Data was not available for RHS Phase 1.

What does this mean?

The proportion of youth who rated their mental health positively has decreased from 2008-10 to now in 2015-17.



Mental Health Conditions

Adults – Approximately one in 10 adults reported having either an anxiety (11%)²⁴ or mood (11%)²⁵ disorder. This is shown for both adult age groups in Figure 35. A higher proportion of females reported either anxiety (16%) or mood disorders (15%) than males (7% and 8%, respectively). This is consistent with data from all of Canada, which also shows that 10% of the population experiences anxiety or mood disorders, with more females (and adolescents) reporting this [113].

Youth and children – It is important to address children and youth's mental health conditions. Early prevention and providing supports can contribute to better outcomes for youth struggling with these conditions. Overall, 12% of youth reported an anxiety disorder and 11% reported a mood disorder (Figure 35). Approximately 4% of youth reported attention deficit (hyperactivity) disorder, which was more common among males (6%)^{26*} than females (2%)^{27*}.

Most children had not been diagnosed with an anxiety disorder, mood disorder, attention deficit (hyperactivity) disorder or fetal alcohol spectrum disorder. Given the small number of “yes” responses, it is difficult to provide a precise estimate of the number of children with these conditions. Although a small percentage of children and youth may have mental health conditions, those who do may require additional support to thrive in school, at home and in the community [108, 110].

While it is difficult to find current data on mood and anxiety disorders among youth and children for context, the Canadian Institute for Health Information (CIHI) estimates that between 10% and 20% of youth and children may develop a mental health disorder [114]. Although this data from the CIHI is not directly comparable to RHS data, it is similar. This could suggest that First Nations in BC may report similar mental health outcomes as all youth and children across all of Canada.

24 Anxiety disorders include anxiety disorder, phobia, obsessive-compulsive disorder and panic disorder.

25 Mood disorders include depression, bipolar, mania and dysthymia.

26 * Interpret with caution due to moderate variability.

27 * Interpret with caution due to moderate variability.



FNHA supports Gathering Our Voices youth conference each year, contributing to youth wellness.

Social Support

Adults – Most adults (88%) said they had someone to confide in or listen to them either some or all the time. Having someone to confide in or listen to them was more commonly reported by females (90%) than males (85%). As well, most adults (93%) said they had someone to have a good time or do something enjoyable with some or all the time. High levels of social support have also been reported for off-reserve First Nations peoples represented in the 2012 Aboriginal Peoples Survey [115]. Good social supports, relationships and feelings of connectedness are vital to mental health and wellness [107].

Adults were asked who they had seen or talked to on the telephone about their emotional or mental health in the past year. Common sources of support for adults were family members (44%) and friends (34%). Overall, 18% of adults had sought professional medical support (e.g., family doctor, mental health professional, community health worker, nurse, social worker, crisis line) for their emotional or mental health and 2% sought support from a traditional healer. Answers also varied by males and females, as shown in Figure 36. It was more common for females than males to seek support from a family member or a medical professional.

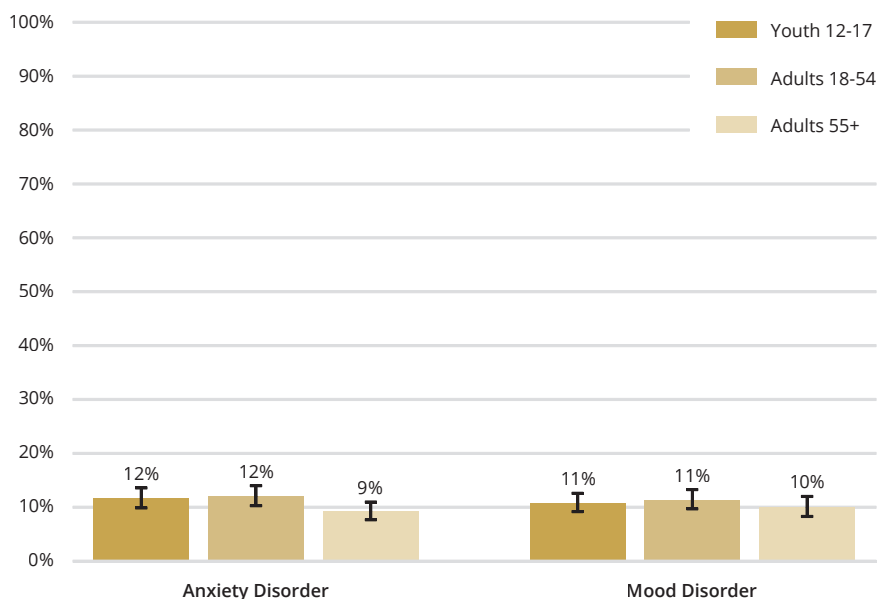
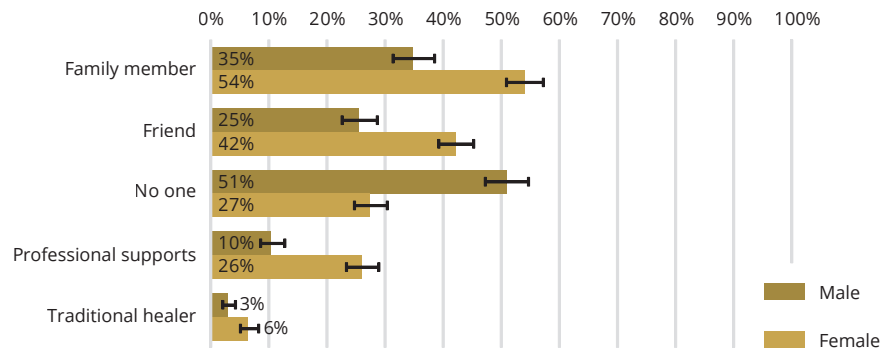


FIGURE 35
Percentage of youth and adults reporting that they have been told by a health care professional that they have an anxiety or mood disorder by age group

FIGURE 36

Social supports adults have seen or talked to on the telephone about their emotional or mental health in the past year by males and females



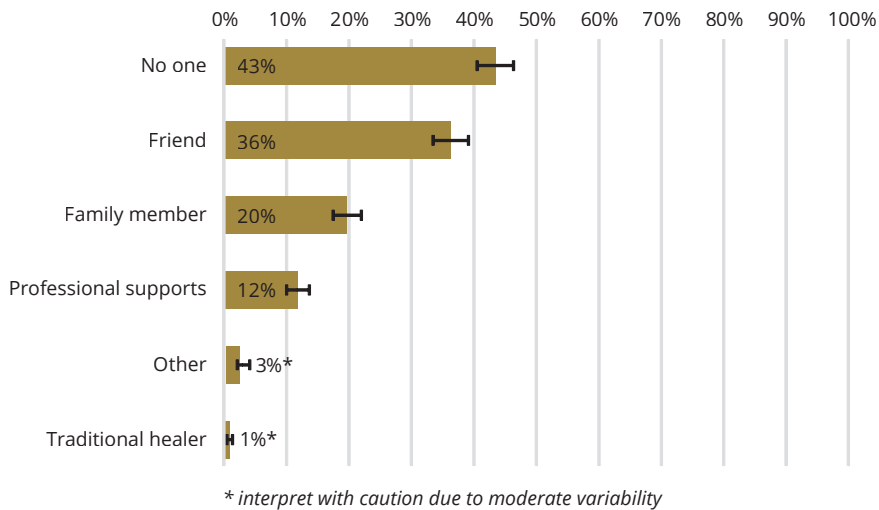
Of note, 40% of adults said they had not spoken to anyone about their emotional or mental health in the past year. Figure 36 shows that half of males said they had not spoken to anyone and this was almost twice the percentage of females.²⁸

Youth – Most youth (88%) said they had someone to confide in or listen to them when support was needed. As well, most (95%) reported that they had someone to have a good time or do something enjoyable with either some or all the time. Healthy relationships with friends and family and within school and community are linked with better health and a feeling of hope for the future [45].

Youth were asked who they had seen or talked to on the telephone about their emotional or mental health in the past year. The largest percentage of youth said they had spoken to no one (43%), followed by a friend (36%; Figure 37).²⁹ The proportion of male youth (56%) who said they had not spoken to anyone about their emotional or mental health in the past year was nearly double that of female youth (30%). It is possible that youth are reaching out for emotional and mental support in other ways, for example, online. However, the RHS data highlights the importance of friends for mental health support among First Nations youth living on-reserve.

²⁸ This question considers all participants and so a portion of those reporting that they sought help from “no one” may not have required any help.

²⁹ This question considers all participants and so a portion of those reporting that they sought help from “no one” may not have required any help.

**FIGURE 37**

Social supports youth have seen or talked to on the telephone about their emotional or mental health in the past year

Among adults and youth, males tended to reach out to social supports for mental and emotional health concerns less frequently than females. However, as mentioned above, it was more likely for females than males to have a lower self-rated mental health status and to report mood or anxiety disorders. (These concerns may also have been underreported among males.) Adults were not asked whether they required mental or emotional support that went unaddressed. However, when asked who they reached out to in the past year for mental or emotional support, approximately half of male youth (56%) and adult males (51%) reported “no one.” In addition, fewer males (11%) sought professional medical support than females (26%). These findings highlight an area for attention. Empowering, culturally rooted programs, such as the Northern Indigenous Guys Gathering that brings together 45 males from 20 communities to participate in traditional activities, are great examples of the work being done to ensure that First Nations males have the tools they need to succeed [116].

Suicide

First Nations across BC continue to cope with the impact of suicide in their communities [117]. Understanding the reasons behind First Nations peoples' thoughts of suicide and the high numbers of suicide in their communities requires recognizing the pain and loss stemming from colonization that has also passed through generations [118]. Ongoing trauma and cultural disconnection contribute to the risk of suicide.

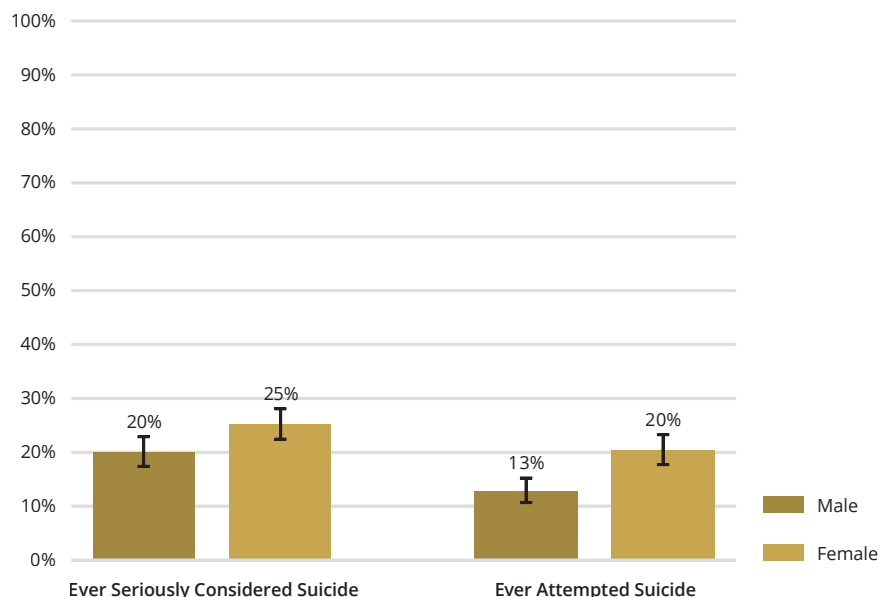
Nearly one-third of unexpected deaths among First Nations youth aged 15 to 24 in BC from 2010 to 2016 were suicides [117]. Elders and leaders remain especially concerned about high rates of suicide among young people who are involved in substance use and/or the foster care system [117, 119].

First Nations in BC have identified that hope, help and healing are critical supports for mental health and wellness and essential to addressing suicide [112]. Hope is about prevention by strengthening community resilience and supporting positive outlooks for the future [39]. Help means being ready to respond to suicidal feelings and attempts, and healing means supporting those affected by suicide and strengthening the community response [112].

Adults – Overall, 22% of adults said they had seriously considered suicide at some point and 16% said they had attempted suicide at some point. According to the 2012 Aboriginal Peoples Survey, one in five First Nations adults living off-reserve has seriously considered suicide [120]. In the RHS, more females (20%) reported having attempted suicide than males (13%), as shown in Figure 38.

The RHS found that 55% of adults reported that they sought help from a health professional after seriously considering suicide. After a suicide attempt, 57% of adults said they sought professional help. A higher percentage of adults 18 to 54 (61%) reported having sought professional help after a suicide attempt than adults 55 and older (46%).

FIGURE 38
Percentage of adults
who have ever
seriously considered
or attempted suicide
by males and females



Suicide touches the entire community. Eighteen per cent of adults have had a close friend or family member take their own life in the past year. Recognizing the impact of grief and loss among loved ones left behind is a vital part of supporting the well-being of First Nations families and communities in BC affected by suicide. The Hope, Help and Healing toolkit supports communities to prevent and respond to suicide, including helping individuals to reclaim their mental well-being [112]. Culturally safe crisis support is funded by the FNHA for community members who are facing a suicide risk or are healing from suicide through the 24-hour KUU-US Crisis Line.³⁰

Youth – Suicide rates have been decreasing among First Nations youth aged 15 to 24 in BC over the past 20 years, with a decline from 5.3 per 10,000 in 1993-1997 to 2.3 per 10,000 in 2009-2013 [78]. Across communities, self-determination and cultural continuity are seen as factors that have contributed to this decline in youth suicide [39]. However, Indigenous youth still struggle with suicide more than other BC youth [78]. While declining suicide rates provide hope, we must ensure youth are getting the appropriate support they need. First Nations communities and families continue to support youth so they can navigate challenges, cope with adversities and thrive.

In the RHS, approximately one in 10 (11%) youth said they had attempted suicide at some point and nine out of 10 youth said they had never attempted suicide. It was more common that female youth (17%) reported a suicide attempt than male youth (6%^{31*}). Of those youth who said they had attempted suicide, half (51%) sought help from a medical professional after their attempt. Of youth who said they had previously attempted suicide, 54% said that the attempt (or attempts) was during adolescence (ages 12-17 years), with 36% of youth reporting an attempt(s) in the past year. The proportion of youth who reported attempting suicide in the RHS may be similar to other studies. Among Aboriginal youth attending school in BC in 2013, 13%³² had attempted suicide in the past year [45].

30 First Nations and other Indigenous peoples who may require emotional support can contact the 24-Hour KUU-US Crisis Line at 1-800-588-8717.

31 * Interpret with caution due to moderate variability.

32 These results – reported in *Raven's Children IV: Aboriginal youth health in BC* [45] – separated Aboriginal students into those who lived on-reserve and those who did not despite the fact that only First Nations, not Métis or Inuit, live on reserves.

WHAT HAS CHANGED? SUICIDE

YOUTH WHO REPORTED THAT THEY HAD EVER ATTEMPTED SUICIDE

	YOUTH
RHS Phase 1 2002-03	8%
RHS Phase 2 2008-10	5%
RHS Phase 3 2015-17	11%

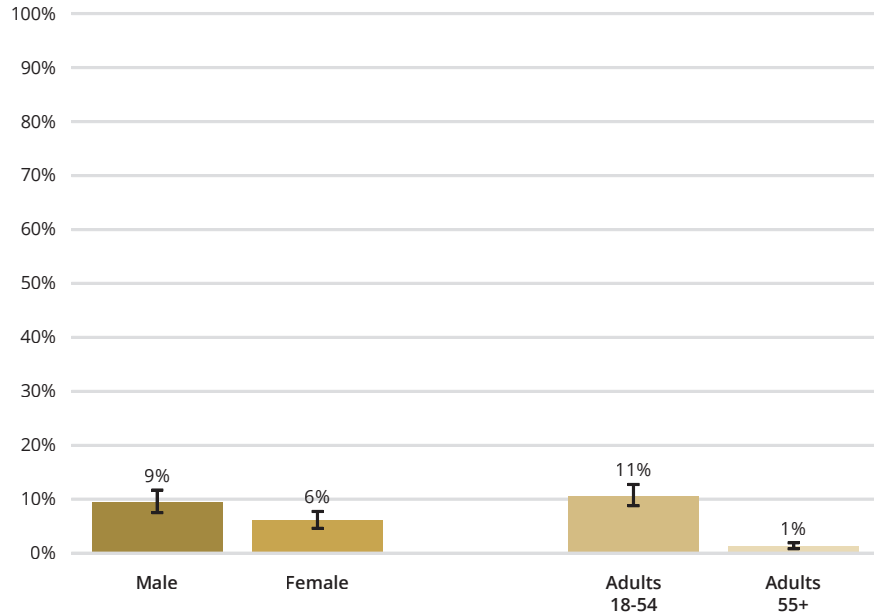
- RHS Phase 2 found that one in 20 youth had attempted suicide and this increased to just over one in 10 (11%) youth in RHS Phase 3.
- There were no substantial changes from RHS Phase 1 to Phase 3.

What does this mean?

The percentage of youth who reported they had attempted suicide has increased from 2008-10 to now in 2015-17. In BC, First Nations youth suicide deaths have been declining. The fact that more youth are saying that they have attempted suicide could be the result of fewer youth dying by suicide as well as greater awareness of mental health in communities.



FIGURE 39
Percentage of adults
who said they
had used an illicit
substance in the past
year



Alcohol and Substance Use

First Nations in BC are resilient and are working to restore balance in their relationships with family, community, ancestors and the earth [106]. First Nations Elders and knowledge keepers continue to maintain traditional knowledge and values and this cultural connection has been shown to protect against problems associated with the misuse of alcohol and illicit substances [121]. While not all alcohol and substance use is harmful, it has the potential to become problematic and lead to health issues. Emotional, mental, physical and spiritual pain stemming from intergenerational and lifetime traumas have contributed to problematic alcohol and substance use among some First Nations people in BC [106].

Although many people across BC experience problematic alcohol and substance use, First Nations peoples in BC experience a disproportionate burden of harms from such use [122, 123]. As well, drug-related harms have intensified among all residents of BC because of the current opioid crisis [124]. Most recent data indicates that First Nations in BC are three times more likely to die from an overdose than non-First Nations residents [19].

The FNHA supports a harm reduction approach [125] to reduce the harmful use of substances without judgment. Innovative, culturally based programs to prevent problematic substance use and support healthy coping strategies for trauma and mental health conditions are offered in many communities across the province. The FNHA manages the National Native Alcohol and Drug Addiction Program (NNADAP) in BC. This program supports community-based prevention and treatment services, such as community awareness campaigns, school programs and cultural and spiritual events. It also funds treatment centres, counselling, detox and support groups [126].

Adults – According to the Canadian Tobacco, Alcohol and Drugs Survey, 2% of all Canadian residents aged 15 and older said they had used at least one illicit substance in the past year [127].³³ In the RHS, illicit substance use in the past year was more common among younger than older adults, with this reported by 11%

³³ The RHS defines illicit substances as cocaine, amphetamines, methamphetamine, ecstasy, hallucinogens, heroin or other non-prescription drugs. Cannabis, inhalants and salvia were not included in this analysis of illicit substances. The definition of illicit substances is not stagnant. As of 2015, the Canadian Tobacco, Alcohol and Drugs Survey defined illicit substances as cocaine or crack, ecstasy, speed or methamphetamines, hallucinogens or heroin. Cannabis is a widely used and now legal (since October 17, 2018) substance in Canada, however, its legal status was debated during the development of this survey and report.



Roundlake Treatment Centre, Armstrong, BC.

of adults aged 18 to 54 (11%) and 1% of adults aged 55 and older. Figure 39 shows reported illicit substance use among adults by males and females and age. Most adults (92%) said they had not used illicit substances over the past year.

The drug-use patterns reported by the 8% of adults in the RHS who said they had used an illicit substance ranged from daily use to once or twice over the past year. It is also important to note that not all alcohol and substance use is harmful and that the stigma associated with substance use may make people less likely to report that they have used these substances.

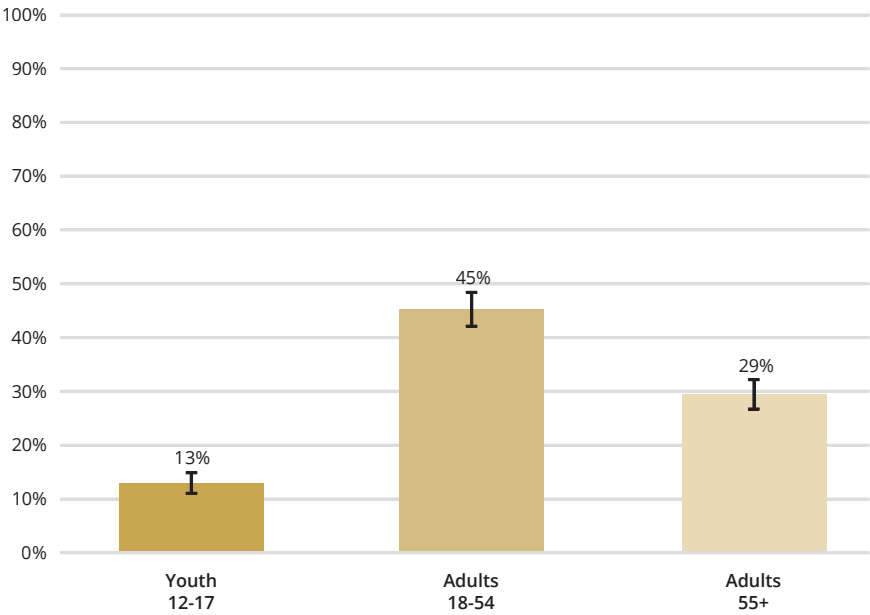
Overall, 9% of adults had attended treatment for alcohol or substance use in the past year. More commonly, adults 18 to 54 (10%) said they had sought treatment than adults 55 and older (5%). The lack of available, accessible and affordable treatment options may impact these numbers.

Youth – Most youth (94%) said they had not used illicit substances in the past year. Six per cent^{34*} of all youth said they had sought treatment for alcohol or substance use in the past year. Previous studies have observed that Aboriginal youth in BC who experienced discrimination were more likely to use substances (other than marijuana and alcohol) [45].

Children – Parents or caregivers were asked whether the child's birth mother drank any alcohol during their pregnancy. A majority (93%) stated that the mother did not drink any alcohol during the pregnancy and among those who did, most were said to have had a drink less than once a month. The powerful stigma against drinking during pregnancy may make people less likely to report alcohol use during pregnancy.

34 * Interpret with caution due to moderate variability.

FIGURE 40
Percentage of youth
and adults who
currently smoke
cigarettes by age
group



Smoking

Tobacco has been used in ceremonies among many First Nations since time immemorial [128-130]. As a sacred plant used with respect in a traditional way, it has powerful spiritual and healing benefits [128, 129].

In contrast, commercial tobacco – such as cigarettes or chewing tobacco – is harmful to health. Harmful tobacco consumption increases the risk of death, cancers and reproductive issues, as well as respiratory and cardiovascular diseases like Chronic Obstructive Pulmonary Disease (COPD), emphysema, heart attacks and angina [130].

Quitting commercial tobacco is an excellent way to improve long-term health – and the health of future generations. That’s why the FNHA has developed First Nations focused programs to support people to quit. These include the Tobacco Timeout Challenge, Youth Respecting Tobacco video contest, *Inside | Out* handbook on second-hand smoke, Smokestack Sandra’s Podcast Series and the Run to Quit fitness training program [128].

Adults – Four in 10 (41%) adults said they smoked cigarettes. Adults 18 to 54 (45%) were more likely to smoke than adults 55 and older (29%; Figure 40). Among all adults who said they had quit smoking, most (90%) did so by going “cold turkey” or through willpower alone. The 2016-17 Canadian Community Health Survey found that 14% of all BC residents aged 12 and older smoked on a daily or occasional basis [64].

Youth – Across Canada, Indigenous youth are three times more likely to smoke cigarettes than other teens [131]. In the RHS, 13% of youth said they smoke cigarettes (Figure 40). This may be similar to the national estimate that 11% of youth currently smoke and is lower than other data that suggests 33% of First Nations youth across Canada smoke [131].

WHAT HAS CHANGED? SMOKING

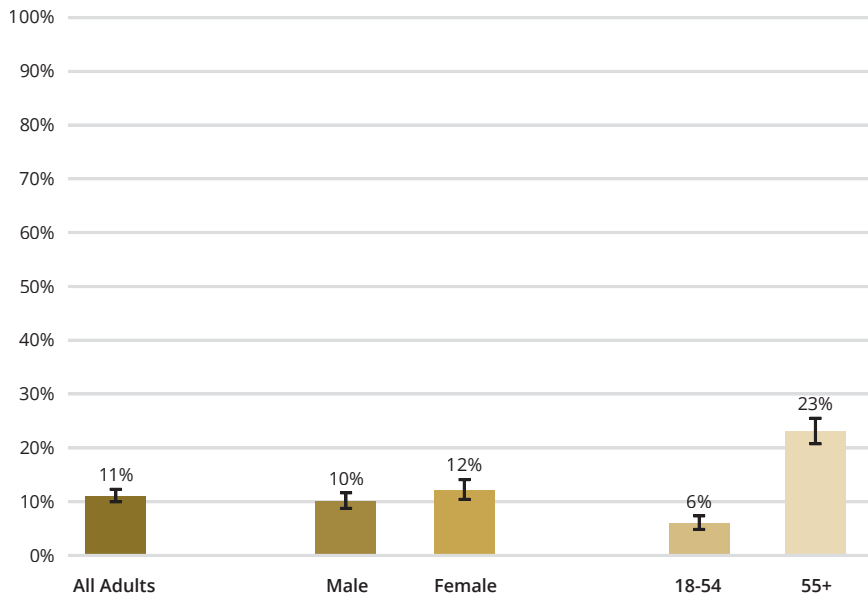
ADULTS AND YOUTH WHO REPORTED SMOKING AT THE TIME OF THE SURVEY

	ADULT	YOUTH
RHS Phase 1 2002-03	49%	27%
RHS Phase 2 2008-10	45%	23%
RHS Phase 3 2015-17	41%	13%

- Approximately four in 10 (41%) adults said they smoke cigarettes in RHS Phase 3, a decrease from RHS Phase 1, where almost half (49%) of adults said they smoked. There was also a decrease in youth smoking rates from Phase 1 to Phase 3 of 27% to 13%.
- From RHS Phase 2 to RHS Phase 3, there were no substantial changes in the smoking rates for adults. However, there were changes for youth, with 23% reporting that they smoked in Phase 2 compared to 13% in Phase 3.

What does this mean?

Reported adult smoking rates decreased from 2002-03 to 2015-17. Likewise, youth smoking decreased over this same period.

**FIGURE 41**

Percentage of adults told by a health care professional that they have diabetes, by males and females and age group

Diabetes

Diabetes is a chronic disease caused when the body becomes unable to properly produce or use insulin, a hormone that controls sugar in the bloodstream. If not properly treated, diabetes can result in serious complications. There are two types of diabetes: Type 1, which is mainly caused by genetics, and Type 2, which is more commonly seen in people who are overweight or obese or physically inactive [130]. The survey did not ask participants to specify whether they had Type 1 or Type 2 diabetes. We acknowledge that this is a limitation but since the Public Health Agency of Canada estimates that 90% to 95% of all diabetes cases are Type 2, compared to 5% to 10% that are Type 1, we can assume that most cases of diabetes are Type 2 [132].

Diabetes has not always been a health issue for First Nations in BC. Historically, healthy traditional diets and active lifestyles sustained generations over thousands of years and prevented many chronic diseases [133-135]. The drastic lifestyle and dietary changes resulting from colonization have contributed to more cases of diabetes among First Nations peoples [133-135].

Recent Canada-wide survey data estimated that 10% of off-reserve and 17% of on-reserve First Nations peoples are living with diabetes [132]. Diabetes diagnoses have increased for all BC residents over the past 25 years. However, the gap between First Nations in BC and other residents has also grown, with more First Nations people being diagnosed with diabetes than other BC residents [78].

First Nations communities in BC are building on their traditional knowledge and strengths to support healthy lifestyles as a way of managing and preventing diabetes today and for future generations.

It is critical that First Nations people have access to culturally safe prevention, treatment and care for diabetes. The First Nations Act Now Initiative, produced by the FNHC, is a toolkit communities can use to design culturally appropriate programs aimed at changing the social, environmental and economic conditions that affect individual and family health and that potentially lead to chronic disease [53, 136].



Dr. Evan Adams, FNHA CMO, at the 2016 Elders Gathering in Williams Lake.

Adults – Most adults (89%) said that they had *not* been diagnosed with diabetes and 11% said they had been diagnosed with diabetes (Figure 41). Age is a risk factor for diabetes and so more adults 55 and older (23%) have been diagnosed with diabetes than adults aged 18 to 54 (6%). Among females with diabetes, 18%^{35*} said that they were first diagnosed when they were pregnant.

Many adults who have diabetes said it had affected their vision (40%) and/or feeling in the hands and feet (37%).

Among the 11% of adults who self-reported diabetes, a majority (85%) said their diagnosis had led them to adopt a healthier lifestyle, including a good diet and/or exercise. Of these adults with diabetes, 56% were currently attending a diabetes clinic or seeing someone like a medical doctor or nurse for education about the condition. Of those who were not attending a clinic, approximately half (53%) felt they no longer required education. Approximately one-quarter (23%) said that they were not attending sessions, as it was unavailable or inconvenient in their area. Finally, 11% of adults with diabetes were managing their condition with traditional methods (traditional medicine/ceremonies/healers).

THE FNHA'S CHIEF MEDICAL OFFICER, DR. EVAN ADAMS, RECOMMENDS SOME ACTIONS PEOPLE CAN TAKE TO REDUCE THEIR SUGAR INTAKE TO PREVENT AND CONTROL DIABETES [137]:

- FOLLOW TRADITIONAL HEALTH TEACHINGS.
- EAT REAL FOODS. TRADITIONAL FOODS ARE REAL FOODS.
- ENJOY PROTEIN, HEALTHY FATS AND FIBRE.
- DO WHAT YOU CAN TO REDUCE THE STRESS IN YOUR LIFE.
- DRINK LOTS OF WATER.
- BE PATIENT WITH YOURSELF AS YOU CREATE HEALTHY NEW HABITS.

35 * Interpret with caution due to moderate variability.

Cancer

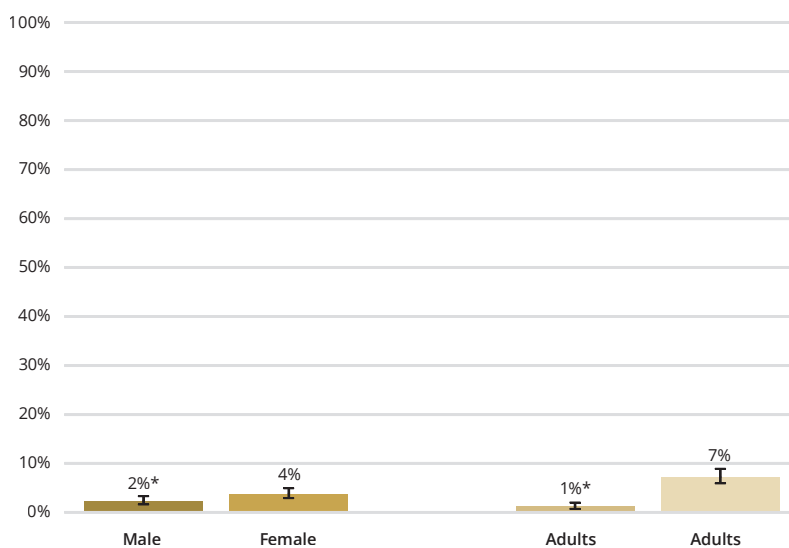
Historically, there has been a lack of knowledge about cancer diagnoses among First Nations, but recent research on cancer among First Nations in BC has provided new information. From 1993 to 2010, First Nations accounted for 1.2% of all cancer diagnoses in BC. Although this is a smaller percentage than might be expected given the proportion of First Nations in the province, First Nations individuals diagnosed with cancer may experience unique issues [138, 139]. First Nations have lower survival rates and higher prevalence of specific types of cancers (e.g., colorectal and cervical cancer) than non-First Nations [138]. Increased life expectancy may lead to more cancer diagnoses, as age is a risk factor for cancer [140]. Potentially challenging effects of social determinants, like low income or education, may affect Indigenous peoples' ability to access cancer screening and prevention programs, which may lead to delays in cancer diagnosis and an increase in deaths due to cancer [140, 141].

Barriers to care, including limited access in rural and remote areas and costs related to accessing health care, as well as systemic racism and unresolved trauma, prevent First Nations in BC from timely access to cancer screening and treatment [138]. Preventing cancer, detecting it early and promoting cultural safety and humility in cancer care are key to longer, healthier lives for First Nations in BC affected by cancer [142]. Traditional and mainstream health services are both important parts of many cancer journeys [143]. Incorporating cultural safety and humility in the health care system is important within the entire journey of cancer care, from prevention to treatment [142].

Cancer Prevalence

Adults – Overall, 3% of adults said they had been diagnosed with cancer. As expected, it was more likely that adults 55 and older (7%) had received a cancer diagnosis than adults aged 18 to 54 (1%^{36*}, Figure 42).

36 * Interpret with caution due to moderate variability



* interpret with caution due to moderate variability

FIGURE 42

Percentage of adults reporting that a health care professional told them they have cancer, by males and females and age group

Cancer Screening

Screening programs help detect cancer before symptoms appear [142]. Early detection and treatment have a major impact on health and survival. BC's screening programs focus on colon, cervical and breast cancer [142]. The intimacy of these tests can prevent some people from choosing to be screened for cancer, especially those who are survivors of sexual abuse [144]. Screening programs should be both culturally safe and trauma informed and health providers must be sensitive that some First Nations people may fear or mistrust these tests because of the legacy of residential schools and other adversities [15, 142].

Breast cancer

Adults – It's recommended that females get screened for breast cancer by having a mammogram every two years if they are between the ages of 50 and 74. Women at a higher risk of breast cancer must be screened more often and at younger ages. Mammograms can usually find lumps two or three years before they can be felt [145, 146]. Over half (52%) of females surveyed in the RHS aged 50 to 74 said they had a mammogram screening within the past two years.

Cervical cancer

Adults – First Nations females in BC are nearly twice as likely as other females in BC to be diagnosed with cervical cancer [138]. Cervical cancer is highly treatable if caught early. BC Cancer recommends females between the ages of 25 and 69 have a pap smear every three years to support early detection and treatment [147]. A majority (68%) of females aged 25 to 69 surveyed in the RHS have had a pap smear within the past three years as recommended.

Colorectal cancer

Adults –The risk of colorectal cancer is higher among First Nations in BC compared to other BC residents [138]. However, early screening can identify and remove precancerous growths, contributing to an approximately 90% survival rate among those diagnosed with colorectal cancer [148]. Screening is recommended every two years for males and females aged 50 to 74 [149]. Within this age group in the RHS, 36% of adults had been screened for colorectal cancer.³⁷

Prostate cancer

Adults – Prostate cancers are lower among First Nations males in BC than other male residents, though First Nations males in BC are more likely to have poorer outcomes [138].

The RHS found that in BC, just under half (48%) of First Nations males between the ages of 50 and 69 said they had been screened. It is unusual for prostate cancer to be diagnosed in males under 50 years of age [152]. It is important to note however, that screening is not recommended on a routine basis for the general population [150, 151]. BC Cancer recommends that males maintain a healthy weight through diet and exercise to prevent prostate cancer [152].

37 Includes fecal occult blood test, sigmoidoscopy, and colonoscopy. Note that these specific tests may not be reflective of current screening guidelines.

WHAT HAS CHANGED?
INJURY

ADULTS, YOUTH AND CHILDREN WHO REPORTED INJURIES IN THE PAST YEAR

	ADULT	YOUTH	CHILDREN
RHS Phase 1 2002-03	29%	51%	23%
RHS Phase 2 2008-10	20%	35%	10%
RHS Phase 3 2015-17	22%	38%	14%

- In RHS Phase 1, 29% of adults, 51% of youth and 23% of children reported an injury in the past year. By RHS Phase 3, this decreased for all age groups to 22% of adults, 38% of youth and 14% of children.
- There were no statistically significant decreases between RHS Phase 2 and RHS Phase 3.

What does this mean?
Reported injuries among adults, youth and children have decreased from 2002-03 to now, in 2015-17.

Injury

Preventing and reducing injury is an important priority for First Nations in BC [69, 153]. Hospitalizations due to injury have been decreasing over the past 30 years and injury gaps between First Nations and other BC residents have narrowed [154]. However, First Nations people working in high risk jobs and living in remote areas or in crowded or inadequate housing remain at risk [155]. In contrast, higher income and education have been linked with a lower likelihood of injury [155]. Preventing injuries can allow First Nations in BC to stay active longer, contributing to overall wellness and healthy aging.

Participants were asked whether they had experienced an injury serious enough to limit their normal activities the next day, such as a broken bone, bad cut, burn or sprain. They also answered questions about the type and cause of the injury.

Adults – A total of 22% of adults said they had been injured in the past year. Injuries by adult age groups are shown in Figure 43. Adult males (25%) more commonly reported injuries than adult females (19%). Of injuries reported by all adults, 27% were major sprains or strains, while 22% were fractured or broken bones. Adults 55 and older were more likely to have suffered a broken or fractured bone (33%) than adults aged 18-55 years (18%). Thirty-one per cent (31%) of all adult injuries were caused by falls.

Youth – Injuries were highest among youth, with 38% saying that an injury in the past year was serious enough to limit normal activity the next day. Results are shown in Figure 43. Reported injuries included fractured or broken bones (26%), sprains or strains (20%) or minor injuries such as scrapes, bruises or blisters (23%). Other research has found that 32% of Aboriginal youth attending school in BC had been injured seriously enough to require medical attention in the past year³⁸ [45].

Children – Fourteen per cent (14%) of children were reported to have been injured in the past year (Figure 43). The main types of injury experienced by children were fractured or broken bones (26%) and scrapes, bruises or blisters (20%). Just under half (47%) of these injuries were caused by a fall.

38 These results – reported in Raven's Children IV: Aboriginal youth health in BC [45] – separated Aboriginal students into those who lived on-reserve and those who did not despite the fact that only First Nations, not Métis or Inuit, live on reserves.

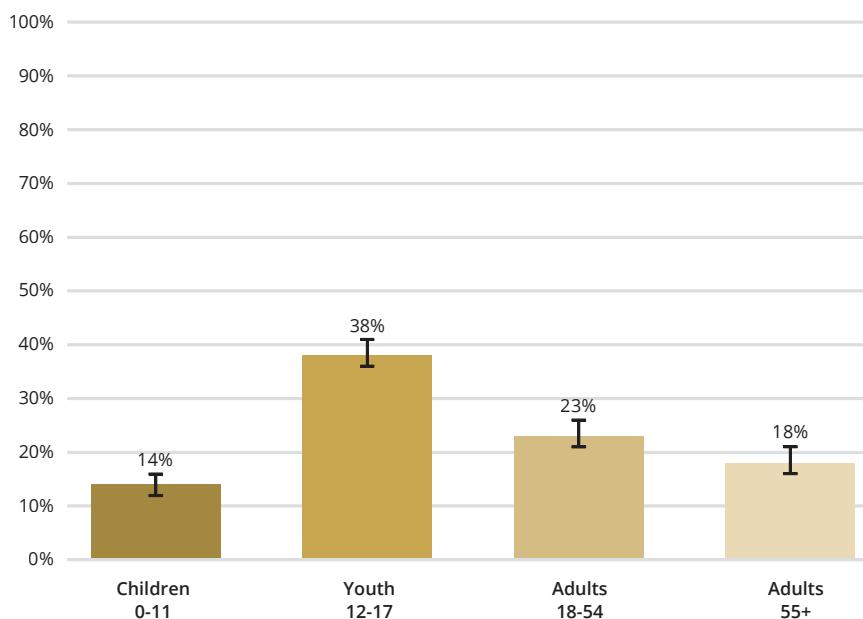


FIGURE 43
Percentage of
participants injured in
the past year by age
group





PRIMARY HEALTH CARE ACCESS AND USE

Many First Nations people in BC seek mainstream health care services when they are unwell. However, First Nations people face persistent inequity when seeking appropriate health services [5, 22, 156, 157].

Since 2013, responsibilities for health governance, programs and services for First Nations in BC have been transferred to the FNHA. These programs and services include healthy living programs to prevent disease; maternal, child and family health services; and mental wellness support.³⁹

³⁹ A compendium of programs and services provided by the FNHA is available at: http://www.fnha.ca/Documents/FNHA_Programs_Compendium.pdf

Guided by the 7 Directives, the FNHA has begun to transform the way health care is delivered in the province to improve the health of First Nations peoples and reduce inequities in health care access [158]. The RHS data collected by the FNHA is essential for identifying barriers to care to facilitate improving access to health care and wellness services for First Nations living on-reserve in BC. The recent expansion of the PharmaCare program for First Nations in BC is an example of how barriers to health and wellness are being addressed. The FNHA is also working to improve the quality of health services for First Nations in BC. The First Nations Quality Improvement and Safety (QIS) Network, overseen by the FNHA Community Accreditation and Quality Improvement Program, was established to support this goal [159].

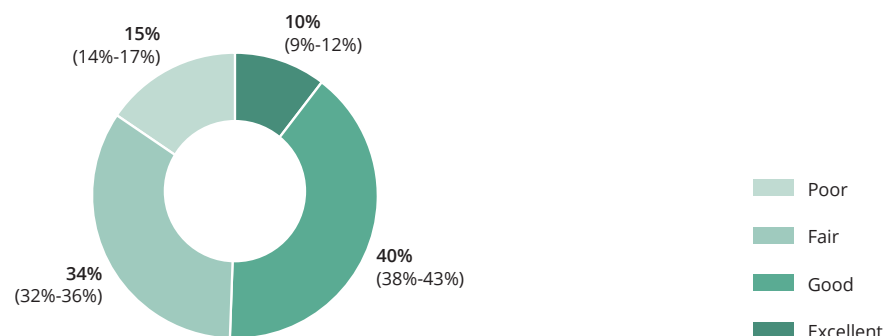
Efforts to embed cultural safety and humility into the health care system are underway, although it will take time to see their impact reflected in the RHS. BC's health leaders have signed commitments asserting that First Nations peoples have a right to access health care free of racism and discrimination and to feel safe accessing health care [160]. The ultimate goal is a future where First Nations peoples have a new relationship with their care providers based on mutual respect, understanding and reciprocal accountability [161].

Quality

Adults – As shown in Figure 44, half of adults rated the quality of health care services in their community as good (40%) or excellent (10%). It was more common for females (19%) than males (12%) to rate the quality of community health care services as poor. Cultural safety and trusting relationships with care providers are key to the quality of health care experiences [162]. Positive relationships that shift the power balance in clinical settings can renew confidence in the health care system.

FIGURE 44

How adults rated the quality of health care services available in their community

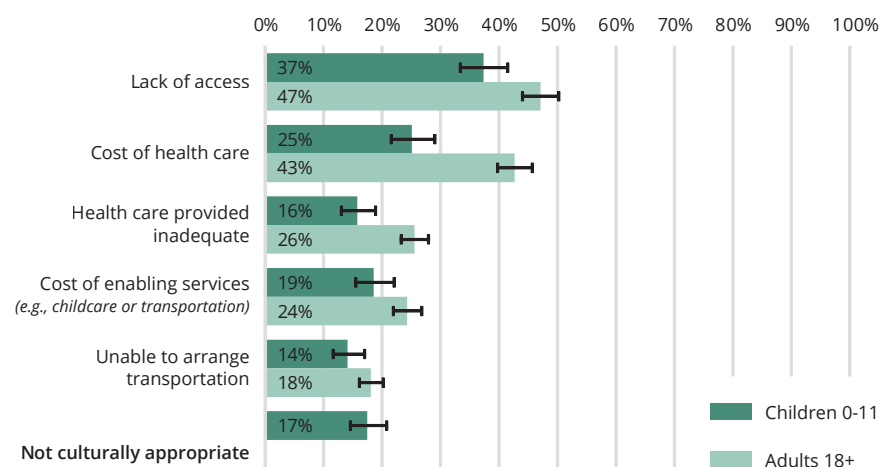


Access and Health Needs

Adults and children – Almost three-quarters (71%) of adults said they required health care from a doctor, nurse or other health professional in the past year. Among these adults, 15% of these adults felt they did not receive all the care they needed. A higher proportion of females (16%) than males (13%) reported that they did not get all the care they required. Over half of children (57%) required health care from a doctor, nurse or other health professional in the past year; of those children, 94% were reported to have received the care they needed and 6% did not.

The adults who received health care in the past year said they faced a range of barriers to receiving care. As is shown in Figure 45, these included lack of access (47%); the cost of health care, including services not covered by insurance (43%); inadequate health care (26%); costs of services enabling health care such as childcare or transportation (24%); and being unable to arrange transportation (18%).

The most commonly reported barriers for children included a lack of access (37%); the cost of health care, including services that were not covered by insurance (25%); the cost of services enabling health care such as child care or transportation (19%); culturally inappropriate services (18%); inadequate services (16%); and being unable to arrange transportation (14%; Figure 45). To ensure the health care needs of First Nations children are met, Jordan's Principle must be implemented across the province. Jordan's Principle states that First Nations children and youth between the ages of 0 and 19 must receive the public care and services they need when they are needed and that any disputes between different levels of government or government agencies about who should pay for care be resolved later [1, 163].



For adults 18+ the value for "Not culturally appropriate" is not reportable due to high amounts of missing values.

FIGURE 45
Barriers children and adults faced when accessing health care in the last year



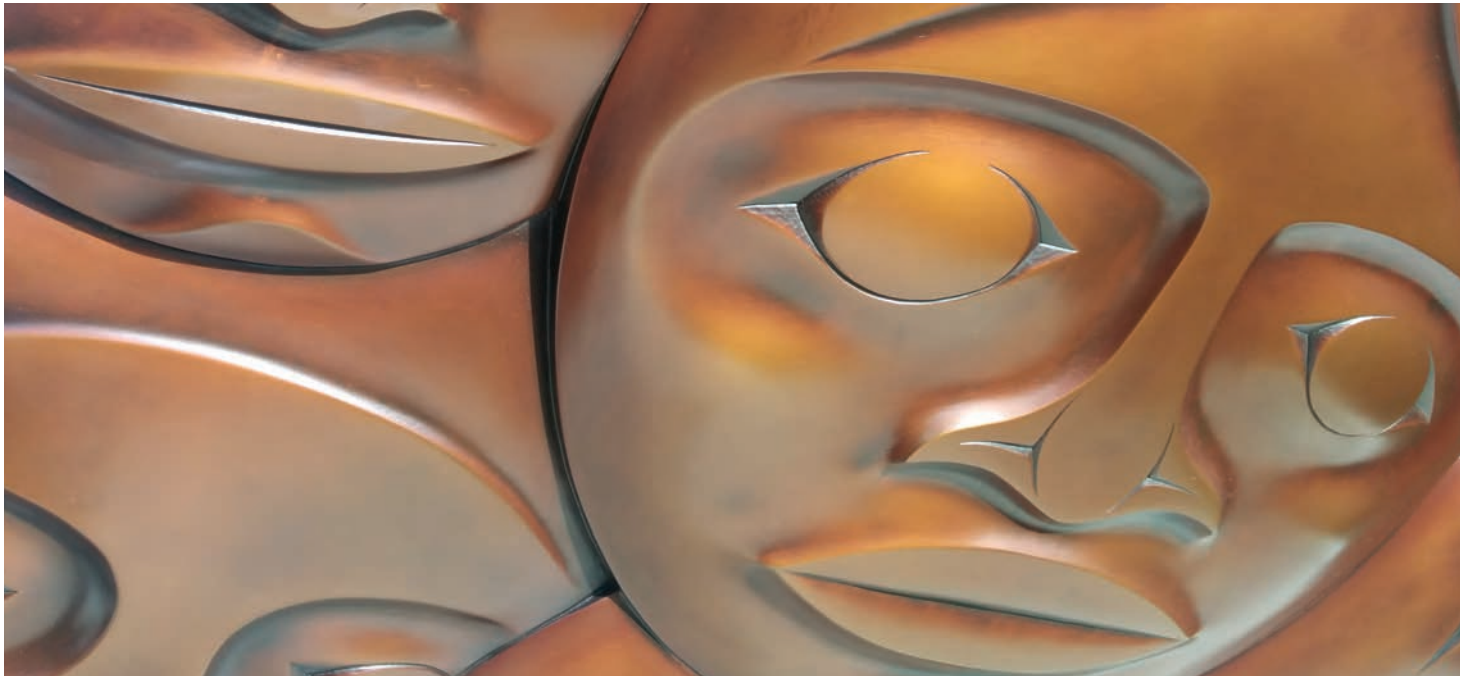
U'mista Cultural Centre, Alert Bay.

Reducing barriers to First Nations health care ensures that individuals receive the needed care and feel respected when they reach out to the health care system. Barriers to care could prevent or delay care when it is most needed. For example, according to a BC Coroners' Service and FNHA report, many First Nations youth and adults who died unexpectedly from 2010-15 faced barriers when they sought care and approximately half of those with mental health concerns who died unexpectedly had received mental health support and services [117]. Accessible, culturally safe and trauma-informed services can address health concerns as they arise.

Limitations Due to Long-Term Conditions

Long-term conditions can limit daily life activities. This includes physical conditions, mental conditions or other health problems that have lasted (or are expected to last) six months or more. Among First Nations adults in BC with long-term conditions, the following difficulties were identified:

- **Communication:** 18% always or often had communication difficulties. More commonly, females (21%) reported this limitation than males (15%) and likewise, it was more common for adults 55 and older (27%) than adults 18 to 54 (14%) to report this limitation always or often. Examples of communication difficulties include challenges reading a newspaper or hearing a normal conversation.
- **Physical:** 17% always or often had physical limitations. It was more likely for females (21%) than males (14%) to report this challenge. This was true for more adults 55 and older (33%) than adults 18 to 54 (10%). Physical difficulties may prevent an individual from being able to climb a flight of stairs or pick something up from the floor.
- **Cognitive:** 8% always or often had cognitive difficulties. Examples of cognitive difficulties include challenges remembering, learning or concentrating.



Assisted Living and Supportive Care

First Nations people of all ages sometimes require care in their homes and communities as a result of disabilities or chronic or acute illnesses [164]. Providing care at home can reduce complications, death, time in hospital and costs and it can also increase patient and caregiver satisfaction [165].

Adults – Among adults who said they currently required home care support because of a physical or mental condition or health problem, the common areas in which they required additional support were home maintenance (9%), light housekeeping (5%), running errands (3%), paying bills (2%) and preparing meals (2%). It was more likely for adults older than 55 than adults 18 to 54 to report inadequate access to these services, with the three most needed services being home maintenance (16% and 6%, respectively), light housekeeping (10% and 3%^{40*}, respectively) and preparing meals (6% and 2%^{41*}, respectively). More females than males reported that they faced challenges accessing services for home maintenance (12% and 6%, respectively) and light housekeeping (7% and 3%, respectively).

40 * Interpret with caution due to moderate variability.

41 * Interpret with caution due to moderate variability.

WHAT HAS CHANGED? SERVICES

ADULTS WHO REPORTED NEEDING SUPPORT AT HOME WITH A RANGE OF SERVICES, DUE TO A MENTAL OR PHYSICAL HEALTH CONDITION.⁴²

	ADULTS
RHS Phase 1 2002-03	24%
RHS Phase 2 2008-10	20%
RHS Phase 3 2015-17	21%

- The percentage of adults requiring home support due to a mental or physical health condition ranged between 20% and 24% across RHS Phases. There weren't any statistically significant differences over time.

What does this mean?

Approximately two in 10 adults required help (such as light housekeeping, home maintenance or meals prepared or delivered) across all three RHS Phases. This proportion remained relatively constant, with no substantial changes.

42 In RHS Phases 1 and 2, services included light housekeeping, home maintenance, care from a nurse, palliative care, personal care or having meals prepared or delivered. RHS Phase 3 also included these services, as well as some additional services including running errands, paying bills, long term care or other.





CONCLUSION

First Nations peoples and communities in BC are resilient and this is reflected in their health and wellness across the province. The 2015-17 RHS shares several messages of optimism for communities when it comes to health and wellness determinants, health outcomes and health services. While challenges remain, the results from this survey show that First Nations people in BC are taking positive steps to live healthy lifestyles and that First Nations communities are championing initiatives that lead the journey to health and wellness.

For example, traditional wellness has been identified as an important priority and while the RHS showed that children and youth have supports within their communities to learn about culture, it is important to offer even more opportunities for them to learn about culture and maintain these traditions among future generations. The FNHA's Traditional Wellness and Strategic Framework provides a way forward to foster traditional wellness in First Nations communities and it advocates for increased resources and opportunities for this important area [42].

Mental health and emotional wellness also remain a high priority for First Nations communities and although most respondents said they generally had good mental health, work is still necessary to ensure that supports are accessible for the benefit of all First Nations people. The FNHA is supporting communities to promote mental wellness by acknowledging the impact of trauma and working towards addressing those impacts using training for mental health and wellness support workers.

Finally, while many respondents believed they received good or excellent health care over the past year, others reported barriers to health care services. Cultural humility and trauma-informed care resources, which are actively being developed and promoted, will support First Nations peoples to access sensitive health care, where they feel safe, respected and well cared for [98].

These are only some examples of initiatives addressing First Nations health and wellness priorities and are one part of a complex health and wellness journey. Communities are on this journey and are carving their own path that celebrates and strengthens their unique cultures. This report, as well as individual reports for each of the five health regions across the province, returns health information back to communities to support self-determination in health. By reclaiming their voice, controlling their own health information and through First Nations-driven initiatives, communities have greater opportunities to support healthful lives into the future and foster strong future generations.

References

1. Blackstock, C. (2012). Jordan's Principle: Canada's broken promise to First Nations children? *Paediatrics & Child Health*, 17(7), 368–370. <https://doi.org/10.1093/pch/17.7.368>
2. First Nations Health Council. (2011). *Implementing the vision: BC First Nations health governance*. Retrieved from http://www.fnha.ca/Documents/FNHC_Health_Governance_Book.pdf
3. King, M., Smith, A., & Gracey, M. (2009). Indigenous health part 2: The underlying causes of the health gap. *The Lancet*, 374(9683), 76–85. [https://doi.org/10.1016/s0140-6736\(09\)60827-8](https://doi.org/10.1016/s0140-6736(09)60827-8)
4. First Nations Health Authority. (n.d.). *First Nations perspective on health and wellness*. Retrieved from <http://www.fnha.ca/wellness/wellness-and-the-first-nations-health-authority/first-nations-perspective-on-wellness>
5. Reading, C., & Wien, F. (2013). *Health inequalities and the social determinants of Aboriginal peoples' health* (2nd ed.). Prince George, BC: National Collaborating Centre for Aboriginal Health. Retrieved from https://www.nccah-ccnsa.ca/495/Health_inequalities_and_the_social_determinants_of_Aboriginal_peoples_health_nccah?id=46
6. Raphael, D. (Ed.). (2016). *Social determinants of health: Canadian perspectives* (3rd ed.). Toronto, ON: Canadian Scholars' Press.
7. Canadian Medical Association. (2013). *Health equity and the social determinants of health: A role for the medical profession*. Retrieved from <http://policybase.cma.ca/dbtw-wpd/Policypdf/PD13-03.pdf>
8. First Nations Health Council. (n.d.). *The work*. Retrieved from <http://fnhc.ca/initiatives/the-work/>
9. United Nations. (2007). *United Nations declaration on the rights of Indigenous peoples*. Retrieved from <https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html>
10. O'Neil, J., Gallagher, J., Wylie, L., Bingham, B., Lavoie, J., Alcock, D., & Johnson, H. (2016). Transforming First Nations' health governance in British Columbia. *International Journal of Health Governance*, 21(4), 229–244. <https://doi.org/10.1108/ijhg-08-2016-0042>
11. First Nations Health Authority. (2013). *Our story: The made-in-BC Tripartite health transformation journey*. Retrieved from http://www.fnha.ca/documents/fnha_our_story.pdf
12. Greenwood, M., de Leeuw, S., Lindsay, N. M., & Reading, C. (Eds.). (2015). *Determinants of indigenous peoples' health: Beyond the social*. Toronto, ON: Canadian Scholars' Press.
13. Reading, C. (2015). Structural determinants of Aboriginal Peoples' health. In M. Greenwood, S. de Leeuw, N. M. Lindsay, & C. Reading (Eds.), *Determinants of Indigenous Peoples' Health: Beyond the social* (pp. 3–15). Toronto, ON: Canadian Scholars' Press.

14. Aguiar, W., & Halseth, R. (2015). *Aboriginal peoples and historic trauma: The processes of intergenerational transmission*. Prince George, BC: National Collaborating Centre for Aboriginal Health. Retrieved from <https://www.ccsa-nccah.ca/docs/context/RPT-HistoricTrauma-IntergenTransmission-Aguiar-Halseth-EN.pdf>
15. Truth and Reconciliation Commission of Canada. (2015). *Honouring the truth, reconciling for the future: Summary of the final report of the Truth and Reconciliation Commission of Canada*. Winnipeg, MB: The Truth and Reconciliation Commission of Canada. Retrieved from <http://publications.gc.ca/site/eng/9.800288/publication.html>
16. Fournier, S., & Crey, E. (1997). *Stolen from our embrace*. Vancouver, BC: Douglas & McIntyre.
17. Sinclair, R. (2007). Identity lost and found: Lessons from the Sixties Scoop. *First Peoples Child & Family Review*, 3(1), 65–82.
18. Grand Chief Ed John. (2016). *Indigenous resilience, connectedness and reunification—from root causes to root solutions: A report on Indigenous child welfare in British Columbia*. Retrieved from <http://fns.bc.ca/our-resources/indigenous-resilience-connectedness-and-reunification-from-root-causes-to-root-solutions>
19. First Nations Health Authority. (2017). *Overdose data and First Nations in BC: Preliminary findings*. Retrieved from http://www.fnha.ca/newsContent/Documents/FNHA_OverdoseDataAndFirstNationsInBC_PreliminaryFindings_FinalWeb.pdf
20. Lux, M.K. (2016). *Separate beds: A history of Indian hospitals in Canada, 1920s–1980s*. Toronto, ON: University of Toronto Press. <https://doi.org/10.3138/9781442663114>
21. Loppie, S., Reading, C., & de Leeuw, S. (2014). *Aboriginal experiences with racism and its impacts*. Prince George, BC: National Collaborating Centre for Aboriginal Health. Retrieved from <https://www.ccsa-nccah.ca/docs/determinants/FS-A-boriginalExperiencesRacismImpacts-Loppie-Reading-deLeeuw-EN.pdf>
22. Allan, B., & Smylie, J. (2015). *First Peoples, second class treatment: The role of racism in the health and well-being of Indigenous peoples in Canada*. Toronto, ON: The Wellesley Institute. Retrieved from <http://www.wellesleyinstitute.com/wp-content/uploads/2015/02/Summary-First-Peoples-Second-Class-Treatment-Final.pdf>
23. Browne, A. J., Smye, V. L., Rodney, P. Tang, S. Y., Mussell, B., & O'Neil, J. (2011). Access to primary care from the perspective of Aboriginal patients at an urban emergency department. *Qualitative Health Research*, 21(3), 333–348. <https://doi.org/10.1177/1049732310385824>
24. Tang, S. Y., & Browne, A. J. (2008). 'Race' matters: Racialization and egalitarian discourses involving Aboriginal people in the Canadian health care context. *Ethnicity and Health*, 13(2), 109–127. <https://doi.org/10.1080/13557850701830307>
25. Mikkonen, J., & Raphael, D. (2010). *Social determinants of health: The Canadian facts*. Toronto, ON: York University School of Health Policy and Management. Retrieved from http://thecanadianfacts.org/The_Canadian_Facts.pdf
26. Chansonneuve, D. (2005). *Reclaiming connections: Understanding residential school trauma among Aboriginal people*. Ottawa, ON: Aboriginal Healing Foundation.
27. Bombay, A., Matheson, K., & Anisman, H. (2009). Intergenerational trauma: Convergence of multiple processes among First Nations peoples in Canada. *Journal of Aboriginal Health*, 5(3), 6–47.
28. Bombay, A., Matheson, K., & Anisman, H. (2014). The intergenerational effects of Indian Residential Schools: Implications for the concept of historical trauma. *Transcultural Psychiatry*, 51(3), 320–338. <https://doi.org/10.1177/1363461513503380>
29. McEwen, B. S., & Gianaros P. J. (2011). Stress-and allostasis-induced brain plasticity. *Annual Review of Medicine*, 62, 431–445. <https://doi.org/10.1146/annurev-med-052209-100430>
30. Institute of Medicine Committee on Health and Behaviour: Research, Practice, and Policy. (2001). *Health and behavior: The interplay of biological, behavioral, and societal influences*. Washington, DC: National Academy Press.

31. Reading, J. L., & R. Halseth. (2013). *Pathways to improving well-being for indigenous peoples: How living conditions decide health*. Prince George, BC: National Collaborating Centre for Aboriginal Health.
32. First Nations Information Governance Centre. (n.d.). *About RHS*. Retrieved from <http://fnigc.ca/our-work/regional-health-survey/about-rhs.html>
33. Statistics Canada. (n.d.). *Census Profile, 2016 Census*. Retrieved from <https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E>
34. First Nations Information Governance Committee. (2007). *First Nations Regional Longitudinal Health Survey (RHS) code of research ethics*. Retrieved from <https://fnigc.ca/sites/default/files/docs/rhs-code-of-research-ethics-2007.pdf>
35. British Columbia Statistics. (n.d.). *2016 census total population results: Indian reserves by census division*. <http://www.bcstats.gov.bc.ca/statisticsbysubject/census/2016census/PopulationHousing/IndianReservesByCD.aspx>
36. First Nations Health Authority. (2012). *Healthy children, healthy families, healthy communities: BC provincial results 2008-10 First Nations Regional Health Survey*. West Vancouver: First Nations Health Authority.
37. First Nations Health Council. (n.d.). *What are the social determinants of health?* Retrieved from <http://fnhc.ca/wp-content/uploads/FNHC-SDOH-Backgrounder.pdf>
38. Greenwood, M. L., & de Leeuw S. N. (2012). Social determinants of health and the future well-being of Aboriginal children in Canada. *Paediatrics & Child Health*, 17(7) 381–384. <https://doi.org/10.1093/pch/17.7.381>
39. Chandler, M. J., & Lalonde, C. E. (2009). Cultural continuity as a moderator of suicide risk among Canada's First Nations. In L. J. Kirmayer & G. G. Valaskakis (Eds.), *Healing traditions: The mental health of Aboriginal Peoples in Canada* (221–248). Vancouver, BC: University of British Columbia Press.
40. Pearce, M. E., Jongbloed, K. A., Richardson, C. G., Henderson, E. W., Pooyak, S. D., Oveido-Joekes, E., . . . Cedar Project Partnership. (2015). The Cedar Project: Resilience in the face of HIV vulnerability within a cohort study involving young Indigenous people who use drugs in three Canadian cities. *BMC Public Health*, 15(1) 1095–1106. <https://doi.org/10.1186/s12889-015-2417-7>
41. Provincial Health Services Authority. (2018). *BC Community Health Data*. Retrieved from <http://communityhealth.phsa.ca/GetTheData>
42. First Nations Health Authority. (2014). *Traditional Wellness Strategic Framework*. Retrieved from http://www.fnha.ca/wellnesscontent/wellness/fnha_traditionalwellnessstrategicframework.pdf
43. Greenwood, M. and E. Jones. (2015). Being at the interface: Early childhood as a determinant of health. In M. Greenwood, S. de Leeuw, N. M. Lindsay & C. Reading (Eds.), *Determinants of Indigenous peoples' health: Beyond the social* (pp. 64–77). Toronto: Canadian Scholars' Press.
44. Macdougall, B. (2015). Knowing Who You Are: Family History and Aboriginal Determinants of Health. In M. Greenwood, S. de Leeuw, N. M. Lindsay & C. Reading (Eds.), *Determinants of Indigenous peoples' health: Beyond the social* (pp. 185–203). Toronto, ON: Canadian Scholars' Press.
45. Tourand, J., Smith, A., Poon, C., Saewyc, E., & McCreary Centre Society. (2016). *Raven's children IV: Aboriginal youth health in BC*. Vancouver, BC: McCreary Centre Society.
46. First Peoples' Cultural Council. (2014). *Report on the status of B.C. First Nations Languages* (2nd ed.). Brentwood Bay, BC: First Peoples' Cultural Council.

47. Truth and Reconciliation Commission of Canada. (2015). *Canada's residential schools: The legacy: The final report of the Truth and Reconciliation Commission of Canada, Volume 5*. Montreal, QC: McGill-Queen's University Press.
48. First Nations Health Authority. (n.d.). *Aboriginal Head Start on-reserve*. Retrieved July 19, 2018, from <http://www.fnha.ca/what-we-do/maternal-child-and-family-health/aboriginal-head-start-on-reserve>
49. First Nations Health Authority. (2014). *Healthy food guidelines for First Nations communities* (2nd Ed). Retrieved from http://www.fnha.ca/documents/healthy_food_guidelines_for_first_nations_communities.pdf
50. First Nations Health Authority. (n.d.). *First Nations traditional foods fact sheets*. Retrieved from http://www.fnha.ca/documents/traditional_food_fact_sheets.pdf
51. Adams, E. (2014, September 2). *Myth busting bannock* [Video file]. Retrieved from <https://youtu.be/t2E2Zhch3el>
52. Statistics Canada. (n.d.). *Aboriginal peoples survey, harvesting activities by Aboriginal identity, age group and sex, population aged 15 years and over, Canada, provinces and territories*. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4110002801>
53. First Nations Health Council. (2010). *The BC First Nations ActNow toolkit*. Retrieved from http://www.fnhc.ca/pdf/60322_FNHC_ActNow_Toolkit.pdf
54. First Nations Health Council. (n.d.). *Aboriginal diabetes initiative resources*. Retrieved from http://www.fnha.ca/Documents/ADI_Resources.pdf
55. First Nations Health Authority. (n.d.). *Sport as medicine: the H'ulh-etun Health Society Outrigger Canoe Club*. Retrieved from <http://www.fnha.ca/wellness/sharing-our-stories/sport-as-medicine-the-hulhetun-health-society-outrigger-canoe-club>
56. First Nations Health Authority. (n.d.). *Eating healthy*. Retrieved from <http://www.fnha.ca/wellness/wellness-and-the-first-nations-health-authority/wellness-streams/eating-healthy>
57. The Council of Canadian Academies. (2014). *Aboriginal food security in Northern Canada: An assessment of the state of knowledge*. Ottawa, ON: Council of Canadian Academies.
58. Sadeghirad, B., Duhaney, T., Motaghupisheh, S., Campbell, N. R., & Johnston, B. C. (2016). Influence of unhealthy food and beverage marketing on children's dietary intake and preference: A systematic review and meta-analysis of randomized trials. *Obesity Reviews*, 17(10) 945–959. <https://doi.org/10.1111/obr.12445>
59. Boyland, E. J., Nolan, S., Kelly, B., Tudur-Smith, C., Jones, A., Halford, J. C., & Robinson E. (2016). Advertising as a cue to consume: a systematic review and meta-analysis of the effects of acute exposure to unhealthy food and nonalcoholic beverage advertising on intake in children and adults. *The American Journal of Clinical Nutrition*, 103(2), 519–533. <https://doi.org/10.3945/ajcn.115.120022>
60. Health Canada. (2007). *Eating well with Canada's food guide: First Nations, Inuit and Métis*. Ottawa, ON: Health Canada.
61. First Nations Health Council. (2010). *Active spirit, active history: A culture of sports, activity, and wellbeing among BC First Nations*. West Vancouver, BC. Retrieved from http://www.fnha.ca/Documents/ASAHBook_web.pdf
62. Canadian Society for Exercise Physiology. (2011). *Canadian physical activity guidelines for adults 18-64 years*. Retrieved from http://www.csep.ca/CMFiles/Guidelines/CSEP_PAGuidelines_adults_en.pdf
63. Public Health Agency of Canada. (2018). *A Common vision for increasing physical activity and reducing sedentary living in Canada: Let's get moving*. Retrieved from <https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/healthy-living/lets-get-moving/pub-eng.pdf>

64. Statistics Canada. (n.d.). *Canadian health characteristics, two-year period estimates Canadian Community Health Survey*. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310011301>
65. Tremblay, M. S., Carson, V., Chaput, J., Gorber, S., Dinh, T., Duggan, M., et al. (2016). Canadian 24-hour movement guidelines for children and youth: An integration of physical activity, sedentary behaviour, and sleep. *Applied Physiology, Nutrition and Metabolism*, 41(6), S311–S327. <https://doi.org/10.1139/apnm-2016-0203>
66. ParticipACTION. (2016). *Are Canadian kids too tired to move? The ParticipACTION report card on physical activity for children and youth*. Retrieved from <https://www.activehealthykids.org/wp-content/uploads/2016/11/canada-report-card-long-form-2016.pdf>
67. Canadian Paediatric Society & Digital Health Task Force. (2017). Screen time and young children: Promoting health and development in a digital world. *Paediatrics & Child Health*, 22(8), 461–468. <https://doi.org/10.1093/pch/pxx197>
68. Center for Disease Control & Prevention. (n.d.). *Body Mass Index: Considerations for practitioners*. Retrieved from <https://www.cdc.gov/obesity/downloads/bmiforpractitioners.pdf>
69. *Transformative Change Accord: First Nations Health Plan*. (2005). Retrieved from https://www.health.gov.bc.ca/library/publications/year/2006/first_nations_health_implementation_plan.pdf
70. National Collaborating Centre for Aboriginal Health. (2013). *Physical activity fact sheet*. Retrieved from <https://www.ccnsa-nccah.ca/docs/health/FS-Physical%20Activity-EN.pdf>
71. Statistics Canada. (n.d.). *Health indicator profile, by Aboriginal identity and sex, age-standardized rate, four year estimates*. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310009901>
72. World Health Organization. (2017). *Obesity and overweight: Key facts*. Retrieved from <http://www.who.int/news-room/fact-sheets/detail/obesity-and-overweight>
73. Organization for Economic Co-operation and Development. (2017). *Obesity update*. Retrieved from <https://www.oecd.org/els/health-systems/Obesity-Update-2017.pdf>
74. Public Health Agency of Canada. (2017). *How healthy are Canadians? A trend analysis of the health of Canadians from a healthy living and chronic disease perspective*. Retrieved from <https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/healthy-living/how-healthy-canadians/pub1-eng.pdf>
75. First Nations Information Governance Centre. (2016). *Our data, our stories, our future: The national report of the First Nations Regional Early Childhood, Education and Employment Survey*. Ottawa, ON. Retrieved from https://fnigc.ca/sites/default/files/docs/fnigc_fnreees_national_report_2016_en_final.pdf
76. Bougie, E., Kelly-Scott, K., & Arriagada, P. (2013). *The education and employment experiences of First Nations people living off reserve, Inuit, and Métis: Selected findings from the 2012 Aboriginal Peoples Survey*. Retrieved from <https://www150.statcan.gc.ca/n1/en/pub/89-653-x/89-653-x2013001-eng.pdf?st=viZoZmdN>
77. Statistics Canada. (2016). *Canada's educational portrait, 2016 Census of Population*. Retrieved from <https://www150.statcan.gc.ca/n1/pub/11-627-m/11-627-m2017036-eng.htm>
78. Provincial Health Officer of BC & First Nations Health Authority. (2015). *First Nations health and well-being: Interim update*. Retrieved from <https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/reports-publications/special-reports/first-nations-health-and-well-being-interim-update-nov-2015.pdf>
79. First Nations Health Authority. (2016). *Health careers guidebook*. Retrieved from http://www.fnha.ca/Documents/FNHA_health_careers_guidebook.pdf

80. First Nations Health Authority. (2018). *What is Aboriginal Head Start on-reserve (AHSOR)?* Retrieved from <http://www.fnha.ca/what-we-do/maternal-child-and-family-health/aboriginal-head-start-on-reserve>
81. Little Bear, L. (2000). Worldview: Jagged worldviews colliding. In M. Battiste (Ed.), *Reclaiming indigenous voice and vision* (pp. 77-85). Vancouver: UBC Press.
82. Frideres, J. S. (2011). *First Nations in the twenty-first century*. Don Mills, ON: Oxford University Press.
83. Belanger, Y. (2014). *Ways of knowing: An introduction to native studies in Canada* (2nd ed). Toronto, ON: Nelson.
84. Piliavin, J. A., & Siegl, E. (2007). Health benefits of volunteering in the Wisconsin Longitudinal Study. *Journal of Health and Social Behavior*, 48(4), 450–464. <https://doi.org/10.1177/002214650704800408>
85. Yeung, J., Zhang, Z., & Kim, T. Y. (2017). Volunteering and health benefits in general adults: cumulative effects and forms. *BMC Public Health*, 18(1), 8. doi:10.1186/s12889-017-4561-8
86. Griep, Y., Hyde, M., Vantilborgh, T., Bidee, J., De Witte, H., & Pepermans, R. (2014). Voluntary work and the relationship with unemployment, health, and well-being: A two-year follow-up study contrasting a materialistic and psychosocial pathway perspective. *Journal of Occupational Health Psychology*, 20(2):190–204. <http://dx.doi.org/10.1037/a0038342>
87. Statistics Canada. (2015). *Aboriginal Statistics at a Glance* (2nd ed). Retrieved from https://www150.statcan.gc.ca/n1/en/pub/89-645-x/89-645-x2015001-eng.pdf?st=b2pDH_Ov
88. First Nations Health Authority. (2018). *Healthy Living*. Retrieved from <http://www.fnha.ca/what-we-do/healthy-living>
89. Richmond, C. A. M., & Ross, N. A. (2009). The determinants of First Nation and Inuit health: A critical population health approach. *Health & Place*, 15(2), 403–411. <https://doi.org/10.1016/j.healthplace.2008.07.004>
90. World Health Organization. (2008). *Closing the gap in a generation: Health equity through action on the social determinants of health. Final report of the Commission on Social Determinants of Health*. Geneva: WHO Press.
91. National Collaborating Centre for Aboriginal Health. (2013). *The sacred space of womanhood: Mothering across the generations*. Retrieved from <https://www.ccsa-nccah.ca/docs/health/RPT-SacredSpaceWomanhood-Bckgrnd-EN.pdf>
92. Perinatal Services BC, Ministry of Health & First Nations Health Authority. (n.d.). *Our sacred journey: Aboriginal pregnancy passport*. (Adapted from: Women's Health Pregnancy Passport, 2011). Retrieved from <http://www.fnha.ca/wellnessContent/Wellness/AboriginalPregnancyPassport.pdf>
93. First Nations Health Authority. (n.d.). *Prenatal nutrition program*. Retrieved from <http://www.fnha.ca/what-we-do/maternal-child-and-family-health/prenatal-nutrition-program>
94. Statistics Canada. (n.d.). *Live births, by birth weight*. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310042201>
95. Public Health Agency of Canada. (2016). *Health status of Canadians 2016: A report of the Chief Public Health Officer*. Retrieved from <http://healthycanadians.gc.ca/publications/departement-ministere/state-public-health-status-2016-etat-sante-publique-statut/alt/pdf-eng.pdf>
96. Hunt, S. (2016). *An introduction to the health of Two-spirit People: Historical, contemporary and emergent issues*. Retrieved from <https://www.ccsa-nccah.ca/docs/emerging/RPT-HealthTwoSpirit-Hunt-EN.pdf>
97. Duran, E., Duran, B., Heart, M. Y. H. B., & Horse-Davis, S. (1998). Healing the American Indian soul wound. In Y. Danieli (Ed.), *International Handbook of Multigenerational Legacies of Trauma* (pp. 341–354). New York, NY: Springer. https://doi.org/10.1007/978-1-4757-5567-1_22

98. First Nations Health Authority. (n.d.). *FNHA's policy statement on cultural safety and humility*. Retrieved from <http://www.fnha.ca/documents/fnha-policy-statement-cultural-safety-and-humility.pdf>
99. Stout, M. D., & Kipling, G. D. (2003). *Aboriginal people, resilience and the residential school legacy*. Retrieved from <http://www.ahf.ca/downloads/resilience.pdf>
100. Brzozowski, J. A., Taylor-Butts, A., & Johnson, S. (2006). *Victimization and offending among the Aboriginal population in Canada*. Retrieved from https://www150.statcan.gc.ca/n1/en/pub/85-002-x/85-002-x2006003-eng.pdf?st=dB_rMuq3
101. Pearce, M. (2003). *An awkward silence: Missing and murdered vulnerable women and the Canadian justice system* (Master's thesis). Retrieved from <https://ruor.uottawa.ca/handle/10393/26299>
102. Royal Canadian Mounted Police. (2014). *Missing and murdered aboriginal women: A national operational overview*. Retrieved from <http://www.rcmp-grc.gc.ca/en/missing-and-murdered-aboriginal-women-national-operational-overview>
103. Bombay, A., Matheson, K., & Anisman, H. (2014). *Origins of lateral violence in Aboriginal communities: A preliminary study of student-to-student abuse in Indian Residential Schools*. Ottawa, ON: Aboriginal Healing Foundation.
104. Office of the Provincial Health Officer & Child Health BC. (2016). *Is "good", good enough? The health and well-being of children & youth in BC*. Retrieved from <https://www2.gov.bc.ca/assets/gov/health/about-bc-s-health-care-system/office-of-the-provincial-health-officer/reports-publications/annual-reports/pho-annual-report-2016.pdf>
105. Pepler, D., Craig, W. M., Cummings, J., Petrunka, K., & Garwood, S. (2017). Mobilizing Canada to promote healthy relationships and prevent bullying among children and youth. In P. Sturmey, (Ed.), *The Wiley Handbook of Violence and Aggression*. John Wiley & Sons. doi: 10.1002/9781119057574.whbva123
106. First Nations Health Authority, BC Ministry of Health, & Health Canada. (2013). *A path forward: BC First Nations and Aboriginal People's mental wellness and substance use - 10 year plan*. Retrieved from http://www.fnha.ca/documents/fnha_mwsu.pdf
107. Assembly of First Nations & Health Canada (2015). *First Nations mental wellness continuum framework: Summary report*. Retrieved from https://thunderbirdpf.org/wp-content/uploads/2015/01/24-14-1273-FN-Mental-Wellness-Summary-EN03_low.pdf
108. Bellamy, S., & Hardy, C. (2015). *Anxiety disorders and Aboriginal peoples in Canada: The current state of knowledge and directions for future research*. Retrieved from <https://www.ccsa-nccah.ca/docs/emerging/RPT-AnxietyDisorders-Bellamy-Hardy-EN.pdf>
109. Bellamy, S., & Hardy, C. (2015). *Post-traumatic stress disorder in aboriginal people in Canada: Review of risk factors, the current state of knowledge and directions for further research*. Retrieved from <https://www.ccsa-nccah.ca/docs/emerging/RPT-Post-TraumaticStressDisorder-Bellamy-Hardy-EN.pdf>
110. Bellamy, S., & Hardy, C. (2015). *Understanding depression in Aboriginal communities and families*. Retrieved from <https://www.ccsa-nccah.ca/docs/emerging/RPT-UnderstandingDepression-Bellamy-Hardy-EN.pdf>
111. Kirmayer, L., Simpson, C., & Cargo, M. (2003). Healing traditions: Culture, community and mental health promotion with Canadian Aboriginal peoples. *Australasian Psychiatry*, 11(1), 15–23. <https://doi.org/10.1046/j.1038-5282.2003.02010.x>
112. First Nations Health Authority & BC Ministry of Health. (2015). *Hope, help, and healing: A planning toolkit for First Nations and Aboriginal communities to prevent and respond to suicide*. Retrieved from <http://www.fnha.ca/wellnessContent/Wellness/FNHA-Hope-Help-and-Healing.pdf>

113. McRae, L., O'Donnell, S., Loukine, L., Rancourt, N., & Pelletier, C. (2016). Report summary - mood and anxiety disorders in Canada, 2016. *Health promotion and chronic disease prevention in Canada: Research, policy and practice*, 36(12), 314–315. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5387798/>
114. Canadian Institute of Health Informatics. (n.d.). *Child and youth mental health in Canada — Infographic*. Retrieved from <https://www.cihi.ca/en/child-and-youth-mental-health-in-canada-infographic>
115. Rotenberg, C. R. (2016). *Aboriginal Peoples Survey, 2012, social determinants of health for the off-reserve First Nations population, 15 Years of age and older*. Retrieved from <https://www150.statcan.gc.ca/n1/pub/89-653-x/89-653-x2016010-eng.htm>
116. First Nations Health Council (2017, June 30). *Northern Indigenous guys gathering*. Retrieved from https://www.youtube.com/watch?v=ONN_TZnFXfc
117. BC Coroner's Service & First Nations Health Authority. (2017). *A review of First Nation youth and young adult injury deaths: 2010-2015*. Retrieved from <http://www.fnha.ca/Documents/FNHA-BCCS-A-Review-of-First-Nations-Youth-and-Young-Adults-Injury-Deaths-2010-2015.pdf>
118. Kirmayer, L. J., Brass, G. M., Holton, T., Paul, K., Simpson, C., Tait, C. (2007). *Suicide among Aboriginal people in Canada*. Retrieved from <http://www.ahf.ca/downloads/suicide.pdf>
119. Jongbloed, K. Pearce, M. E., Pooyak, S., Zamar, D., Thomas, V., Demerais, L., . . . Spittal, P. M (2017). The Cedar Project: Mortality among young Indigenous people who use drugs in British Columbia. *Canadian Medical Association Journal*, 189(44), E1352-E1359. <https://doi.org/10.1503/cmaj.160778>
120. Statistics Canada. (n.d.). *Perceived mental health and suicidal thoughts, by Aboriginal identity*. Retrieved from <https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4110001101>
121. Currie, C., Wild, T. C., Schopflocher, D., Laing, L., Veugelers, P. (2013). Illicit and prescription drug problems among urban Aboriginal adults in Canada: The role of traditional culture in protection and resilience. *Social Science & Medicine*, 88, 1–9. <https://doi.org/10.1016/j.socscimed.2013.03.032>
122. McKenzie, H. A., Dell, C. A., & Fornssler, B. (2016). Understanding addictions among Indigenous people through social determinants of health frameworks and strength-based approaches: A review of the research literature from 2013 to 2016. *Current Addiction Reports*, 3(4), 378–386. <https://doi.org/10.1007/s40429-016-0116-9>
123. Firestone, M., Tyndall, M., & Fischer, B. (2015). Substance use and related harms among aboriginal people in Canada: A comprehensive review. *Journal of Health Care for the Poor and Underserved*, 26(4), 1110–1131. <https://doi.org/10.1353/hpu.2015.0108>
124. British Columbia Government. (2016, April 14). *Provincial health officer declares public health emergency*. Retrieved from <https://news.gov.bc.ca/releases/2016hlth0026-000568>
125. First Nations Health Authority. (2018). *Harm reduction*. Retrieved from <http://www.fnha.ca/what-we-do/mental-wellness-and-substance-use/overdose-information/harm-reduction>
126. Government of Canada. (n.d.). *National native alcohol and drug abuse program*. Retrieved from <https://www.canada.ca/en/indigenous-services-canada/services/first-nations-inuit-health/reports-publications/substance-use-treatment-addictions/alcohol-drugs-solvents/national-native-alcohol-drug-abuse-program.html>
127. Government of Canada. (n.d.). *Canadian Tobacco Alcohol and Drugs (CTADS): 2015 supplementary tables*. Retrieved from <https://www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2015-supplementary-tables.html>

128. First Nations Health Authority. (n.d.). *Respecting tobacco*. Retrieved from <http://www.fnha.ca/wellness/wellness-and-the-first-nations-health-authority/wellness-streams/respecting-tobacco>
129. National Native Addictions Partnership Foundation. (2006). *Keeping the sacred in tobacco: A Toolkit for tobacco cessation*. Retrieved from http://epub.sub.uni-hamburg.de/epub/volltexte/2013/20227/pdf/NNAPF_Keeping_Sacred_Tobacco1.pdf
130. Orisatoki, R. (2013). The public health implications of the use and misuse of tobacco among the Aboriginals in Canada. *Global Journal of Health Science*, 5(1), 28–34. <https://doi.org/10.5539/gjhs.v5n1p28>
131. Jetty, R. (2017). Tobacco use and misuse among Indigenous children and youth in Canada. *Paediatrics & Child Health*, 22(7), 395–399. <https://doi.org/10.1093/pch/pxx124>
132. Public Health Agency of Canada. (2011). *Diabetes in Canada: Facts and figures from a public health perspective*. Ottawa, ON: Chronic Disease Surveillance and Monitoring Division.
133. Maar, M. A., Manitowabi, D., Gzik, D., McGregor, L., & Corbiere, C. (2011). Serious complications for patients, care providers and policy makers: Tackling the structural violence of First Nations people living with diabetes in Canada. *The International Indigenous Policy Journal*, 2(1), 6. Retrieved from <https://ir.lib.uwo.ca/iipj/vol2/iss1/6>
134. Polanco, F., & Arbour, L. (2015). Type 2 diabetes in Indigenous Populations: Why a focus on genetic susceptibility is not enough. In M. Greenwood, S. de Leeuw, N. M. Lindsay & C. Reading (Eds.), *Determinants of Indigenous Peoples' Health: Beyond the Social* (pp. 296–311). Toronto, ON: Canadian Scholars' Press.
135. Dyck, R. F., Karunanayake, C., Janzen, B., Lawson, J., Ramsden, V. R., Rennie, D. C. ... First Nations Lung Health Team. (2015). Do discrimination, residential school attendance and cultural disruption add to individual-level diabetes risk among Aboriginal people in Canada? *BioMed Central Public Health*, 15(1), 1222. <https://doi.org/10.1186/s12889-015-2551-2>
136. First Nations Health Authority. (n.d.). *Being active*. Retrieved from <http://www.fnha.ca/wellness/wellness-and-the-first-nations-health-authority/wellness-streams/being-active>
137. Adams, E. (2017). *World diabetes day 2017*. Retrieved from <http://www.fnha.ca/about/news-and-events/news/world-diabetes-day-2017>
138. McGahan, C. E., Linn, K., Guno, P., Johnson, H., Coldman, A. J., Spinelli, J. J., & Caron, N. R. (2017). Cancer in First Nations people living in British Columbia, Canada: An analysis of incidence and survival from 1993 to 2010. *Cancer Causes & Control*, 28(10), 1–12. <https://doi.org/10.1007/s10552-017-0950-7>
139. First Nations Health Authority & BC Cancer Agency. (2017). *Cancer and First Nations peoples in BC: A community resource*. Retrieved from <http://www.fnha.ca/wellnessContent/Wellness/Cancer-and-First-Nations-Peoples-in-BC.PDF>
140. Elias, B., Kliwer, E. V., Hall, M., Demers, A. A., Turner, D., Martens, P., ... Munro, G. (2011). The burden of cancer risk in Canada's indigenous population: A comparative study of known risks in a Canadian region. *International Journal of General Medicine*, 4, 699–709. <https://doi.org/10.2147/ijgm.s24292>
141. Ahmed, S., Shahid, R., & Episkew, J. (2015). Disparity in cancer prevention and screening in aboriginal populations: Recommendations for action. *Current Oncology*, 22(6), 417. <https://doi.org/10.3747/co.22.2599>
142. First Nations Health Authority, Métis Nation of BC, BC Cancer Agency, & BC Association of Aboriginal Friendship Centres. (2017). *Improving Indigenous cancer journeys in BC: A roadmap*. Retrieved from <http://www.fnha.ca/wellnessContent/Wellness/improving-indigenous-cancer-journeys-in-bc.pdf>
143. First Nations Health Authority, Métis Nation of BC, BC Cancer Agency, & BC Association of Aboriginal Friendship Centres. (2016). *Living with cancer: Everyone deserves support*. Retrieved from <http://www.fnha.ca/wellnessContent/Wellness/Living-With-Cancer.pdf>

144. Gesink, D., & Nattel, L. (2015). A qualitative cancer screening study with childhood sexual abuse survivors: experiences, perspectives and compassionate care. *British Medical Journal Open*, 5(8), e007628. <https://doi.org/10.1136/bmjopen-2015-007628>
145. BC Cancer Agency. (n.d.). *Who Should Get a Mammogram?* Retrieved from <http://www.bccancer.bc.ca/screening/breast/get-a-mammogram/who-should-get-a-mammogram>
146. BC Cancer Agency. (n.d.). *Why are mammograms important?* Retrieved from <http://www.bccancer.bc.ca/screening/breast/get-a-mammogram/why-are-mammograms-important>
147. BC Cancer Agency. (n.d.). *Why is screening important?* Retrieved from <http://www.bccancer.bc.ca/screening/cervix/get-screened/why-is-screening-important>
148. BC Cancer Agency. (n.d.). *Colon*. Retrieved from <http://www.bccancer.bc.ca/screening/colon>
149. BC Cancer Agency. (n.d.). *Who should get screened?* Retrieved from <http://www.bccancer.bc.ca/screening/colon/get-screened/who-should-get-screened>
150. BC Cancer Agency. (n.d.). *Prostate*. Retrieved from <http://www.bccancer.bc.ca/health-info/types-of-cancer/mens-cancer/prostate>
151. BC Cancer Agency, Genito-Urinary Tumour Group, The Prostate Centre at VGH, & The Vancouver Prostate Support and Awareness Group. (2007). *The pros and cons of PSA testing for prostate cancer*. Retrieved from <http://www.bccancer.bc.ca/books/documents/genitourinary/psascreeningpatientpamphlet2007april.pdf>
152. Bell, N. Gorber, S. C., Shane, A., Joffres, M., Singh, H., Dickinson, J., ... & Canadian Task Force on Preventive Health Care. (2014). Recommendations on screening for prostate cancer with the prostate-specific antigen test. *Canadian Medical Association Journal*, 186(16), 1225–1234. <https://doi.org/10.1503/cmaj.140703>
153. First Nations Health Authority. (n.d.). *Injury prevention and control*. Retrieved from <http://www.fnha.ca/what-we-do/healthy-living/injury-prevention-and-control>
154. George, M. A., Jin, A., Brussoni, M., & Lalonde, C. E. (2015). Is the injury gap closing between the Aboriginal and general populations of British Columbia? *Health Reports*, 26(1), 3–15.
155. Brussoni, M., Jin, A., George, M. A., Lalonde, C. E. (2015). Aboriginal community-level predictors of injury-related hospitalizations in British Columbia, Canada. *Prevention Science*, 16(4), 560–567. <https://doi.org/10.1007/s11121-014-0503-1>
156. Lavoie, J., & Gervais, L. (2011). Access to primary health care in rural and remote aboriginal communities: Progress, challenges, and policy directions. In J. C. Kulig & A. M. Williams (Eds.), *Health in Rural Canada* (390-408). Vancouver, BC: UBC Press.
157. Cameron, B. L., Camargo Plazas, M. dP., Santos Salas, A., Bourque Bearskin, R. L., Hungler, K. (2014). Understanding inequalities in access to health care services for Aboriginal people: A call for nursing action. *Advances in Nursing Science*, 37(3), E1–E16. <https://doi.org/10.1097/ans.0000000000000039>
158. First Nations Health Authority. *Directives*. (n.d.). Retrieved from <http://www.fnha.ca/about/fnha-overview/directives>
159. First Nations Health Authority. (2018). *Community health services accreditation & quality improvement*. Retrieved from <http://www.fnha.ca/what-we-do/health-and-wellness-planning/accreditation>
160. First Nations Health Authority. (2015). *Declaration of commitment on cultural safety and humility in health services*. Retrieved from <http://www.fnha.ca/Documents/Declaration-of-Commitment-on-Cultural-Safety-and-Humility-in-Health-Services.pdf>

161. First Nations Health Authority. (2016). *It starts with me: Creating a climate for change*. Retrieved from <http://www.fnha.ca/documents/fnha-creating-a-climate-for-change-cultural-humility-resource-booklet.pdf>
162. Browne, A. J., Varcoe, C., Lavoie, J., Smye, V., Wong, S. T., Krause, M., ... Fridkin, A. (2016). Enhancing health care equity with Indigenous populations: Evidence-based strategies from an ethnographic study. *BMC Health Services Research*, 16(1) 544. <https://doi.org/10.1186/s12913-016-1707-9>
163. First Nations Child & Family Caring Society of Canada. (2018). *Jordan's Principle: How to access public services and supports through Jordan's Principle*. Retrieved from <https://fncaringsociety.com/sites/default/files/Jordan%27s%20Principle%20Infographic%20%28web%29.pdf>
164. First Nations Health Authority. (n.d.). *Home and community care*. Retrieved from <http://www.fnha.ca/what-we-do/nursing-services/home-and-community-care>
165. Caplan, G. A., Sulaiman, N. S., Mangin, D. A., Ricauda, N. A., Wilson, A. D., & Barclay, L. (2012). A meta-analysis of "hospital in the home". *The Medical Journal of Australia*, 197(9), 512–519. <https://doi.org/10.5694/mja12.10480>





Appendix A: Methods

Background

The RHS is a national survey led by the First Nations Information Governance Centre (FNIGC), a First Nations organization promoting First Nations information needs. The Code of Research Ethics for the RHS was approved by the First Nations Information Governance Committee [34].

An important foundation of the RHS is respect for the First Nations principles of Ownership, Control, Access and Possession of data (OCAP®). The FNHA is working with regions and communities to return the results (i.e., provincial and regional reports) in a good way while maintaining the data to enable further reporting and analysis of the information. The FNHA and FNIGC have been designated by participating First Nations as knowledge keepers for the data obtained by the RHS. These two organizations are responsible for holding the data and facilitating its access on behalf of First Nations. The RHS information will be used according to agreements with participating First Nations and First Nations individuals and according to the principles of these organizations, in order to empower and enable First Nations communities to gain further control of their health.

The RHS has been conducted three times in BC (Phase 1 in 2002-2003, Phase 2 in 2008-2010 and now Phase 3 in 2015-17). The majority of the questions in the current RHS (Phase 3) were also asked in Phase 1 and 2.

Sampling

The RHS process for selecting participants involved two stages. In **Stage 1: Community Selection**, BC First Nations communities were grouped by the five health regions: Fraser Salish Region (FSR), Interior Region (IR), Northern Region (NR), Vancouver Coastal Region (VCR) and Vancouver Island Region (VIR). In IR, FSR and VCR, all communities, regardless of size, were invited to participate. In the NR and VIR, communities with fewer than 75 members were excluded due to the cost and complexity of engaging those communities. In **Stage 2: Survey Participants**, individuals from selected communities were randomly selected using community membership lists. The number of members surveyed depended on the number of participants required to meet the sampling strategy. The sampling strategy was designed to enable results to be generalized to the whole on-reserve population at a 95% confidence level. Individuals were invited to participate and if they declined, a random substitute (same gender and age group) was surveyed in order to accurately represent First Nations communities within their demographic complexity.

Data Collection

Field supervisors and support staff were hired for each region and community navigators were hired from within each community, when possible. Data collectors helped administer the survey and individuals directly entered their responses to the survey on a computer. If individuals needed help, data collectors were available to provide assistance. Data collectors supported individuals to take the survey wherever they felt most comfortable (e.g., band office, health centre, home, etc.). Surveys were completed between December 2015 and March 2017. Participants filled out age-specific surveys: Child (0-11 years); Youth (12-17 years); and Adult (18+ years). Adults and youth filled out their own surveys and a parent or caregiver was asked to respond on behalf of children aged 0-11. Surveys covered a range of topics including, but not limited to, mental health and wellness, primary health care, social determinants of health, traditional wellness, health status and health behaviours.

Indicator Selection

The scope of the survey was very wide with many questions, producing a substantial amount of data, beyond what is manageable to share in a single document. An indicator selection process was used to select questions that would be included in the RHS summary report. Regional and Nation representatives were engaged by the FNHA to choose which major sections to address (e.g., Health Determinants, Health Status and Primary Care, Mental Health and Wellness). Within these major sections and beyond, these representatives identified and prioritized survey questions within each section. The areas of interest from each region were combined and the most frequently identified topics and questions were prioritized for inclusion in the reports.

Data Analysis

To ensure the data was representative of the entire population of on-reserve First Nations in BC, responses were weighted using age and gender. Estimated percentages and a 95% confidence interval (CI) are used to report results. The 95% CI tells us the range in which we can be 95% certain that the actual population value falls.

CIs are useful to compare results between groups (e.g., age and gender groups). When comparing results, if the CI ranges **do not overlap**, the two groups are statistically significantly different. If the CIs between groups for an indicator **do overlap**, we **cannot** say if the groups are statistically significantly different without conducting further analysis. In this report, further analysis was not completed and differences are only reported if the CIs do not overlap. The one exception to this is when comparisons were made between results between RHS survey cycles.

Data Quality

To ensure reported results represent a valuable estimate, the coefficient of variation of the estimate was examined.

When the coefficient of variation of an estimate is less than or equal to 16.6%, the confidence interval is comparatively narrow and the estimate can be used without restriction. Estimates with moderately high coefficients of variation (between 16.7% and 33.3%) have wider confidence intervals, hence the true

population value is estimated in a relatively wide range. These estimates were supplemented with an “*” in the results to indicate the high sampling variability associated with the estimate and that it should be interpreted with caution. Estimates with unacceptably high coefficients of variation (greater than 33.3%) have very wide confidence intervals and therefore the value could fall in a very wide band. These estimates were suppressed as conclusions based on these data will be unreliable and possibly invalid (denoted by an “**” within the graphics and tables). In addition, results of the analyses based on a small number of responses (nine or fewer individuals) were suppressed to protect confidentiality (denoted by an “E” in the graphics and tables).

Questions that had 10% or greater “don’t know” or “refused” responses are viewed as unreliable and not reported. Dependent questions were also not reported.

Reporting

Sometimes comparisons are made between results from the current RHS and other reports or research. They are not directly comparable. They may involve a different population, such as urban Aboriginal people. Or they may use a slightly different way of measuring concepts, sampling, study design or conducting analyses. While they provide useful context, results will not be directly comparable.

Pull-out boxes throughout the report, titled “*What Has Changed*,” compare results from RHS Phase 1 (2002-03) to RHS Phase 3 (2015-17, the current phase) and RHS Phase 2 (2008-10) to RHS Phase 3 (2015-17). Differences may be statistically significant; however, it is a matter of judgment whether these differences are practically important.

Across graphs in this report, estimates for one category usually add to 100%, which reflects all responses. In some cases, this may add to slightly over (e.g., 101%) or slightly under (e.g., 99%) 100%. This is due to data rounding and estimates remain accurate.

Key Limitations

Although measures were taken to ensure that results speak to the whole province, there may be unique differences between communities that were not captured. Additionally, the RHS is voluntary. Selected communities and individuals could choose not to participate. These individuals may be different than those who participated.

Another data limitation is inherent reporting bias; for example, when participants choose a response that may be perceived as more “desirable” than what is true. This bias occurs within all survey research and is not unique to the RHS.

Depending on the number of surveys completed and the variability of responses, results may not be able to be reported due to low numbers or high coefficients of variation. Some regions had more surveys completed than others, enabling more complete reporting.



Appendix B: RESULTS

Appendix B contains a table that includes 95% confidence intervals for all of the results in the report.

The range indicated by a 95% confidence interval indicates the range that the true population value would fall within, with a 95% certainty. When we compare two groups, such as males and females, only if the confidence intervals do not overlap (include the same numbers), can we be sure that these groups are different.

Appendix B presents the 95% confidence intervals for all reported estimates and is available for download at <http://www.fnha.ca/Documents/FNHA-Appendix-B-Table-of-RHS-Results-for-British-Columbia.pdf>.





First Nations Health Authority
Health through wellness

Published by:
First Nations Health Authority
501 - 100 Park Royal South
Coast Salish Territory
West Vancouver, BC
Canada V7T 1A2
www.fnha.ca | info@fnha.ca

PRINTED IN CANADA

ISBN 978-1-9991574-1-8



9 781999 157418