ONE CHANCE TO BE A CHILD

A DATA PROFILE TO INFORM A BETTER FUTURE FOR CHILD AND YOUTH WELL-BEING IN NOVA SCOTIA

HEALTHY POPULATIONS INSTITUTE

DALHOUSIE UNIVERSITY
FACULTY OF MEDICINE
Department of Pediatrics

One Chance to Be a Child: A data profile to inform a better future for child and youth well-being in Nova Scotia

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"The day will come when nations will be judged not by their military or economic strength, nor by the splendour of their capital cities and public buildings, but by the well-being of their peoples; by their levels of health, nutrition and education; by their opportunities to earn a fair reward for their labours; by their ability to participate in decisions that affect their lives; by the respect that is shown for their civil and political liberties; by the provision that is made for those who are vulnerable and disadvantaged; **and by the protection that is afforded to the growing minds and bodies of their children."**

UNICEF, Progress of Nations, 1998

FOREWORD

As pediatricians, academics, social workers, and child advocates we have the privilege of bearing witness to some of the most critical moments in the lives of children, youth, and their families – moments of despair and pain, healing, and hope. Our roles also position us to recognize the key contributors to illness in childhood and the factors that lay the foundation for future health and well-being.

The social determinants of health, including education, income, housing, and racism, are the driving force behind population health in childhood and beyond. The impacts of poverty, trauma, and hopelessness may manifest in the bodies and minds of those children and youth who arrive at the doorsteps of clinics, hospitals, and schools, but these impacts are rooted in the systemic shortcomings of social policy.

As the healthcare system increasingly becomes the focus of public attention and funding in Nova Scotia, we must remember the critical importance of prevention and upstream interventions, especially those focused on addressing inequity. By nurturing the well-being of Nova Scotia's young people, we can alleviate the possibility of a healthcare system that is further overwhelmed by the downstream effects of childhood ill health and inadequate well-being.

It is also our duty to recognize Nova Scotian children and youth as rights holders with inherent humanness and dignity. The full breadth of rights held by children and youth are found in the *United Nations Convention on the Rights of the Child* which serves as a blueprint for how we, as a society, can improve the health and well-being of our youngest citizens.

Work to create this data profile began in 2018 when our passionate group joined together to uncover and organize what is currently known about the well-being of children and youth in Nova Scotia. We hope this work will spark a conversation with decision-makers and others about how we can better assess and monitor the rights and well-being of children and youth. Improvements to legislation, policies, and services in Nova Scotia can be made if we develop a better understanding of how young people are faring.

The data presented in this data profile were collected prior to the COVID-19 pandemic, and we are concerned by new information that suggests children and youth who were already in precarious situations prior to the pandemic are now faring worse in many areas of their lives. The COVID-19 pandemic impacted few groups more than young people: children and youth who rely on school food programs for nutritious meals, who lack access to safe places to play or gather, and who may not have accessible human connections for optimal development.

The title of this data profile reflects the critical nature of childhood, a period that lays the foundations for lifelong health and well-being. While children have just one chance to be a child, as a caring society we have many opportunities to honour the innate potential of their future. We must recognize our shared responsibility to give young people the building blocks they need for optimal well-being and to uphold the full rights of Nova Scotian children and youth to live to their potential by taking concrete action today.

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LAND ACKNOWLEDGEMENT

We acknowledge our presence in Mi'kma'ki, the ancestral and unceded territory of the Mi'kmaw people. This territory is covered by the Treaties of Peace and Friendship that Mi'kmaq and Wolastoqiyik peoples signed with the British Crown in 1725. We continually remind ourselves that the treaties did not deal with surrender of lands and resources but, in fact, recognized Mi'kmaq and Wolastoqiyik title and established the rules for what was to be an ongoing relationship between nations.

In presenting this data profile, we recognize that any discussion of child and youth well-being must include an acknowledgement of the inequities caused by historic and ongoing violence against and oppression of Indigenous peoples, as well as the African Nova Scotia community and others who have been marginalized on this land.

The inequities experienced by many Indigenous peoples in Canada are inextricably linked to the legacy and ongoing effects of colonization and the residential school system. We also recognize that in the face of systemic marginalization many Indigenous and African Nova Scotian communities have responded with enduring tenacity, resilience, and creativity in addressing the challenges their communities face.

As authors of this data profile, individually and collectively, we hold ourselves accountable for our own intentions and actions moving forward, recognizing that our shared presence on this land is both a reflection of our own position as well as a communal task and responsibility.

We are all Treaty People.

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Our thanks go to the organizations that provided data or facilitated data access for the profile. The list of organizations and a description of data sources are available in Appendix 1.

A special thanks to the children and youth who participated in engagement events and have lent their voices to the "Pass the Mic" highlights throughout.

ABOUT THIS DATA PROFILE

Many great leaders, including Nelson Mandela, have said that the truest measure of a society is how well it protects and nurtures its children. As a wealthy country, Canada is viewed as one of the greatest nations in the world to grow up in, and indeed, some young people in Canada are flourishing. Yet, for many children and youth, day-to-day life is challenging.

Canada ratified the United Nations' *Convention on the Rights of the Child* in 1991.[1] This international treaty affirms the unique and distinct human rights of children. When children's rights are honoured, improved health and well-being follow. Federal and provincial/territorial governments in Canada have a moral duty and legal responsibility to implement laws and policies that ensure the rights of children are affirmed and protected.[1]

Citizens of Nova Scotia can be proud to live in a province with a rich culture, generous people, and natural landscapes. Our community members and leaders may find it harder to acknowledge that Nova Scotia is also a province where too many children and youth are not doing well. This is our reality, even though previous strategies and initiatives in support of child and youth health, well-being, or engagement have been prepared. The Nunn Commission of Inquiry report published in 2006, the *Our Kids are Worth It: Strategy for Children and Youth* published in 2008, and *Thrive: A Plan for a Healthier Nova Scotia* published in 2012 were all launched with great promise.[2–4] In the years since, a province-wide, coordinated effort to improve the lives of children and youth has been lacking.

We believe that what is measured – and measured well – impacts what matters to decision makers. As a province, we must prioritize better measures of the well-being of our children and youth, and actively assess how effectively we are realizing their rights through legislation, policies, programs, and services. We found only one previous report that focused on comprehensively organizing measures of child and youth well-being in the province, *Nova Scotia's Children and Youth: Vital Signs*, which was published in 2014 by the Community Foundation of Nova Scotia.[5]

In the *One Chance to Be a Child* data profile, we aim to provide a balanced, holistic, and evidence-informed snapshot of the well-being of young people in our province that is framed by an understanding of their rights. We have gathered the best available data to uncover areas where children and youth may be thriving and the areas in need of dedicated and timely attention. There is a need for additional and improved measures relating to child rights and well-being in Nova Scotia. We hope this work will inform future efforts to develop an organized approach to rights and well-being monitoring and timely action for young people that is based on data. For the purposes of this data profile, we define children and youth as those aged 0 to 18 years.

Our assessment of the current landscape has led to six overarching recommendations that together serve as an urgent, unifying call to action. A concerted effort to implement these recommendations without delay would improve the lives of the children and youth in Nova Scotia who are most disadvantaged.

Children have just one chance to experience childhood, the period of life that determines the trajectory for what is to come. Decision-making today must consider implications for our children's tomorrow.

We have no time to waste.

PASS THE MIC

"Children are ready for change and a better world. Adults need to catch up"

- Youth participant

WHAT IS WELL-BEING?

UNICEF Canada states that "there is no official definition of well-being".[6] Being "well" is conceptualized differently for every individual, group, and community depending on their culture and values. In general, to be well, a person must have the essentials to be happy and have a good quality of life.[7] Being well requires that conditions are in place to allow people to reach their full potential. This means having access to more than the basics.[8] Well-being is therefore shaped by the quality of a person's experiences, which are, in turn, influenced by a host of factors, from familial to societal.[6]

For the purposes of this data profile, we have been guided by some widely agreed-upon concepts and critical discussions that relate to the lives of children. UNICEF Canada has developed *Where We Stand: The Canadian Index of Child and Youth Well-being* that broadly assesses the status of well-being for young people across the country.[6] This index influenced the current data profile and we discuss various aspects of child or youth well-being for Nova Scotian children and youth using some of the broad questions posed in the index.

- **Are we secure?**
- **Are we learning?**
- **Are we healthy?**
- **Are we happy?**
- **Are we connected to our environment?**
- **Are we protected? Do we belong?**

The answers were obtained by combining the input of young people with the best data available, identified through expert consensus. Theoretical frameworks, international benchmarks, and other key concepts in the literature were also considered when selecting and interpreting information.

To summarize the data used, "*At a Glance*" tables are provided at the beginning of each section of the data profile.

Where more data were available, a spotlight essay explores issues in greater depth. The following three issues have been given a spotlight:

- Food security
- Oral health
- Substance use

Because some children and youth in Nova Scotia may be disproportionately oppressed by policy choices or government inaction, and by the harmful effects of colonization, racism, and other forms of discrimination, a spotlight has been placed on experiences of the following children and youth:

- Mi'kmaw children and youth
- African Nova Scotian children and youth
- Newcomer children and youth
- Children and youth identifying as 2SLGBTQ+
- Children and youth living with disability

These spotlight essays were prepared with community representatives who ensured that unique cultural and historic context was accounted for when assessing well-being outcomes. It is important that communities who have been systemically oppressed and marginalized guide how their data are represented.

Every child has the right to express their views, feelings, and wishes in all matters affecting them, and to have their views considered and taken seriously (UNCRC, Article 12).

Throughout this data profile we have taken the opportunity to "**PASS THE MIC**" and provide a sample of the valuable input we received form children and youth during engagement activities. They had many important things to say about how they feel about their well-being and what they want adults to know, including ideas to make things better.

GUIDING FRAMEWORKS AND CONCEPTS

The following guiding frameworks and concepts are woven into the data profile:

United Nations Convention on the Rights of the Child (UNCRC)[1]

The UNCRC affirms the unique and distinct human rights of children. Child rights are basic standards that children and youth are entitled to and that governments have a moral or legal responsibility to meet. Canada ratified the UNCRC in 1991. In doing so, we committed to respecting the rights of our nation's children. Where appropriate, we have identified the relevant articles of the UNCRC as they relate to aspects of child and youth well-being.

Social Determinants of Health[9]

The World Health Organization defines health as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity." Health is influenced by a variety of interconnected social circumstances known collectively as the social determinants of health. The Government of Canada acknowledges the following as primary social determinants of health:

- Income and social status
- Employment and working conditions
- Education and literacy
- Childhood experiences
- Physical environments
- Social supports and coping skills
- Health behaviours
- Access to health services
- Biology and genetic endowment

Note: Race, gender, and culture are often listed as social determinants, but it is colonialism, racism, sexism, and transphobia that truly influence health outcomes.

A child's development is impacted by the quality of the social determinants of health at the level of the family, community, and socio-political environment. We also know that there are social determinants of health that differentially impact some populations more than others.

Social Inequality and Social Inequity[10]

Conditions of modern life affect the health of communities, families, and people in ways that are complex, inter-related, and, in many cases, unjust. Social inequality is characterized by the existence of unequal or unbalanced opportunities and rewards for different social positions or statuses within a group or society. Social inequity occurs when such inequalities are unjust or unfair. A key distinction between inequality and inequity is that the latter is avoidable. For example, in Canada, systemic racism and colonial structures have created long-standing inequities for people of African descent (African, Black, Caribbean) and Indigenous peoples.

Sustainable Development Goals[11]

In 2015, all United Nations' member states – including Canada – adopted the 2030 Agenda for Sustainable Development, a shared blueprint for partnership, peace, and prosperity for all people and the planet now and into the future. This is a strategy to implement a set of 17 shared global goals for progress on core challenges facing countries worldwide such as climate change and poverty.

Adverse Childhood Experiences[12]

Health and well-being are shaped by how well children are shielded from a set of experiences known as adverse childhood experiences or ACEs. When a child is repeatedly exposed to negative and traumatizing experiences without help from a supportive adult, there is a prolonged activation of the body's stress response system that can disrupt brain development and organ-system function. This is known as toxic stress.[13] Adverse childhood experiences that lead to this type of stress include abuse and neglect, household dysfunction, and poverty.[14]

HEALTH is defined as a "state of complete physical, mental and social well-being and not merely the absence of disease or infirmity."

DATA OVERVIEW

We use a population health approach to examine data available about children and youth in Nova Scotia. These data enable us to look for differences within and among groups during a certain period. They are the best kind of data to guide decision-making and assess public policies after they are implemented.

The data for population health monitoring are typically collected by government agencies, health authorities, researchers, and others. The data are collected either from all members of the group, community, or region, such as the Census; or a sample of individual respondents, like in many Statistics Canada population health monitoring surveys. Samples are taken to be as representative as possible of the larger population.

No primary data collection took place to create this data profile. When selecting which source of existing population health data was best to represent a particular child or youth outcome in this profile, we considered several factors, including:

- The quality of the data
- Whether we could compare provincial to national data
- Whether the data would be collected again in the future
- Whether the data were self-reported by children and youth
- Whether the data reflect a full age spectrum of childhood and youth within the life course: infancy, middle childhood, adolescence

To assess an outcome more comprehensively, sometimes more than one measure or data point was selected.

For many outcomes, we were able to present data with a comparison between Canada and Nova Scotia. This should be viewed as a general guide only. To provide more detail about who is represented by the data that were included, demographic variables such as age, self-reported gender, estimates of household income, and approximate geographic area, are included when available from the original source. We are limited to the demographic variables that were collected, which often do not account for a broad diversity of experience. For example, self-reported gender is recorded on a male or female binary only.

Limitations

There are limitations to all population health data, including the data in this profile, that should be acknowledged.

Data may come from sources where small numbers or lack of real-life diversity in the sample limit how accurately the data represent the experiences or outcomes of some individuals or subgroups.

Data in the profile may also be limited because they come from questions not directly aligned with the topic of interest or from sources where information is missing. Often, there was not enough data to assess a dimension of well-being to the full extent desired. Other times, there were no data available to even comment on some of the questions in UNICEF's *Canadian Index of Child and Youth Well-being*, such as about participation and freedom to play.

Data in the profile allow us to look at differences within or among groups during a specific period only. Data that are available now are often reflective of one or more years past because of the realities of research, data collection, and analysis.

The flaws and uncertainty of population heath data mean it is important that key decisions about children and youth are not made on any single source of information alone. Gaps in the data exist, particularly around child rights, and are described further in Appendix 2. Despite imperfections, however, population health data for Nova Scotian children and youth are critical to guide decision-making.

The authors present this data profile and the accompanying recommendations to inform discussions and decisions, and to spark a conversation about how data quality and collection can be improved upon when it comes to the well-being of children and youth in Nova Scotia.

SOURCES FOR THIS SECTION

1. United Nations (1990). Convention on the Rights of the Child: General Assembly Resolution 44/25 of 20.
2. Nunn DM (2006). Spiralling out of control: Lessons learned from a boy in trouble. Report of the Nunn Commission of Inquiry. Available from: https://novascotia.ca/just/nunn_commission/_docs/report_nunn_final.pdf. Accessed October 6, 2021.
3. Province of Nova Scotia (2008). "Our Kids Are Worth It: Strategy for Children and Youth. Available from: https://novascotia.ca/coms/department/documents/our_kids_are_worth_it.pdf. Accessed October 6, 2021.
4. Province of Nova Scotia (2012). Thrive! Plan for a Healthier Nova Scotia (press release). Available from: https://novascotia.ca/news/smr/2012-06-07-thrive-plan/. Accessed October 6, 2021.
5. Community Foundation of Nova Scotia (2014). Vital Signs: Nova Scotia's Children and Youth. Available from: https://ions.ca/wp-content/uploads/2019/02/VitalSigns_NSYouth.pdf. Accessed October 7, 2021.
6. UNICEF Canada. Where Does Canada Stand? The Canadian Index of Child and Youth Well-being 2019 Baseline Report. Available from: https://oneyouth.unicef.ca/sites/default/files/2019-08/2019_Baseline_Report_Canadian_Index_of_Child_and_Youth_Well-being.pdf. Accessed December 2, 2020.
7. Government of New Zealand Ministry of Social Development (2008). Children and Young People: Indicators of Wellbeing in New Zealand. Available from: https://www.msd.govt.nz/documents/about-msd-and-our-work/publications-resources/monitoring/children-young-indicators-wellbeing/2008-report/cyi-report-2008.pdf. Accessed October 6, 2021.
8. Office of the Children's Commissioner and Oranga Tamariki (2019). What Makes a Good Life: Children and young people's views on wellbeing. Available from: https://www.occ.org.nz/assets/uploads/what-makes-a-good-life-report-occ-ot-2019-web2.pdf. Accessed October 6, 2021.
9. Public Health Agency of Canada (2001). Social determinants of health and health inequalities. Available from: https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health.html. Accessed October 5, 2021.
10. Stewart, F. (2013). Approaches towards Inequality and Inequity: Concepts, measures and policies, Office of Research Discussion Paper No.2013-01, UNICEF Office of Research, Florence. Available from: https://www.unicef-irc.org/publications/pdf/stewart%20inequality_inequity_layout_fin.pdf. Accessed October 6, 2021.
11. United Nations (2015). Sustainable Development Goals. Available from: https://sustainabledevelopment.un.org/?menu=1300. Accessed October 5, 2021.
12. Centers for Disease Control and Prevention (2019). Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence. Available from: https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf. Accessed October 7, 2021.
13. Harvard University Center on the Developing Child (2020). Toxic Stress. Available from: https://developingchild.harvard.edu/science/key-concepts/toxic-stress/. Accessed October 6, 2021.
14. Stewart, F. (2013). Approaches towards Inequality and Inequity: Concepts, measures and policies, Office of Research Discussion Paper No.2013-01, UNICEF Office of Research, Florence. Available from: https://www.unicef-irc.org/publications/pdf/stewart%20inequality_inequity_layout_fin.pdf. Accessed October 6, 2021.

WHO ARE WE?

CHILDREN AND YOUTH IN NOVA SCOTIA

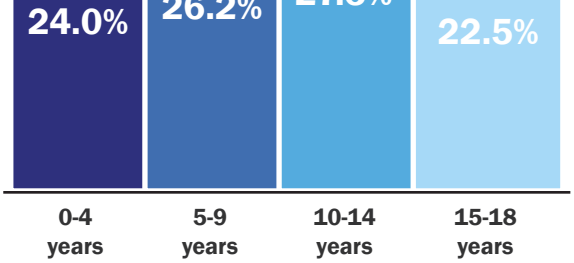
For this data profile, we define children and youth as those ages 0 to 18 years, but in many instances, a broader age range is included due to parameters on how data were collected.[1]

981,889

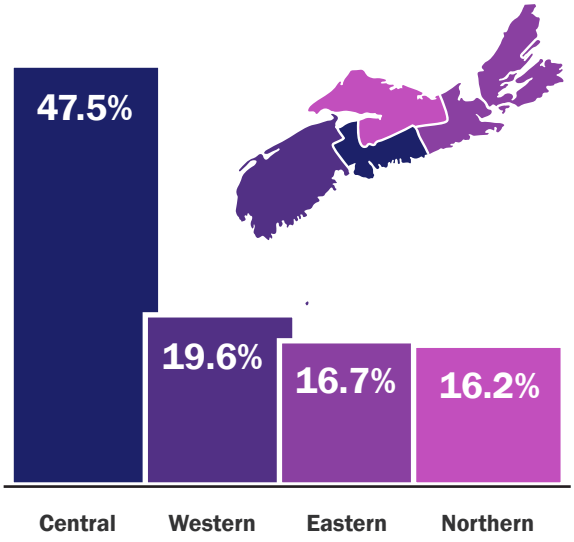
Total Population of Nova Scotia (2020)[a]

176,377

Population 0-18 years[a]



By Age[a]



By Health Zone[b]

[a] Statistics Canada, Annual Demographic Estimates, Provinces and Territories, 2020

[b] Statistics Canada. 2016 Census of Population

CHILDREN'S PARTICIPATION AND YOUTH ENGAGEMENT

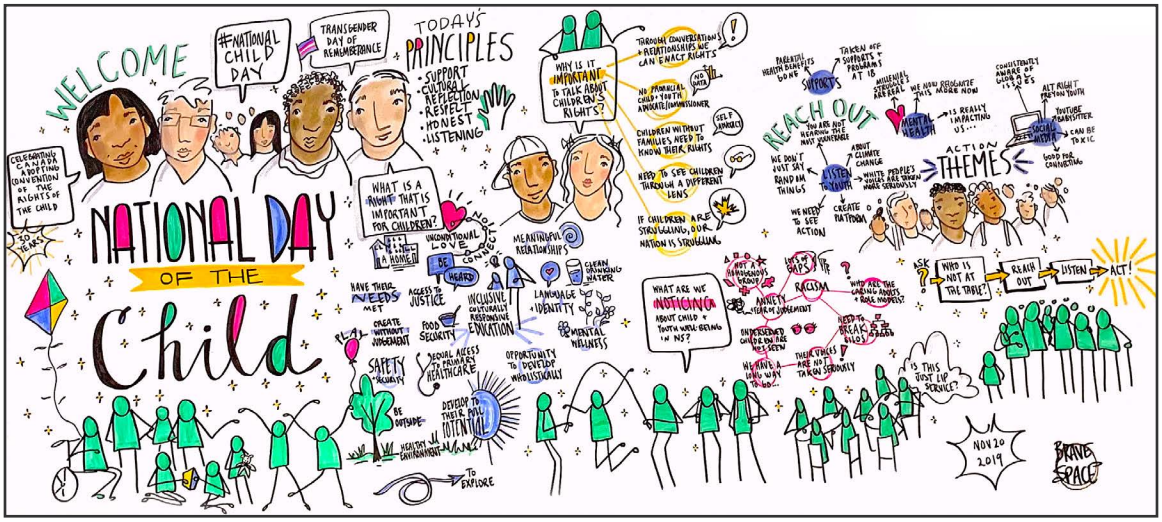
Children have a right to participate and be heard in matters that affect them. This is one of the guiding principles of the *United Nations Convention on the Rights of the Child* (UNCRC).

This principle was applied in this report by directly engaging young people and by deliberately selecting data that are reported by Nova Scotian children and youth.

Adult-run spheres of power and influence in all sectors – from non-profits to businesses to government – need to include the voices of young people, especially when discussions and decisions are being made that will impact child and youth well-being.

Today, many young people feel stressed about what their future holds, including the pressing threats posed by climate change and pervasive social inequities.

When involving youth in assessment and decision-making processes, we must ensure their engagement respects both their age and the wisdom they bring to the table. Young people should not feel burdened by the weight of resolving social ills on their own. However, their assistance in identifying key problems and advising on solutions to improve society benefits us all.



HEAR THE VOICE OF YOUTH

By Reem Al-Ameri, Youth, Advocate and Student

Youth voices matter. Youth voices are fearless, creative, and free. They are critical to ensuring that innovative and progressive ideas are making today and tomorrow better for all.

But what young people are looking for is tangible and concrete implementation of mechanisms to ensure their voices are heard, a responsibility that falls upon the adults in the room, who are too often more content with the photo ops.

We want real action, not words.

As per Article 12 of the United Nations Convention on the Rights of the Child, youth participation is a fundamental human right. Young people have the right to be heard and listened to in all matters affecting them.

Civil society organizations led by passionate youth advocates who understand the importance of young voices have shouldered the majority of the effort to create space for children's participation and youth engagement. A great example can be seen in the HeartWood Centre for Community Youth Development. HeartWood has done tremendous work in capacity building to ensure adult spaces are reaching youth across Nova Scotia. Among other projects, the centre developed youth-engagement strategies and toolkits that have involved youth in making the Halifax Regional Municipality (HRM) more youth friendly. In partnership with HRM, young people were part of the development and implementation of recreation, tourism, and cultural programs and services over two years. This was a meaningful way of ensuring young voices and ideas were reflected in spaces that affected them.

Corporate settings don't usually involve youth in decision-making. Some companies or corporations invest in programs and services that greatly benefit youth, but youth aren't necessarily always involved in the planning, decisions, or roll out.

Some provincial health and well-being spaces have adopted youth advisory councils, but many don't necessarily involve youth regularly in key decisions. Federally, the Canadian Institute of Human Development, Child and Youth Health has a youth advisory council. It would be great to see similar councils in provincial government settings that lead healthcare and public health decision making.

At the federal level, the Prime Minister's Youth Council was established in 2016 to provide "non-partisan advice to the Prime Minister on issues of importance to young Canadians." In Nova Scotia, the provincial Ombudsman's office has a Youth Council, as do several communities, including the HRM and Amherst. Having a dedicated advocate office for children and youth like in Prince Edward Island or New Brunswick would also help give young people a voice.

Let's remember that children and youth are critical resources and must be included in discussions and decisions. It is their right.

ARE WE SECURE?

Economic and material well-being

ARE WE SECURE?

Economic and material well-being

Children and youth have a moral and legal right to an adequate standard of living for their physical, mental, spiritual, moral, and social development as set out in the United Nations' *Convention on the Rights of the Child* (Article 27).[1] A family's monetary resources, the way income is distributed in society, and the social safety net offered by governments influence a child or youth's standard of living and in turn, their well-being.[2]

When caregivers lack monetary resources and are not met with sufficient social security, children and youth may be deprived and this deprivation is called poverty. When poverty is experienced by children and youth, it is multidimensional and extends beyond lacking material goods like food, shelter, and clothing.[3] Children experiencing poverty may not be able to live in the way they value (e.g., play, leisure) or be deprived of future choices and options (e.g., education, employment).[3] Their relationships can be affected as a result of shame, stress, or stigma.[3] For example, a child experiencing poverty may face increased parental stress, and that impacts the quality and amount of time available for parent-child interactions.[3] Similarly, a child or youth experiencing poverty may face shame and stigma in the form of bullying or discrimination.[3]

Understanding how many children and youth are experiencing this wide range of deprivations – from material to non-material– is essential to estimating the true scale of poverty and tracking progress. It is also essential to understand the issue broadly if we intend to foster optimal health and well-being for Nova Scotia's children and youth. Such a broad view of poverty in childhood is consistent with definitions used by Canada's National Advisory Council on Poverty,[4] and eliminating poverty in all of its forms is one of the 17 United Nations Sustainable Development Goals that Canada has committed to realizing.[5]

Information about the adequacy of monetary resources and the material security of families with children and youth in Nova Scotia clearly shows the need for action. Data also point to the fact that lack of economic and material security is impacting overall child and youth well-being in the province.

AT A GLANCE

Nova Scotia
Canada

Dimension	Indicator		
Financial resources and income adequacy	**Persons living in poverty where basic needs are not affordable** Percentage of children and youth under 18 years living in households with disposable income below the poverty line according to the Market Basket Measure, Canada's official poverty line *Statistics Canada, Canadian Income Survey, 2019 Table: 11-10-0135-01, 2019.*	**11.7%** **9.7%**	
	Persons living in severe income poverty Percentage of children and youth under 18 years living in households experiencing deep income poverty (below 75 percent of the Market Basket Measure) *Statistics Canada, Canadian Income Survey, 2019**	**4.9%** **4%**	
	Persons living in poverty where income is low relative to others Percentage of census families with children under 18 years with low income, based on Census Family Low Income Measure After Tax (CFLIM-AT) *Statistics Canada, Canadian Income Survey, 2019. T1 Family File Table: 11-10-0020-011*	**24.3%** **17.7%**	
Public policies related to financial support for families	**Income assistance cases involving a child or youth** Percentage of children and youth, 24 years or younger, that are attending school and/or living in the home of a family that receives Employment Support and Income Assistance *Nova Scotia Department of Community Services, 2019**	**30.1%** **N/A**	10,315 dependent children and youth
Parent perceptions of material deprivation	**New mothers with concerns about money for basic necessities** Percentage of new mothers that responded "yes" to having concerns about money to pay for housing, food, clothing, utilities, and other basic necessities on a screening questionnaire *Healthy Beginnings Enhanced Home Visiting Program, 2019**	**24%** **5%** **N/A**	<20 years 20+ years
Safe, secure, and affordable housing	**Children or youth living with a core housing need** Percentage of children living in homes defined as having a core housing need based on standards of adequacy, suitability, and affordability *Statistics Canada, Census, 2016*	**12.6%** **12.6%**	
	Parents that reported unaffordable housing Percentage of respondents with children or youth living at home that spent more than 30% of their monthly income on housing *Engage Nova Scotia Quality of Life Survey, 2019*	**36.6%** **N/A**	

* Indicates a custom data request from the data source indicated.

ESTIMATING THE SCALE OF POVERTY IN CHILDHOOD IN NOVA SCOTIA

Monetary resources and Income-based poverty measures

One way of estimating the number of children and youth who experience poverty is to consider how many families are deprived of meeting their basic needs like food, clothing, and shelter due to low income – a so-called absolute poverty measure.[6] In 2018, the Canadian government adopted the Market Basket Measure (MBM) as the country's official measure for this purpose. The MBM is used to calculate the number of children and youth who live in households with incomes below a level needed to purchase a modest basket of goods and services in their region, considering local costs. The level is adjusted for a family's size.[7]

In 2019, 11.7 percent of Nova Scotian children aged 17 years and younger were estimated to be experiencing poverty that deprived them of basic needs, as estimated by the MBM.[8] This was above the national average of 9.7 percent.[8] It should be noted that the 2019 data for Nova Scotia was published by Statistics Canada with a warning that this measure should be interpreted with care for the year 2019.

When the scale of poverty is assessed by whether a child is deprived of their basic needs alone, the true number of children and youth who are prevented from flourishing due to poverty is likely to be underestimated.

Relative income-based poverty measures can be used to estimate poverty more broadly by looking at the number of families with such low income, relative to others, that their children are likely to be excluded from having goods or opportunities most people would consider normal for a good life. For example, those who may not be able to access regular internet at home or participate in extra-curricular events.[6] The after-tax Census Family Low Income Measure (CFLIM-AT) is used for this purpose. The CFLIM-AT creates a low-income threshold or relative poverty line at 50 percent of the median income of Canadians, then assesses how many children live in families with after-tax incomes that fall below the threshold (adjusted for the family's size).

In 2019, 24.3 percent of children and youth in Nova Scotia were estimated to be experiencing poverty as measured by the CFLIM-AT.[8] This is compared to 17.7 percent nationally and to 24.4 percent in 1989, when a promise was made by the House of Commons of Canada to eradicate child poverty by the year 2000 with unanimous cross-party support.[9]

The CFLIM-AT varies across Nova Scotia when applied to different regions. It is highest for children and youth in Digby (34.7 percent), Annapolis (33.7 percent), and Cape Breton (33.5 percent).[8] When the ages and family composition of the children identified by the CFLIM-AT are assessed, it becomes clear that young children and lone-parent families are over-represented; 27.9 percent of these children are under six years old and 51.7 percent live in lone-parent families.[8]

The CFLIM-AT is calculated for Nova Scotian children using information about a family's income obtained from tax-filer data, which represents 95 percent of families. Because not all families are represented and potential inaccuracies in self-reported tax information exist, the CFLIM-AT is an estimate at the population level, like the MBM. For the CFLIM-AT, a family is defined as members of a couple family with children, and lone-parents and their children (census families). Internationally, low-income measures (LIMs), like the CFLIM-AT, are widely used to reflect child income poverty and track progress on initiatives such as the United Nations Sustainable Development Goal to end poverty.

Depth of poverty

Some children and youth experience a depth of deprivation that is greater than others, and this leads to more adverse impacts on their well-being. The proportion of children and youth living in deep or severe poverty can be estimated by assessing how many live in families with income below 75 percent of the threshold amount (poverty line) set by the MBM for the family's size. In 2019, an estimated 4.9 percent of Nova Scotian children 17 years and younger were living in severe poverty compared with 4 percent nationally. Children and youth living in deep or severe income poverty are likely experiencing a truly appalling level of deprivation.

A FURTHER NOTE ABOUT MEASUREMENT

For Nova Scotia, the MBM is calculated using information about a household's income after tax, the family's size, and the cost of the modest basket of goods and services in four regions in the province. Data for the calculation come from a sample of Nova Scotians who respond to a Canadian survey. A statistical weighting is then used to show how the responses from the individuals sampled apply to the whole population of Nova Scotians. In 2019, responses used to calculate the MBM in Nova Scotia varied to a higher degree than would be statistically expected. The data were published with a "Use with Caution" warning for this reason. The lack of expected variability in responses can occur when a sample is too small to accurately represent a population. These numbers must be interpreted with care given this issue and because these data sources exclude children living on First Nations reserves.

MATERIAL DEPRIVATION

Individually, income-based measures provide important, yet imperfect information for estimating the number of children and youth experiencing poverty in Nova Scotia. Because income-level alone may not reflect the degree to which a child is broadly deprived, multiple additional measurement tools are used across Canada and internationally to understand this problem. For example, multiple child-specific material-deprivation indices have been created and are in use internationally.[10,11] Independent of family income, these indices directly ask children about how deprived they are of basic needs and other important material goods and experiences like receiving a gift on their birthday or having a bit of pocket money.[12] A child material-deprivation index or tool could be applied in Nova Scotia to help improve the information available to those tasked with estimating the scale and burden of childhood poverty, designing effective solutions, and tracking progress on this critical issue.

It is possible to glean information about the scale of deprivation children and youth in Nova Scotia are facing based on other data collected about material deprivation of basic needs.

Food Security

Based on Statistics Canada's 2017-2018 *Household Food Security Survey Module*, 19.5 percent of Nova Scotian children reside in a food-insecure household, higher than the national average of 16.2 percent. Food insecurity is considered a sign of broader material deprivation that occurs when members of a household have inadequate or insecure access to food due to economic or other constraints.[13]

Housing

Housing and community spaces should be affordable, safe, and healthy.

Housing affordability has emerged as a significant issue, especially within urban settings. As of September 2021, the average rent for a one-bedroom apartment in Nova Scotia was $1,660 a month, only slightly below the national average of $1,763 a month,[14] despite Nova Scotia having the lowest median after-tax income among all provinces.[15]

When housing is unacceptable because it is in poor condition, unsuitable (i.e., too crowded for the number of people), or unaffordable (costing 30 percent or more of a household's before-tax income), household members are considered to have a core housing need. According to the 2016 Census, the most recent data available, Nova Scotia had a higher percentage of children under 18 years (12. 6 percent) living in core housing need than the other Atlantic provinces but a lower rate than British Columbia, Saskatchewan, and Ontario.[16]

In Canada, 24.1 percent of all households reported spending 30 percent or more of their income on shelter costs based on the 2016 Census.[16] The rate for Nova Scotia was less than the Canadian average (21.5 percent); however, 25 percent of households in the Halifax census metropolitan area spent 30 percent or more on housing. The 2019 Engage Nova Scotia *Quality of Life Survey* found that 36.6 percent of respondents who are parents spent more than 30 percent of their monthly income on housing.[17] Of this group, 4.6 percent spent more than 50 percent of their monthly income on housing.[17]

Material deprivation of new parents

Data collected by the Nova Scotia Department of Health and Wellness on intake forms completed for the *Healthy Beginnings: Enhanced Home Visiting* program show that approximately 24 percent of mothers under 20 years and 5 percent of mothers 20 years and over reported

concerns about material needs.[8] The critical importance of ensuring that pregnant parents and families caring for a newborn have the material resources they need must be viewed in relation to the significance of the early years for overall childhood health and development.

HOW ARE CHILDREN AND YOUTH FEELING THE IMPACTS OF EXPERIENCING POVERTY IN NOVA SCOTIA?

Measures of income poverty and data about material deprivation give us insight into the scale of the issue of childhood poverty in Nova Scotia, but there is also a need to understand how child and youth well-being is impacted by the experience of poverty.

The *Nova Scotia Student Success Survey* provides a small glimpse into how poverty impacts peer relationships through stigma or discrimination.[18] In 2018-2019, 28 percent of all students (grades 4 to 12) reported feeling less respected than other students. Of those who felt less respected, 16 percent said they felt it was due to their family's income. Nearly 1 in 5 (19 percent) of students in the same survey indicated they felt unsafe or threatened in the last 30 days. Of those, 19 percent thought it was because of how much money their family has.[18]

The 2018-2019 *Health Behaviour in School-aged Children survey* provides another look at the impact of experiencing poverty in childhood using information about family affluence.[19] Nova Scotian children and youth with the lowest family affluence were 2.3 times more likely to report low life satisfaction than those with the highest family affluence. They were also less likely to report positive mental health, feelings of community safety, and involvement in teams and individual sports.[19] They were 1.7 times more likely to report feeling low or depressed, lonely, and that it was not safe for children to play outside during the day.[19]

PASS THE MIC

"When children are struggling in Nova Scotia, our province is struggling, our future is struggling"

- Youth participant

Children and youth with the highest family affluence were almost twice as likely to be involved in organized team sports. However, children and youth with the lowest family affluence were slightly more likely (4.0 percent) to be involved in community groups than their most affluent peers. These differences reflect the ways a child or youth may be limited in their participation based on the cost of certain activities.

Ensuring that all child well-being outcomes in Nova Scotia are being monitored alongside information about family income or socioeconomic status is essential for tracking impacts and progress related to any interventions.

SOCIAL SECURITY AND THE ROLE OF GOVERNMENT IN PREVENTING CHILDHOOD POVERTY

The UNCRC states that parents or other adults responsible for a child have the primary responsibility to secure, within their abilities, the conditions of living necessary for their development. However, it is the government's role to appropriately assist those caring for children to provide an adequate standard of living through material assistance and support programs, especially related to nutrition, clothing, and housing.[1] UNCRC signatories, like Canada, have also committed to ensuring the right of every child to benefit from social security, including social insurance, by making sure caregivers receive the financial support they need to raise the child (Article 26).[1]

The Nova Scotia's Income Assistance (IA) program administered by the Nova Scotia Department of Community Services is described as a program intended to help individuals who are not able to support themselves or their family. Families or individuals may get money for basic needs or help with other special needs depending on their unique situation.[20]

In 2019, 30.1 percent of all IA cases included families with children or youth. There were 10,315 dependent children and student family members living with families receiving IA support in Nova Scotia according to the Department of Community Services.

Total welfare income is the combination of government transfers like IA payments, federal and provincial child tax credits, and other provincial government transfers.[21] In 2019 Nova Scotia, along with New Brunswick, had the lowest welfare income provisions in Canada for the family types that are used to study national trends.[21] For lone-parent families with one child and couple families with two children in Nova Scotia in need of social security, total welfare income

PASS THE MIC

"I wish kids had someone to talk to at school if they are living in poverty"

- Youth participant

provisions made up only 57 to 60 percent of the income they would need to reach the poverty line set by the MBM, Canada's official poverty line in 2019.[8,22] This information demonstrates that Nova Scotia's social safety net, even when combined with federal government transfers, allows poverty to persist, depriving children and youth of even the most basic material needs.

Child benefits, delivered by both the federal and provincial government, have been shown to be effective tools to reduce child income poverty when eligibility thresholds and amounts are appropriate. For example, the federal Canada Child Benefit (CCB) was tied to a 30.3 percent reduction in income poverty for Canadian children under 18 years in 2018.[22] The Nova Scotia Child Benefit (NSCB), a provincial benefit connected to the federal CCB, is described as an additional tool "to help families with low and modest income with the cost of raising children under 18 years of age".[23] In July 2020, the threshold for receiving the NSCB was raised to $33,999 from $26,000 so that families with slightly higher incomes are now eligible to receive the benefit. Despite this change, some families with incomes below the poverty threshold set by the MBM are still considered to have too much income to be eligible for the NSCB. For example, the MBM poverty threshold for a couple with two children in Halifax was $45,872 in 2019, which means this family would not qualify for the NSCB.[8]

The NSCB is not indexed to inflation, so every year it may lose its effectiveness as a tool to alleviate child income poverty.

THE BOTTOM LINE

Global and Canadian research supports a negative relationship between poverty, income inequality, and outcomes such as infant mortality, childhood asthma, emotional and behavioural problems in childhood, readiness to learn, and educational achievement.[24–27] These adverse impacts in childhood carry through to adulthood, especially when children are deprived early and over a prolonged period.[27]

In Nova Scotia, too many children and youth are experiencing poverty. Without concrete action, the consequences of this will carry through to their future and that of our province. Past efforts to reduce child and family poverty in Nova Scotia have not led to adequate change.[8,28] Moving forward, decision-makers must take immediate steps to prevent the ongoing deprivation faced by children and youth, and reduce the number of children experiencing all dimensions of poverty using effective social securities. Designing a comprehensive child poverty reduction action plan that ensures a child's right to an adequate standard of living and reduces the ill-effects of poverty on child well-being is crucial.

It is paramount that efforts to reduce and eventually eliminate childhood poverty do not veer off course as governments change. Legislation is needed to guarantee government always has a plan that moves us closer to eliminating child poverty in all its forms, with targets and accountability mechanisms in place.

Because designing solutions that are long lasting requires improved information, implementing new and more comprehensive tools to measure multidimensional childhood poverty in Nova Scotia are essential steps on the pathway to change.

SOURCES FOR THIS SECTION

1. United Nations (1990). Convention on the Rights of the Child: General Assembly Resolution 44/25 of 20.
2. Marmot, M (2002). The Influence of Income on Health: Views of An Epidemiologist. Health Affairs, 21:31–46.
3. Bessell, S (2021). Rethinking Child Poverty. Journal of Human Development and Capabilities, 1–23.
4. Employment and Social Development Canada (2020). Building Understanding: The First Report of the National Advisory Council on Poverty. Available from: https://www.canada.ca/en/employment-social-development/programs/poverty-reduction/national-advisory-council/reports/2020-annual.html. Accessed November 31, 2021.
5. United Nations (2015). Sustainable Development Goals. Available from: https://sustainabledevelopment.un.org/?menu=1300. Accessed October 8, 2021.
6. GSDRC (n.d.). Defining poverty, extreme poverty and inequality. Available from: https://gsdrc.org/topic-guides/poverty-and-inequality/measuring-and-analysing-poverty-and-inequality/defining-poverty-extreme-poverty-and-inequality/. Accessed October 8, 2021.
7. Statistics Canada (2019). An Update on the Market Basket Measure Comprehensive Review. Available from: https://www150.statcan.gc.ca/n1/pub/75f0002m/75f0002m2019009-eng.htm. Accessed November 3, 2021.
8. Frank L, Fisher L, Saulnier C (2021). Report Card on Child and Family Poverty in Nova Scotia: Worst Provincial Performance over 30 Years. Available from: https://www.policyalternatives.ca/publications/reports/2021-report-card-child-and-family-poverty-nova-scotia. Accessed November 30, 2021.
9. Parliament of Canada (2011). Bill C-233 (41-2): Poverty Elimination Act. Available from: https://www.parl.ca/DocumentViewer/en/41-2/bill/C-233/first-reading/page-78. Accessed December 3, 2021.
10. Main G, Bradshaw J (2012). A Child Material Deprivation Index. Child Ind Res 5, 503–521.
11. Watson D, Maître B, Whelan CT (2012). Understanding Childhood Deprivation in Ireland. Available from: http://www.socialinclusion.ie/documents/2012_UnderstandingChildhoodDepReportWeb.pdf. Accessed January 3, 2022.
12. Mendelson M, Notten G (2016). Using low income and material deprivation to monitor poverty reduction. Available from: https://maytree.com/wp-content/uploads/CaledonPFD-1103ENG.pdf. Accessed December 11, 2021.
13. Tarasuk V, Mitchell A (2020). Household Food Insecurity in Canada, 2017-2018. Available from: https://proof.utoronto.ca/wp-content/uploads/2020/03/Household-Food-Insecurity-in-Canada-2017-2018-Full-Reportpdf.pdf. Accessed November 1, 2020.
14. Rentals.ca (2021). September 2021 Rent Report. Available from: https://rentals.ca/national-rent-report (2021). Accessed September 21, 2021.
15. Statistics Canada (2016). Core housing need, 2016 Census. Available from: https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/chn-biml/index-eng.cfm. Accessed November 3, 2021.
16. Statistics Canada (2016) 2016 Census Profile: Income. Available from: https://www12.statcan.gc.ca/census-recensement/2016/rt-td/inc-rev-eng.cfm. Accessed November 3, 2021.
17. Engage Nova Scotia (2019). Quality of Life Survey. Available from: https://engagenovascotia.ca/aboutsurvey. Accessed November 8, 2021.
18. Department of Education and Early Childhood Development and Communications Nova Scotia (2019). Student Success Survey. Available from: https://plans.ednet.ns.ca/sites/default/files/documents/2018-2019_StudentSuccessSurvey.pdf. Accessed June 30, 2021.
19. Craig W, et al (2020). Health and Health-Related Behaviours among Young People: Nova Scotia Report.

20. Nova Scotia Department of Community Services (n.d.). Income Assistance. Available from: https://novascotia.ca/coms/employment/income_assistance/index.html. Accessed November 8, 2021.
21. Maytree (2020). Welfare in Canada 2019. Available from: https://maytree.com/welfare-in-canada/nova-scotia/. Accessed December 3, 2021.
22. Frank L, Fisher L, Saulnier C (2020). Report card on family and child poverty in Nova Scotia. Available from: https://campaign2000.ca/wp-content/uploads/2020/12/NS-Child-poverty-report-card-2020-FINAL.pdf. Accessed November 8, 2021.
23. Province of Nova Scotia (n.d.). Income Assistance - Standard Household Rate. Available from: https://novascotia.ca/coms/employment/other-benefits/. Accessed November 8, 2021.
24. Ross DP, Roberts P (1999). Income and child well-being: A new perspective on the poverty debate. Ottawa: Canadian Council on Social Development.
25. Guttmann A (2001). Child poverty, health and health care use in Canada. Child Health, 6: 509–513.
26. Gupta RP-S, de Wit ML, McKeown D (2007). The impact of poverty on the current and future health status of children. Paediatr Child Health 12, 667–672.
27. National Academies of Sciences, Engineering, and Medicine (2019). A Roadmap to Reducing Child Poverty. Washington DC, National Academies Press.
28. Province of Nova Scotia (2009). Preventing Poverty: Promoting Prosperity. Available from: https://novascotia.ca/coms/specials/poverty/documents/poverty_report_2009.pdf. Accessed November 8, 2021.

ARE WE LEARNING?

Cognitive, social, and emotional well-being

ARE WE LEARNING?

Cognitive, social, and emotional well-being

Ensuring the full cognitive, social, and emotional development of children in Nova Scotia is essential for optimizing well-being throughout their lifespan and for the future social and economic welfare of the province. While a child's caregivers provide the foundation for their earliest learning, governments also have a responsibility to help fully realize children's fundamental right to education as afforded by the UNCRC (Articles 28 and 29).[1] This includes creating high-quality, inclusive, and safe learning environments that foster the unique abilities and talents of all children. Children and youth deserve access to opportunities from birth through adolescence to obtain academic proficiency and social and emotional skills that allow them to reach their full potential.

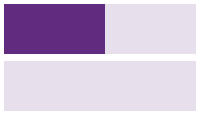
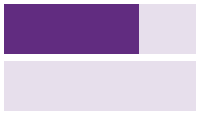
The early years, defined here as the period from birth to school entry, represent a critical period for setting the paths that children will follow throughout their lives.[2] The trajectory of development in the early years can lead to short-term success or significant challenges in elementary and secondary school, and a similar spectrum of long-term outcomes for adults in terms of post-secondary education, relationships, and employment.[2] The importance of early childhood development is recognized and emphasized to varying degrees in jurisdictions across Canada and around the world.[3]

Progress to support early childhood development and education in Nova Scotia is a provincial success story for child and youth well-being. This is seen in the establishment of the Early Years Branch within the Department of Education and Early Childhood Development (DEECD) and the introduction of no cost Pre-primary Programming connected to the public school system. Early learning and child-care bilateral agreements also signal a commitment to creating an accessible, affordable, high-quality, and inclusive early-learning and child-care system in Nova Scotia that will support early childhood development.

Despite these advances, data suggest an ongoing need to optimize the cognitive, social, and emotional development of children and fully recognize their right to education in the early years all the way through to graduation.

AT A GLANCE

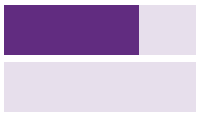
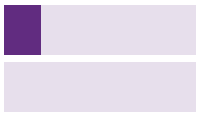
Nova Scotia
Canada

Dimension	Indicator		
Public policies related to early childhood education	**Participation in preschool** Percentage of the four-year-old population enrolled in pre-primary programs *Early Childhood Education Report 2020 Table 3.3 Nova Scotia ECE School Programs (2019-2020)*	52% N/A	
	Participation in preschool where available Percentage of children enrolled in pre-primary for four-year-olds in designated catchment areas with programs in place *Early Childhood Education Report 2020 Table 3.3 Nova Scotia ECE School Programs (2019-2020)*	75% N/A	
Early cognitive development	**Omission of important skills in the first year of school** Percentage of children that are vulnerable on one or more domain of the early development instrument (EDI) in grade primary *Province of Nova Scotia (2021), EDI data from 2020* *Offord Centre, McMaster University, 2008-2017*	25.5% 27%	
Learning behaviours and attitudes	**Enjoyment of learning in school** Percentage of students in grades 4 to 12 that agree with the statement "I enjoy learning in school" *Province of Nova Scotia, 2018/2019 Student Success Survey*	73% N/A	
Learning skills and competences	**Reading to academic expectations (grade 3)** Percentage of students in grade 3 that meet expectations for reading based on assessments developed in Nova Scotia *Province of Nova Scotia, 2018–2019, Nova Scotia Assessment: Literacy and Mathematics/Mathématiques in Grade 3*	70% N/A	
	Reading to academic expectations (grade 6) Percentage of students in grade 6 that meet expectations for reading based on assessments developed in Nova Scotia *2019–2020 Nova Scotia Assessment Reading, Writing, and Mathematics in Grade 6*	74% N/A	

* Indicates a custom data request from the data source indicated.

Nova Scotia

Canada

Dimension	Indicator		
Learning skills and competences (cont'd)	**Academic expectations in math (grade 6)** Percentage of students in grade 6 that meet expectations for mathematics based on assessments developed in Nova Scotia *2019–2020 Nova Scotia Assessment Reading, Writing, and Mathematics in Grade 6*	70% N/A	
	Performance in math (grade 8) Percentage of students in grade 8 performing at or above Level 2 in mathematics *Pan-Canadian Assessment Program (2019) Table 1.3*	89% 90%	
	Performance in reading (grade 8) Mean reading score for grade 8 students *Pan-Canadian Assessment Program, 2019 Table 2.1*	500 505	
School environment	**Belief that school is a nice place to be** Percentage of students in grades 6 to 10 that agree with the statement "School is a nice place to be" *Health Behaviour in School-aged Children survey, 2018/2019**	50.7% 64.1%	
	Belief that school is unsafe or threatening Percentage of students in grades 4 to 12 that reported feeling unsafe or threatened at school within the past month *Province of Nova Scotia, 2018/2019 Student Success Survey*	19% N/A	
Educational attainment and progression	**On-time graduation** Percentage of students that started grade 10 in 2015-2016 and graduated from grade 12 by the end of the 2017-2018 school year *Statistics Canada. Education Indicators in Canada: An International Perspective (2020) Table A.2.1, pg. 39*	88% 81%	

* Indicates a custom data request from the data source indicated.

ACCESS TO HIGH-QUALITY EARLY CHILDHOOD EDUCATION AND CARE

Access to high-quality early childhood education contributes to the cognitive, social, and emotional development of children and helps to reduce social inequities by ensuring that all children can develop critical early-learning skills.[2] Through a play-based approach, high-quality early childhood programs, such as licensed child care and pre-primary programs, provide opportunities for young children to learn and develop foundational skills. For example, the Nova Scotia Early Learning Curriculum Framework focuses on well-being; discovery and invention; language and communication; and personal and social responsibility.[4] The role of responsive early childhood educators is crucial in supporting intentional play-based programming that promotes exploration and encourages children to expand upon and extend their play.[4]

Investments in early childhood education over the last 10 years have resulted in an increase in the percentage of children aged two to four years participating in programs across the province. In 2020-2021, over 6,000 children were enrolled in the province's Pre-primary Program where it was available, representing 75 percent of eligible children, a meaningful increase in access to early childhood education over time for Nova Scotian children that is expected to realize long-term benefits.[5] However, the availability of early childhood programming for the province's younger children remains a concern.[6] While the total number of regulated child-care spaces has increased in the last few years, a recent survey found that in 2020 more than one third of parents/guardians reported difficulties in finding a child-care arrangement, a figure similar to Canada as a whole.[7]

Developmental status at school entry

Since 2013, Nova Scotia has administered the Early Developmental Instrument (EDI) to all eligible grade primary students every two to three years.[8] The EDI is the only population-level estimate of the developmental status of our province's youngest children and a useful, albeit imperfect, measure of the skills necessary for success at school.

The EDI is a teacher-completed assessment of children that occurs several months into their first year of school.[8] It comprises 161 questions in five developmental domains (2018 Ontario version). The first domain, physical health and well-being, includes questions about health, independence, and being rested. The second domain, social competence, deals with the ability of children to play and get along with others, share, and show self-confidence. The third domain, emotional maturity, deals with the ability to concentrate, help others, show patience, and inhibit aggression or anger. Language and cognitive development, the fourth domain,

assesses interest in reading and writing, ability to count, and recognition of numbers and shapes. The fifth domain, communication skills and general knowledge, has questions about the ability of children to tell a story and communicate with adults and other children.[8]

Scores are summed for each domain and converted into percentile ranks (i.e., 1 - 99 percent). Children who score below the 10th percentile cut-off for the Nova Scotia baseline population on any of the five EDI domains are considered "vulnerable." Children who are vulnerable are at increased risk of experiencing difficulties at school or in other settings compared to children at or above the 10th percentile. Data show that around one-quarter (25.5 percent) of grade primary children in the province are vulnerable in one or more EDI domains, a number that has been stable between 2013 and 2020 (with the exception of 2018).[8] This rate is comparable to the national estimate of 27 percent of students entering school with developmental vulnerabilities.[9]

The increased vulnerability documented in Nova Scotian children in 2018 may reflect differences in how the EDI was administered or a change in causative factors that affected child development during the five years of those children's lives.[8] Changes in EDI administration in each survey cycle make cycle-to-cycle comparisons difficult. In addition, some questions may consciously or unconsciously disadvantage some children based on cultural norms (e.g., social competence and emotional maturity). Nevertheless, it is critical to continue EDI administration: this is the only population-wide measure available to assesses children's development at around age five. Each cycle adds to our ability to see changes over time in response to any investments or program changes in early learning and child care.

PASS THE MIC

"Sometimes when you learn new stuff, you can make it to your big dreams."

- Child participant

ELEMENTARY SCHOOL PERFORMANCE: A MARKER OF LEARNING OVER TIME

Children's literacy and numeracy skills are critical for unlocking life opportunities. Most students in Nova Scotia complete standardized tests to measure student performance in literacy and mathematics in grades 3, 6, and 8. Results are typically reported in four levels of proficiency and then collapsed into two groups: not meeting expectations (levels 1 and 2) and meeting expectations (levels 3 and 4). The processes used by the DEECD for these assessments have changed in recent years. In 2018-19, a new literacy and mathematics assessment for grade 3 students was administered at the end of the school year.[10] Previously, grade 3 literacy and grade 4 mathematics assessments were administered at the beginning of the school year, so results prior to and after 2018-19 cannot be compared directly. There is also no national comparator for these data.

In the 2018-2019 school year, 70 percent of grade 3 students met expectations for reading.[10] Grade 6 provincial results have remained consistent over the last three years (2017-18 to 2019-20), with about three-quarters of this population meeting expectations in both reading and mathematics (74 percent and 70-71 percent, respectively).[11]

The Pan-Canadian Assessment Program, a national initiative from the Council of Ministers of Education, Canada, seeks to determine whether students across the country reach similar levels of performance at about the same time in their schooling. A survey is conducted in grade 8.[3] In 2019, the most recent assessment, students in Nova Scotia were slightly below their national counterparts for mathematics (89 percent performing at or above Level 2 provincially versus 90 percent nationally) and reading (mean reading score of 500 provincially versus 504 nationally).[3] For some children in this age group, it may be too late to identify and correct any challenges with learning.

When children require specific educational interventions, based on needing either remediation or enrichment in school, the school engages in a program-planning process. This process sometimes results in the development of an adaptation or individualized program plan (IPP), which is governed by the provincial *Special Education Policy.*[12] Adaptations focus on strategies or resources to address identified challenges and/or support a child's strengths.

PASS THE MIC

> "Asking students what their interests are or how they prefer to learn can help students learn effectively. Sometimes I wish we could add another grade in school so things could be spaced out and I wouldn't be as stressed."
>
> *- Youth participant*

At the discretion of the school, children with adaptations or IPPs may not be allowed to complete standardized assessments. While IPPs are used with a small minority of students (approximately six percent in 2016-17), it is important to remember how they may impact population-level data about school performance and critical to appreciate that some groups of children and youth are disproportionately over-represented in IPP data.[13]

There are several ways to measure whether a child or youth is developing the skills and proficiencies they need. Standardized testing is the primary method used by the DEECD to track the academic performance of elementary school children. These tests, although indicative of educational performance, do not provide a full picture of a child's cognitive, social, and emotional development in middle childhood. Furthermore, interpretation of these data is hampered by the different rates of participation by school, the ability of school administrators to decide who writes these tests, and the lack of a national comparator.

Clear criteria that school administrators can apply to each student in the same manner would allow easier comparison of standardized test results among schools across the province and over time. Adopting instruments that assess the totality of development during this period would also provide a more rounded picture of whether young children are being equipped with the variety of life skills they need to meet their full potential and not just the basic academic building blocks.

CHILDREN'S EXPERIENCE IN SCHOOL

School environments can be a significant source of stress or support for children and youth. A positive school climate improves student achievement and sense of belonging.[14] It is important to understand how children and youth in Nova Scotia feel about learning and school. The 2018-2019 *Nova Scotia Student Success Survey* assesses students' perceptions in a variety of areas, including school climate and personal engagement in school.[15] All public-school students in grades 4 to 12 were eligible to complete the survey, and there was a response rate of 65 percent.

Seventy-three percent of children and youth agreed or strongly agreed with the statement "I enjoy learning in school." Children and youth in grades 4 to 6 also generally reported having an encouraging relationship with teachers (85 percent).[15] There was a substantial decline, however, in those who enjoyed learning in school after grade 6 and marked variability in responses for students based on self-reported disability status, sexual orientation or gender identity, and race or ethnicity.[15]

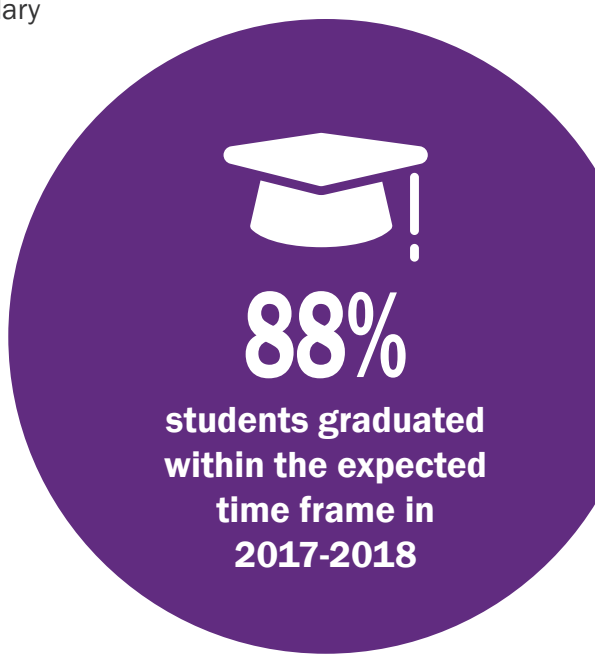
Based on the 2018-2019 *Health Behaviour in School-aged Children survey*, students in Nova Scotia were less likely than their national counterparts to agree with the statement that "school is a nice place to be".[16] The biggest discrepancy was seen in older students: only 43 percent of boys and 41 percent of girls in grades 9 and 10 agreed that school was a nice place to be compared to 62 percent of boys and 57 percent of girls nationally.[16] These responses are consistent with the 2018-2019 *Nova Scotia Student Success Survey* results: nearly 1 in 5 students in grades 4 to 12 reported feeling unsafe or threatened at school in the past month.[15] Children and youth who reported feeling unsafe identified social, verbal, or written sources of abuse as the main causes.[15] These responses again varied by self-reported disability status, sexual orientation or gender identity, and race or ethnicity.[15]

High school completion

Graduation from high school is an important milestone; it is a requirement for access to post-secondary education, which, in turn, is associated with employment success and other benefits to health, well-being, and quality of life. Based on a national report that compares provincial and territorial graduations rates, an estimated 88 percent of students in Nova Scotia graduated at the expected time (2017-2018 year) compared with 81 percent of students across Canada.[17]

The graduation rate reported by the Government of Nova Scotia is calculated differently than other regions and is defined as the percentage of students receiving a high school graduation diploma compared to the number of students in grade 9 three years earlier.[18] These provincial data show an increasing trend in the overall graduation rate from 84.8 percent in 2006-2007 to 92.3 percent in 2016-2017 (the most recent available data).[18] This rate varied in 2016-2017 across the province's seven Regional Centres of Education from 81.7 percent to 97 percent.

Although rates were calculated using different methods, Nova Scotia appears to be a strong performer on this indicator relative to national comparators. It is not known what proportion of graduates go on to post-secondary education and to employment in Nova Scotia, and therefore, graduation rates do not necessarily indicate future success. Information about the later life course of youth who do not graduate in the province is also lacking.



THE BOTTOM LINE

Recent and planned investments in early childhood education and the provincial Pre-primary Program, as well as the Nova Scotia Government's ongoing commitment to measure early childhood development using the population-based EDI, is encouraging. However, without high-quality information about development, skill acquisition, and educational achievement across childhood and into adolescence, it is difficult to ascertain a complete picture of how well children and youth in Nova Scotia are learning. Greater efforts are needed to improve the monitoring of development and learning outcomes across the lifespan with attention to existing gaps, for example, measuring the development of young children or tracking the outcomes of adolescents after graduation.

Available data suggest there is significant room for improvement to realize the right of children and youth to learning and education (UNCRC Articles 28 and 29). Child-care settings and schools also have a recognized role in supporting leisure, play, and culture (UNCRC Article 31).[1] Implementing affordable, high-quality child care and earlier formalized opportunities for childhood education may help improve children's preparedness for school entry. Adding at least one more measurement point at the age of 18 months, as has been implemented in many jurisdictions across North America, would help with earlier identification of vulnerabilities and provide guidance for early intervention prior to school entry.

A child's or youth's ability to learn is influenced by their enjoyment and feeling of safety in the school environment. Many Nova Scotian children and youth feel that school is not a safe and enjoyable place to be. Therefore, it is critical that the province continue to implement ongoing strategies to hear from young people of school age about their experiences. Nova Scotia's *Inclusive Education Policy* is an important step forward in supporting student achievement and well-being.[19]

Further efforts are needed to ensure that learning environments provide safe, inclusive, educational experiences that foster a desire to learn and promote optimal well-being in all children and youth.

SOURCES FOR THIS SECTION

1. United Nations (1990). Convention on the Rights of the Child: General Assembly Resolution 44/25 of 20.
2. Heckman JJ (2011). The Economics of Inequality. American Educator; 31–47.
3. Council of Ministers of Education (2021). PCAP 2019 Report on the Pan-Canadian Assessment of Mathematics, Reading, and Science. Available from: https://www.cmec.ca/publications/lists/publications/attachments/426/pcap2019-public-report-en.pdf. Accessed Friday November 12, 2021.
4. Province of Nova Scotia (2018). Nova Scotia Early Learning Curriculum Framework. Available from: https://www.ednet.ns.ca/docs/nselcurriculumframework.pdf. Accessed June 22, 2021.
5. Akbari E, McCuaig K, Foster D (2021). The Early Childhood Education Report 2020. Ontario Institute for Studies in Education/University of Toronto. Available from: http://ecereport.ca/media/uploads/2021-profiles-en/ns_20.pdf. Accessed October 22, 2021.
6. Saulnier C, Findlay T (2021). On the right track: Reflections on the federal-provincial bilateral agreement on early learning and child care in Nova Scotia. Canadian Centre for Policy Alternatives. Available from: https://monitormag.ca/articles/on-the-right-track-reflections-on-the-federal-provincial-bilateral-agreement-on-early-learning-and-child-care-in-nova-scotia. Accessed October 22, 2021.
7. Statistics Canada (2021). Survey on Early Learning and Child Care Arrangements, 2020: Difficulties for parents/guardians in finding a child care arrangement, children aged 0 to 5 years. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=4210000101. Accessed October 22, 2021.
8. Province of Nova Scotia (2021). Early Development Instrument (EDI). Available from: https://www.ednet.ns.ca/edi. Accessed June 22, 2021.
9. UNICEF Canada (2019). Where Does Canada Stand? The Canadian Index of Child and Youth Well-being 2019 Baseline Report Available from: https://oneyouth.unicef.ca/sites/default/files/2019-08/2019_Baseline_Report_Canadian_Index_of_Child_and_Youth_Well-being.pdf. Accessed June 22, 2021.
10. Province of Nova Scotia (n.d.). Literacy and Mathematics/Mathématiques in Grade 3. Available from: https://plans.ednet.ns.ca/grade3. Accessed June 22, 2021.
11. Province of Nova Scotia (n.d.). Reading, Writing, and Mathematics/Mathématiques in Grade 6 (RWM6). Available from: https://plans.ednet.ns.ca/grade6. Accessed June 22, 2021.
12. Province of Nova Scotia (2008). Special Education Policy. Available from: https://studentservices.ednet.ns.ca/sites/default/files/speceng.pdf. Accessed June 22, 2021.
13. Province of Nova Scotia (2016). Individual Program Plan Review. Available from: https://www.ednet.ns.ca/docs/individualprogramplanreview.pdf. Accessed June 22, 2021.
14. Darling-Hammond L, DePaoli J (2020). Why School Climate Matters and What Can Be Done to Improve It. State Education Standard, 20(2):7-11.
15. Province of Nova Scotia (2020). Student Success Survey, 2018-2019 Available from: https://plans.ednet.ns.ca/sites/default/files/documents/2018-2019_StudentSuccessSurvey.pdf. Accessed June 22, 2021.
16. Craig W, et al (2020). Health and Health-Related Behaviours among Young People: Nova Scotia Report.
17. Statistics Canada (2020). Education Indicators in Canada: An International Perspective, p.162. Available from: https://www150.statcan.gc.ca/n1/en/catalogue/81-604-X. Accessed October 5, 2021.
18. Province of Nova Scotia (2018). Graduation Rates. Available from: https://data.novascotia.ca/Education-Primary-to-Grade-12/Graduation-Rates/fqau-nfyv. Accessed October 5, 2021.
19. Whitley J, Hollweck T (2020). Inclusion and equity in education: Current policy reform in Nova Scotia, Canada. Prospects, 49:297–312.

ARE WE HEALTHY?

Physical well-being

ARE WE HEALTHY?

Physical well-being

The UNCRC affirms every child's right to enjoy the best possible health (UNCRC Article 24).[1] This means having access to good-quality health education and healthcare services, clean water, nutritious food, and an environment free of pollution. Strong physical health in childhood is fundamental to establishing overall well-being.

Setting the stage for children and youth to develop healthy behaviours and lifelong physical health and health behaviours cannot be achieved if children and youth are not provided with optimal social conditions. For example, whether a baby is born into a family with sufficient income to afford basic nutritious foods directly influences a mother's ability to breastfeed and a child's body weight in later childhood and adolescence.[2]

Behaviours we know are important for health, like being physically active, getting enough sleep, and eating nutritiously are also a reflection of social conditions. The reality is that for many young people, the ability to engage in healthy behaviours is not only about choice. This is because the choices we make are shaped by the choices we have.[3] Not all children and youth have access to fresh fruits and vegetables, a quiet place to rest, or low-cost physical activities to optimize their physical health. Healthy public policy and equitable access to resources are needed to positively shape the physical health and well-being of children and youth.

Of concern, Canada ranks 30th out of 38 wealthy countries when it comes to childhood physical health.[4] Data from Nova Scotia also support the need to improve upon child and youth physical health outcomes. Enhancing access to opportunities for regular physical activity, affordable nutritious food, and safe and secure homes is essential for children and youth in the province to enjoy the best possible health.[3]

AT A GLANCE

Nova Scotia
Canada

Dimension	Indicator	Nova Scotia	Canada
Birth outcomes	**Infant mortality** Five-year average of infant deaths under one year of age *Statistics Canada, Infant deaths and mortality rates, by age group, 2015-2019 Table: 13-10-0713-01*	4.3 in 1,000	4.5 in 1,000
	Preterm birth Five-year average of live births before 37 weeks gestation *Statistics Canada/Vital Statistics, live births, by weeks of gestation 2016-2020 Table: 13-10-0425-01*	7.7%	7.9%
	Small size for gestational age Percentage of infants born with birthweight below the 10th percentile for gestation age and sex *Statistics Canada/Vital Statistics. Birth-related indicators 2015-2017*	9.2%	9.1%
Physical health status	**Positive self-rated physical health** Percentage of children aged 12 to 17 years that rated their health as very good or excellent *Statistics Canada, Canadian Community Health Survey, Annual Component, 2020 Table 13-10-0763-01*	77.6%	76.5%
	Overweight or obesity Percentage of children aged 12 to 17 years with overweight or obesity as measured by Body Mass Index *Statistics Canada, Canadian Community Health Survey, Annual Component, 2019 Table 13-10-0096-01*	36.7%	24.5%
	Injuries that required medical treatment Percentage of students in grades 6 to 10 that sustained an injury requiring medical treatment *Health Behaviour in School-aged Children survey, 2018/2019**	48-55%	46-52%
Healthy behaviors	**Sexually active** Percentage of students in grades 9 and 10 engaging in sexual intercourse *Health Behaviour in School-aged Children survey, 2018/2019**	25.6%	18.9%

* Indicates a custom data request from the data source indicated.

Nova Scotia
Canada

Dimension	Indicator		
Healthy behaviors (cont'd)	**Safe sexual practices (oral contraceptive)** Percentage of students in grades 9 and 10 that reported they or their partner used an oral contraceptive the last time they had sex *Health Behaviour in School-aged Children survey, 2018/2019**	57.4% 50.0%	
	Safe sexual practices (condom) Percentage of students in grades 9 and 10 that reported they or their partner used a condom the last time they had sex *Health Behaviour in School-aged Children survey, 2018/2019**	60.3% 62.4%	
	Births to adolescents Fertility rate of adolescent women 15 to 19 years per 1,000 women *Statistics Canada: Fertility rates, women aged 15 to 19 years (per 1,000 women), 2020 Table 13-10-0418-02*	7.4 per 1,000 5.5 per 1,000	
	Step guidelines Percentage of children aged 5 to 19 years taking at least 12,000 steps per day, 2014-2016 *ParticipACTION Report Card on Physical Activity for Children and Youth, 2020*	39% 41%	
	Daily physical activity guidelines Percentage of students that reported being physically active each of the last 7 days for a minimum of 60 minutes per day *Health Behaviour in School-aged Children survey, 2018/2019**	27.9% 25.1%	
	Sufficient sleep Percentage of students meeting the recommended sleep duration for their age group, 9 to 10 hours for 6 to 13 years, 8 to 10 hours for 14 to 17 years *Health Behaviour in School-aged Children survey, 2018/2019**	79.7% 80.7%	
Nutrition and eating	**Breastfeeding** Percentage of mothers that breastfed or tried to breastfeed their last child or gave breastmilk to their last child even if only for a short time *Statistics Canada, Canadian Community Health Survey, Health characteristics, two-year period estimates, 2017/2018 Table: 13-10-0113-01*	88.6% 90.9%	
	Nutritious foods Percentage of students that reported eating both fruits and vegetables at least once per day *Health Behaviour in School-aged Children survey, 2018/2019**	34.8% 42.0%	
Public policies related to health and healthcare services	**Access to a regular healthcare provider** Percentage of students aged 12 to 17 years that have a regular healthcare provider, 2020 *Statistics Canada, Canadian Community Health Survey, Annual Component, 2020 Table 13-10-0096-01*	85.3% 85.3%	

* Indicates a custom data request from the data source indicated.

Nova Scotia
Canada

Dimension	Indicator		
Public policies related to health and healthcare services (cont'd)	**Vaccination by age 2**		
	Diphtheria, pertussis, and tetanus Percentage of children that received 3 or more doses of diphtheria, pertussis, and tetanus vaccine by age 2 as recommended *Vaccine Coverage in Canadian Children, Public Health Agency of Canada, 2017*	73.8% 75.8%	
	Polio Percentage of children that received 3 or more doses of polio vaccine by age 2 as recommended *Vaccine Coverage in Canadian Children, Public Health Agency of Canada, 2017*	93.5% 90.7%	
	Haemophilus influenzae type B (HIB) Percentage of children that received 4 or more doses of HIB vaccine by age 2 as recommended *Vaccine Coverage in Canadian Children, Public Health Agency of Canada, 2017*	68.5% 73.4%	
	Measles Percentage of children that received 1 dose or more of measle vaccine by age 2 as recommended *Vaccine Coverage in Canadian Children, Public Health Agency of Canada, 2017*	87.1% 90.2%	
	Mumps Percentage of children that received 1 dose or more of mumps vaccine by age 2 as recommended *Vaccine Coverage in Canadian Children, Public Health Agency of Canada, 2017*	86.8% 89.9%	
	Rubella Percentage of children that received 1 dose or more of rubella vaccine by age 2 as recommended *Vaccine Coverage in Canadian Children, Public Health Agency of Canada, 2017*	86.8% 90.0%	
	Varicella Percentage of children that received 1 dose or more of varicella vaccine by age 2 as recommended *Vaccine Coverage in Canadian Children, Public Health Agency of Canada, 2017*	84.8% 82.9%	
	Meningococcal type C Percentage of children that received 1 dose or more of meningococcal-C vaccine by age 2 as recommended *Vaccine Coverage in Canadian Children, Public Health Agency of Canada, 2017*	81.8% 87.6%	
	Pneumococcal Percentage of children that received 1 dose or more of pneumococcal vaccine by age 2 as recommended *Vaccine Coverage in Canadian Children, Public Health Agency of Canada, 2017*	80.4% 81.4%	

* Indicates a custom data request from the data source indicated.

Nova Scotia

Canada

Dimension	Indicator		
Public policies related to health and healthcare services (cont'd)	**Vaccination in early childhood**		
	Influenza Percentage of children aged 6 to 59 months that received the influenza vaccine *Influenza Immunization Report, Nova Scotia, 2019-2020*	**50.4%** **N/A**	
	Vaccination in adolescence		
	Tetanus, diphtheria, pertussis (TDAP) Percentage of youth that received the recommended doses of TDAP vaccine by Dec. 31st of grade 8 *Nova Scotia School-based Immunization Coverage Report for 2018-2019*	**89.4%** **N/A**	
	Human papillomavirus (HPV) Percentage of youth that received the recommended doses of HPV vaccine by Dec. 31st of grade 8 *Nova Scotia School-based Immunization Coverage Report for 2018-2019*	**84.9%** **N/A**	
	Meningococcal quadrivalent vaccination (Med-Quad) Percentage of youth that received the recommended doses of Men-Quad vaccine by Dec. 31st of grade 8 *Nova Scotia School-based Immunization Coverage Report for 2018-2019*	**91.8%** **N/A**	
	Hepatitis B Percentage of youth that received the recommended doses of Hepatitis B vaccine by Dec. 31st of grade 8 *Nova Scotia School-based Immunization Coverage Report for 2018-2019*	**84.3%** **N/A**	

* Indicates a custom data request from the data source indicated.

PHYSICAL HEALTH IN EARLY LIFE

The foundations for lifelong physical health are laid during pregnancy, birth, and early infancy.[2] Not only do these periods mark the start of a child's life, but they are also a time of significant change for families in terms of their economic situation and social relationships within and outside of the family. These milestones provide a window of opportunity to influence child health through a family's frequent contact with health services and the potential for increased receptivity to health promotion. In Nova Scotia, key indicators about pregnancy and early infancy are collected through the *Atlee Perinatal Database*, which was established in 1998 and is the longest-running database of its kind in Canada.[5] Information about pregnant mothers and babies either born after 20 weeks' gestation or who weigh more than 500g are included in the database. Data are derived from standardized prenatal, hospital, and delivery forms used across the province (and that include ethnicity).[5]

Weight at birth, prematurity, and perinatal mortality

A child's weight at birth and whether they are born preterm are widely accepted as important indicators for their mortality, growth, development, and physical health status in childhood and beyond.[2] On average, 8,276 babies were born per year in Nova Scotia from 2015 to 2019.[5] The rate of infant mortality during this period was 4.3 in 1,000 births, very similar to the national average of 4.5 in 1,000 births in 2019.[6] This rate is on par with the United Nations' Sustainable Development Goal of 5 in 1,000 births but higher than several other rich nations with resources similar to Nova Scotia and Canada.[4]

Of babies born in Nova Scotia from 2016 to 2020, 7.7 percent were delivered preterm (before 37 weeks' gestation), similar to the national average of 7.9 percent.[5] During this same period, 9.2 percent of infants were born with a birth weight below the 10th percentile of expected weight for their gestational age and sex[5] based on a Canadian reference population, the same as in Canada (9.1%).[7]

Several complex and interrelated factors contribute to infant mortality, prematurity and low birth weight, all with downstream impacts on lifelong health and well-being.[2] Some of these factors can be modified by the actions of decision-makers working at the policy level, such as income. For example, data point to a corelation between income and babies born with low weight for their gestation in Nova Scotia.[8] Based on postal code income estimates, the rate of babies born with a weight under the 10th percentile for their gestation who come from neighbourhoods with the lowest income was 10.4 percent compared to 7.6 percent from highest-income neighbourhoods.[5]

Breastfeeding

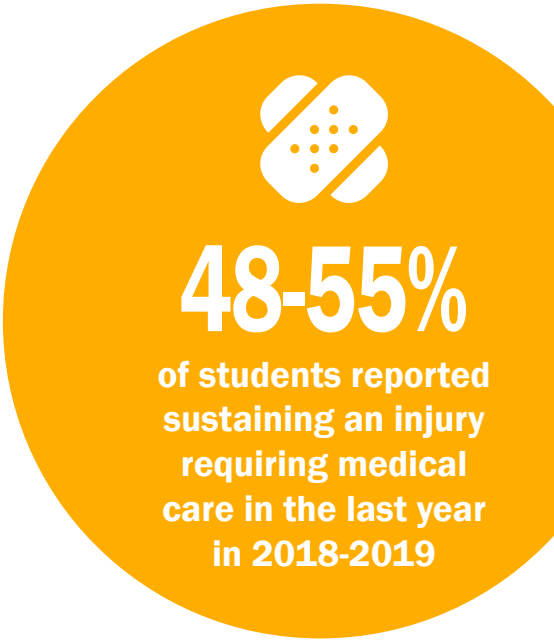
Breastfeeding is also considered an important indicator of the physical health of children and exclusively breastfeeding infants until six months of age is recommended globally.[9] In Nova Scotia between 2015 and 2019, breastfeeding had been initiated when the family left the hospital for 86 percent of babies based on data recorded in the *Atlee Perinatal Database*.[5] Based on a *Statistics Canada* survey of mothers, 88.6 percent self-reported breastfeeding, trying to breastfeed, or having given breastmilk to their last born child even if only for a short time versus 90.9 percent nationally.[10] More robust data on breastfeeding are lacking in the province. Parents who breastfeed need a host of positive social conditions to be successful – from food security to safe and nurturing relationships.

GROWING UP HEALTHY

For children and youth to enjoy physical health as they grow up, healthy behaviours must be promoted and harms to physical health prevented where possible. When sickness or chronic medical needs arise, children and youth must receive the support they require. In 2020, just over three-quarters of Nova Scotia's youth aged 12 to 17 years rated their own health as very good or excellent (77.6 percent) similar to the Canadian average of 76.5 percent.[11] Improving how children and youth view their own physical health is important and additional data about health outcomes, threats to physical health, health behaviours, and the quality of health services help paint a more detailed picture of the physical health status of children and youth in Nova Scotia beyond infancy.

Injuries

Injuries represent a critical threat to child and youth physical health and well-being.[12] Across Canada, injury is the leading cause of death and a major cause of hospitalization for children. Children and youth are particularly vulnerable to unintentional injuries, which can have lifelong health and social impacts.[13] Additionally, many social determinants of health, such as low socioeconomic status, correlate with higher injury rates. The last major review of unintentional injuries in Nova Scotia assessed the period between 2004 to 2013.[13]



The most recent available data specific to Nova Scotia suggest that injuries continue to be a threat to child and youth well-being. In 2019, 21 percent of all emergency department visits to the IWK Health Centre, the region's tertiary care children's hospital, were related to unintentional injuries.[14] The largest proportion of children and youth seen for such injuries were between the ages of 2 and 14 years old.

Further information about the prevalence of injury can be gleaned from students in grades 6 to 10 who responded to the 2018-2019 *Health Behaviour in School-aged Children survey* in Nova Scotia.[15] Youth were asked whether they had sustained an injury requiring medical treatment in the past year. Based on grade and self-reported gender, between 48 to 55 percent of students had experienced such an injury.[15] Overall, grade 9 to 10 students were more likely than grade 6 to 8 students to report sustaining injuries requiring care overall. Boys in grades 6 to 8 and girls in grades 9 to 10 were the most likely to report sustaining an injury requiring medical treatment (55 percent and 54 percent, respectively).[15] This is higher than their peers in other provinces and territories who reported such injuries at rates of 52 percent and 46 percent, respectively.[15]

The Atlantic Collaborative on Injury Prevention is currently developing a report that will determine the cost of intentional and unintentional injuries. That report, due in 2022, will increase understanding about the impacts of injury on Nova Scotia's young people and the broader society. Further work is required to assess the nature and rate of injury in children and youth in the province compared to the rest of Canada for more recent years.

Sexual and reproductive health

Youth must be supported in making healthy choices about their sexual and reproductive health as a contributor to their overall physical health and well-being.[16] Sexual health is defined as the ability to embrace and enjoy our sexuality throughout our lives. The definition also acknowledges the sexual rights of individuals. Positive outcomes include: respect for self and others, self-esteem, non-exploitive sexual relations, and making informed reproductive choices.[17,18] To understand sexual health, we must think about it positively, as an important part of life, and an integral aspect of physical and emotional well-being.

Systematically collected data on youth sexual health in Nova Scotia is limited and sparse. From the 2018-2019 *Health Behaviour in School-aged Children survey*, the most recent known source of population-level information for youth sexual activity, Nova Scotia students were more likely than students in the rest of Canada to report that they had sexual intercourse: 25.6 percent versus 18.9 percent for boys, respectively.[15]

Fewer than two-thirds of grade 9 and 10 students reported using condoms the last time they had sex (60.3 percent). This was slightly lower than the Canadian average (62.4 percent). A higher percentage of grade 9 and 10 students reported using an oral contraceptive pill the last time they had sex than the national average (57.4 percent versus 50.0 percent).[15]

An unintended pregnancy in adolescence represents a challenge with far-reaching impacts for both youth and their babies. Decreased educational attainment, lower socioeconomic status, and greater rates of mental illness, substance use, and domestic violence have all been recorded among adolescent parents.[19,20] Furthermore, infants born to younger females may also face greater risk of some adverse outcomes in the perinatal period, such as preterm birth and having low weight for gestational age, and the impact of the social determinants of health.[19]

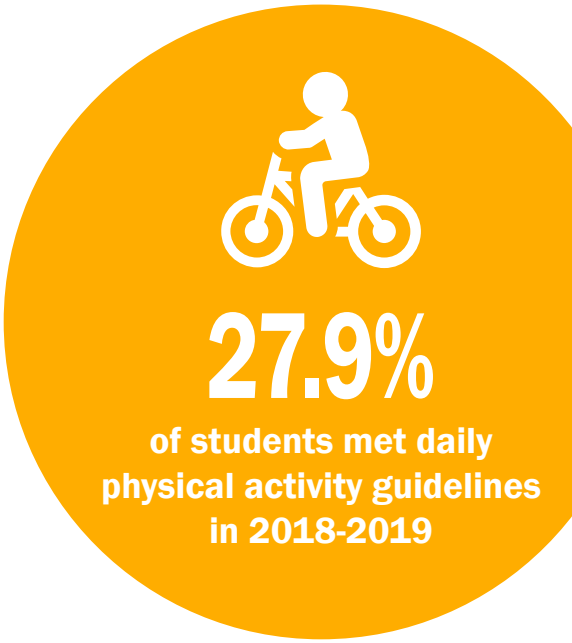
The age-specific fertility rate for females aged 15 to 19 years in 2020 was 7.4 births per 1000 females of this age group in Nova Scotia, compared to 5.5 per 1000 in Canada overall. These rates have decreased annually since 2015. This is consistent with data available from the *Atlee Perinatal Database*, which showed that deliveries to women under 20 years represented 3.3 percent of all deliveries in Nova Scotia between 2015 and 2019, down from 6.2 percent in 2009.[5] One in four deliveries in this group were to women under 18 years of age, accounting for more than 300 births. There were approximately 1,000 births to women aged 18 to 19 years during this period.[5]

The key to reducing the incidence of pregnancy in adolescence and the adverse outcomes that may follow is low-barrier access to contraception.

The Canadian Paediatric Society has called for all contraceptives, including condoms, to be covered under provincial/territorial or federal health plans at no cost until age 25 and readily available in places where youth spend their time.[22]

Physical activity

To grow up healthy, it is important for children and youth to engage in physical activity to achieve important health benefits such as the prevention of chronic diseases. Many factors beyond individual choice influence a young person's ability to be sufficiently active such as the quality of the built environment and social determinants of health like income. A 2020 report by ParticipACTION on physical activity among Canadian children and youth paints a depressing



picture.[23] Canada was given an overall physical activity grade of D+ for the second consecutive year.[23] Provincial estimates paint a similarly dismal picture.

Taking at least 12,000 steps per day on average is an objective benchmark to approximate whether children and youth are meeting the *Canadian 24-Hour Movement Guidelines for Children and Youth*. The guidelines recommend 60 minutes of moderate-to-vigorous physical activity (MVPA) per day. Only 39 percent of Nova Scotian children aged 5 to 19 years were taking at least 12,000 steps daily on average from 2014 to 2016, slightly less than the national average of 41 percent, a figure that has barely changed in over a decade.[23] Student respondents to the 2018-2019 *Health Behaviour in School-aged Children survey* in 2018-19 echoed this lack of physical activity by self-report.[15] Just 27.9 percent of students in grades 6 to 10 reported meeting suggested physical activity guidelines of a minimum of 60 minutes per day, in the 7 days leading up to the survey. This was slightly higher than the national average of 25.1 percent. Concerningly, girls in grades 9 to 10 were least likely to meet this guidelines with just 16 percent reporting physical activity for a minimum of 60 minutes over the preceding seven days.[15]

Because children and youth spend a considerable amount of time in school, it is important that health and well-being are supported in this setting.

From the 2018-19 *Health Behaviour in School-aged Children survey* it appears there is room to increase opportunities for physical activity in schools. Between 17 to 32 percent of Nova Scotian students in grades 6 to 10 spent four or more hours a week participating in physical activity during class time. This was slightly lower than students in the rest of Canada.[15]

Sleep

Adequate sleep is not only critical for the physical health and well-being of young people, but also for other facets of their lives, such as the ability to learn.[24] The Canadian Paediatric Society recommends 9 to 12 hours of sleep for children 6 to 12 years old, and 8 to 10 hours of sleep for youth 13 to 18 years based on guidelines from the American Academy of Sleep Medicine.[24,25]

In the 2018-2019 *Health Behaviour in School-aged Children survey,* child and youth responses about sleep were measured against sleep duration recommendations of the National Sleep Foundation in the U.S., which are 9 to 11 hours of sleep per night for children 6 to 13 years of age, and 8 to 10 hours for young people 14 to 17 years of age.[26] Approximately three-quarters of Nova Scotian students in grades 9 and 10 reported meeting these recommendations, similar to the national average. More children in grades 6 to 8 reported meeting recommendations (88 percent of boys and 86 percent of girls).[15]

Healthy eating

Consumption of vegetables and fruits is a marker for healthy eating, which, in turn, impacts overall physical health. Data indicate that fewer than half of Nova Scotian children in grades 6 to 8 eat fruits and vegetables at least once a day or more, less than their counterparts across Canada.[15] Nova Scotian students are also more likely than students in the rest of the country to engage in unhealthy eating behaviours, like skipping breakfast and eating fast food.[15]

Public policy that impacts the marketing and availability of unhealthy food is a key contributor to young people's ability to engage in healthy eating.

The proximity of food outlets with nutritious food and the affordability of nutritious food are undeniably linked to the ability to engage in healthy eating.[27]

Body weight

Weight status is typically used as a proxy measure of health behaviours, mostly in conjunction with height to calculate body mass index (BMI).[28] BMI, although widely used, is an imperfect measure that does not reflect all populations.[28] Even though weight status and/or BMI are frequently used as measures of individual behaviours, they are more valuable indicators for reflecting the quality of public policy, especially policy that supports healthy food systems and supportive environments that are designed to prevent chronic disease.

Based on data from the *Canadian Community Health Survey, 2019*, 36.7 percent of Nova Scotian children and youth aged 12 to 17 years live with overweight or obesity compared to a Canadian average of 24.5 percent.[11] BMI data collected through the 2018-19 *Health Behaviour in School-aged Children survey* for students in grades 6 to 10 are consistent with the Canadian average for girls, but show a sex difference for boys, who reported a higher BMI than the national average.[15]

PASS THE MIC

"We need to recruit enough medical professionals and make sure kids are taken care of. We also need access to information about how to get mental health and dental care"

- Youth participant

Access to healthcare

Healthcare consumes government dollars and frequently generates public debate. Canadians are indeed fortunate to benefit from universal public healthcare that is the envy of nations worldwide. For children and youth, access to quality healthcare that places an emphasis on preventive care is critical to well-being. Young children and families benefit from developmental assessments, vaccinations, and anticipatory guidance from their primary healthcare providers.

Primary care providers also have a major role to play in the diagnosis and management of physical and mental health conditions. In 2020, 85.3 percent of youth aged 12 to 17 years reported having a regular healthcare provider in Nova Scotia, which is the same as the national average.[11] Given that these are reported estimates, the actual number of children and youth without access to a regular healthcare provider and the frequency of contact with this provider is unknown. Furthermore, these estimates exclude important groups of children and youth, such as those living on reserve and those living in foster care.[11]

Healthcare plays a small part in what makes and keeps children and youth healthy and well. The social determinants of health play the greatest role in determining health status. As such, any effort to improve the healthcare system must consider the upstream effects of prevention and healthy public policy that serve to bolster key social determinants such as income, housing, education, and the quality of built and natural environments.

Immunizations

Immunizing children against vaccine-preventable diseases is one of society's best tools to ensure physical health. Canadian children benefit from universal public healthcare, which ensures vaccines are available to all.[29] Concerningly, increasing vaccine hesitancy across Canada represents a significant threat to the widespread uptake of vaccines in childhood.[30] Due to the historic lack of a centralized registry and variability in vaccine schedules across Canada, it is difficult to estimate the proportion of children that are vaccinated both provincially and nationally. Efforts are currently under way to correct this, and Nova Scotia is expected to participate in a national vaccine registry in the coming years.

The most recent estimates of vaccine coverage in young children come from the *Childhood National Immunization Coverage Survey*, which collects caregiver reports of immunization status. As of 2017, the most recent year for which there are public data, Nova Scotia lags behind the national average when it comes to vaccine coverage at the time of a child's second birthday for most routine childhood vaccines. Pertussis (whooping cough) and varicella (chicken pox) vaccines were the exceptions.[31] For example, 73.8 percent of children in Nova Scotia versus 75.8 percent of children in Canada had received four or more doses of diphtheria, pertussis, and tetanus vaccines by age two. Both figures are well below the target set by the World Health Organization for pertussis vaccination: 95 percent coverage.[31]

A national target of 90 percent vaccination coverage by 17 years has been set for youth to receive a meningococcal vaccine, an additional Hepatitis B and tetanus, diphtheria, and acellular pertussis vaccine.[29] More recently, the human papillomavirus vaccine was added to this target group.[29]

In Nova Scotia, these vaccines are delivered to children in grade 7. Encouragingly, the provincial coverage rates of school-based immunizations in these students were above 80 percent for all provincial health zones in the 2018-2019 school year.[29] However, the province has yet to reach the target of 90 percent for three of the four vaccines related to this national target. Of note, home-schooled students in Nova Scotia, representing 1.1 percent of the grade 7 student population in the year assessed, have significantly lower provincial coverage rates

Healthcare plays a small part in what makes and keeps children and youth healthy and well. The social determinants of health play the greatest role in determining health status.

across all vaccines.[32] These rates ranged from 24.3 percent to 34 percent and highlight the need for targeted vaccination efforts for these children.[32] It should be noted that school closures during the COVID-19 pandemic may have impacted immunizations given in schools in the 2020-2021 school years. This may be a particular issue for the 14.4 percent of youth who reported they don't have access to a regular healthcare provider.[11]

In Nova Scotia, children aged six to 59 months are a priority population for immunization against influenza as part of a universal publicly funded influenza vaccine program for all individuals six months of age or older that was established in 2010.[33] In the 2019-2020 influenza season, the most recent year for which there are data, the coverage rate for children aged six to 59 months was 50.4 percent, with a low of 33.1 percent in the Western Zone to a high of 60 percent in the Central Zone.[33]

EMERGING ISSUE

MENSTRUAL POVERTY

Researchers at the IWK Health Centre have developed a questionnaire to estimate the impact of menstrual poverty (i.e., the inability to afford menstrual products) on adolescents in Nova Scotia.[34] Out of 420 respondents, 65 percent didn't always have enough money to buy menstrual products. This has led to unsafe menstrual hygiene practices, including using alternatives for menstrual products (e.g., rags), washing disposable menstrual products, and wearing products for longer than intended. Up to 40 percent of respondents reported affordability of menstrual products as a cause of school absenteeism and lack of participation in sport or social activities. Although having menstrual products available in schools in Nova Scotia has improved access, 70 percent of respondents still felt embarrassed to ask for them. Almost all respondents supported the idea of freely available menstrual products in public washrooms.

THE BOTTOM LINE

Every child has the right to the best possible health but too many children and youth in Nova Scotia face threats to their physical health like poverty, food insecurity, and a lack of access to safe places to move and play. Settings like schools should be optimized to provide the conditions necessary for children to learn about and practice positive health behaviours. Strong public policies are needed to support the conditions for physical health ranging from urban design and transportation to sound economic, food, and housing policies.

With almost half of the provincial budget being spent on delivering care for sickness, we must support our children and youth to achieve their full health potential long before illness or disease arises. Investing preventatively in the physical health and well-being of young people and their families makes good economic sense; data suggest that comprehensive health promotion programs in schools could have a return on investment of $13 for every dollar invested in future healthcare cost savings.[35] Ensuring access to preventive health services and responsive healthcare when disease or illness arises is also critical to supporting lifelong physical health and well-being in childhood.

SOURCES FOR THIS SECTION

1. United Nations (1990). Convention on the Rights of the Child: General Assembly Resolution 44/25 of 20.
2. Suzuki, K (2018). The developing world of DOHaD. Journal of Developmental Origins of Health and Disease, 9: 266–269.
3. Province of Nova Scotia (2012). Thrive! Plan for a Healthier Nova Scotia (press release). Available from: https://novascotia.ca/news/smr/2012-06-07-Thrive-Plan/. Accessed October 6, 2021
4. UNICEF Canada (2020). Worlds Apart: Canadian Companion to UNICEF Report Card 16. Available from: https://oneyouth.unicef.ca/sites/default/files/2020-09/UNICEF%20RC16%20Canadian%20Companion%20EN_Web.pdf. Accessed October 5, 2021.
5. Reproductive Care Program of Nova Scotia (n.d.). The Nova Scotia Atlee Perinatal Database. Available from: http://rcp.nshealth.ca/atlee-database. Accessed June 13, 2020.
6. Statistics Canada (2020). Infant deaths and mortality rates, by age group. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310071301 (2020). Accessed October 6, 2021.
7. Kramer MS, et al (2001). Fetal/Infant Health Study Group of the Canadian Perinatal Surveillance System. A new and improved population-based Canadian reference for birth weight for gestational age. Pediatrics 108: E35.
8. Joseph KS, et al (2007). Socioeconomic status and perinatal outcomes in a setting with universal access to essential health care services. *CMAJ* 177: 583–590.
9. Kramer MS, Kakuma R. (2012). Optimal duration of exclusive breastfeeding. Cochrane database of systematic reviews, CD003517.
10. Statistics Canada (2019). Health characteristics, two-year period estimates: Breast milk feeding initiation, 2017/2018. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1310011301. Accessed October 6, 2021.
11. Statistics Canada (2020). Health Characteristics: Annual Estimates. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1310009601. Accessed October 6, 2021.
12. Canadian Pediatric Society (2012). Child and Youth Injury Prevention: A Public Health Approach (Position Statement). Paediatr Child Health 17: 511.
13. Atlantic Collaborative on Injury Prevention & Child Safety Link (2018). Atlantic Canada Child & Youth Unintentional Injury Hospitalizations: 10 Years in Review (2004-2013). Available from: https://childsafetylink.ca/wp-content/uploads/2018/03/Atlantic-Hospitalization-Report-2018_en-Revised-March-2018.pdf. Accessed october 6, 2021.
14. Government of Canada (n.d.). Canadian Hospitals Injury Reporting and Prevention Program. Available from: https://www.canada.ca/en/public-health/services/injury-prevention/canadian-hospitals-injury-reporting-prevention-program.html#a3. Accessed october 6, 2021.
15. Craig W, et al (2020). Health and Health-Related Behaviours among Young People: Nova Scotia Report.
16. American Sexual Health Association (n.d.). Understanding Sexual Health. Available from: http://www.ashasexualhealth.org/sexual-health/. Accessed October 6, 2021.
17. Public Health Agency of Canada (2011). The Chief Public Health Officer's Report on the State of Public Health in Canada (2011). Youth and Young Adults — Life in Transition. Available from: http://www.phac-aspc.gc.ca/cphorsphc-respcacsp/2011/index-eng.php#toc. Accessed October 6, 2021.
18. Public Health Agency of Canada (2008). Canadian Guidelines for Sexual Health Education. Available from: http://www.phac-aspc.gc.ca/publicat/cgshe-ldnemss/pdf/guidelines-eng.pdf. Accessed October 6, 2021.
19. Thompson G (2016). Meeting the needs of adolescent parents and their children. Available from: https://www.cps.ca/en/documents/position/adolescent-parents. Accessed october 6, 2021.

20. Jain LH, Van Eyk N, Woolcott C, Kuhle S (2018). Characteristics and Outcomes of Adolescent Births in Nova Scotia: A Retrospective Cohort Study. J Obstet Gynaecol Can, 40: 1459–1465.

21. Statistics Canada (2021). Fertility rates, women aged 15 to 19 years (per 1,000 women). Available from: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310041802. Accessed October 6, 2021.

22. Di Meglio G, Yorke E (2019). Universal access to no-cost contraception for youth in Canada. Available from: https://cps.ca/en/documents/position/universal-access-to-no-cost-contraception-for-youth-in-canada. Accessed October 6, 2021.

23. ParticipACTION (2020). The 2020 ParticipACTION Report Card for Children and Youth. Available from: https://www.participaction.com/en-ca/resources/children-and-youth-report-card. Accessed October 6, 2021.

24. Canadian Paediatric Society (2017). Healthy sleep for your baby and child. Available from: https://caringforkids.cps.ca/handouts/pregnancy-and-babies/healthy_sleep_for_your_baby_and_child. Accessed October 6, 2021.

25. Paruthi S, et al (2016). Recommended amount of sleep for pediatric populations: a consensus statement of the American Academy of Sleep Medicine. J Clin Sleep Med, 12: 785–786.

26. Hirshkowitz M, et al (2015). National Sleep Foundation's updated sleep duration recommendations: final report. Sleep Health, 1: 233–243.

27. Ziauddeen N, et al (2018). Eating at food outlets and leisure places and "on the go" is associated with less-healthy food choices than eating at home and in school in children: cross-sectional data from the UK National Diet and Nutrition Survey Rolling Program (2008–2014). *The American Journal of Clinical Nutrition,* 107:992–1003.

28. Must A, Anderson S (2006). Body mass index in children and adolescents: considerations for population-based applications. Int J Obes, 30: 590–594.

29. Government of Canada (2017). National Immunization Strategy. Available from: https://www.canada.ca/en/public-health/services/immunization-vaccine-priorities/national-immunization-strategy/vaccination-coverage-goals-vaccine-preventable-diseases-reduction-targets-2025.html. Accessed October 6, 2021.

30. Dubé E, et al (2016). Understanding Vaccine Hesitancy in Canada: Results of a Consultation Study by the Canadian Immunization Research Network. PLoS One, 11: e0156118.

31. Public Health Agency of Canada (2019). Vaccine coverage in Canadian children: Results from the 2017 childhood National Immunization Coverage Survey (cNICS). Available from: https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/healthy-living/2017-vaccine-uptake-canadian-children-survey/2017-vaccine-uptake-canadian-children-survey-eng.pdf. Accessed October 6, 2021.

32. Nova Scotia Health (2020). Nova Scotia School-Based Immunization Coverage Report for 2018-2019. Available from: https://www.nshealth.ca/sites/nshealth.ca/files/20201026_2018-2019_school-based_immunization_coverage_report.pdf. Accessed October 6, 2021.

33. Department of Health and Wellness (2020). Influenza Immunization Report 2019-2020 Influenza Season. Available from: https://novascotia.ca/dhw/populationhealth/documents/Influenza_Immunization_Report_2019-2020.pdf. Accessed October 6, 2021.

34. D'Entremont Y (2021). IWK study collecting data on period poverty to advocate for free menstrual products in public washrooms. Halifax Examiner. Available from: https://www.halifaxexaminer.ca/featured/iwk-study-collecting-data-on-period-poverty-to-advocate-for-free-menstrual-products-in-public-washrooms/. Accessed December 12, 2021.

35. APPLE Schools (2015). Healthy Kids in Healthy Schools. Available from: http://www.appleschools.ca/files/StoryCatchersV3-ROI-web.pdf. Accessed October 6, 2021.

ARE WE HAPPY ?

Mental well-being

ARE WE HAPPY?

Mental well-being

Most adults in Canada cite happiness as a top priority for child and youth well-being, and young people themselves identify happiness and mental health as fundamental for a good life.[1] The UNCRC has given child and youth mental health significant consideration in relation to affirming a child's right to enjoy the best possible health (Articles 24 and 25).[2] The committee has called for immediate action by signatories, including Canada, to ensure adequate treatment and recovery of child and youth mental illness, to engage in suicide-prevention efforts, and to protect children from significant psychosocial stress.[2]

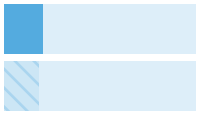
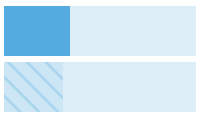
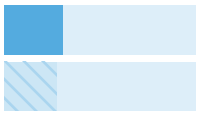
The ability to achieve positive mental health and well-being in childhood and beyond is strongly influenced by the quality of social, economic, and environmental conditions that shape experiences.[3] Interconnected factors at the level of the child or youth, the family, the school, the community, and the society may serve to protect or challenge positive mental health and well-being. Some of these factors can be modified through the actions of individuals, schools, communities, and governments.

For example, at the level of the individual child or youth, physical health status and level of physical activity influences the status of mental well-being.[4] At the level of the family, factors like the caregiver's mental health and the strength of the relationships and attachments between caregiver and child are important.[5] In school, the experience of bullying and connection to a supportive adult, sense of belonging, social inclusion, and experience of racism or discrimination may also influence mental well-being for children and youth.[6]

At the community level, mental well-being is influenced by threats known as Adverse Childhood Experiences (ACEs), traumatic or highly stressful events that occur before the age of 18.[7] These include neglect, physical or sexual abuse, household violence, racism, and deep poverty. When a child experiences multiple ACEs without the support of a protective adult, they endure "toxic stress." Toxic stress excessively activates the body's stress-response system, which has direct impacts on brain development.[8] The trauma of ACEs and toxic stress can have lasting and profound impacts on well-being and the propensity for developing mental illness.[7,9]

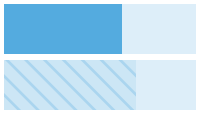
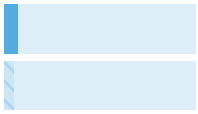
AT A GLANCE

Nova Scotia
Canada

Dimension	Indicator		
Life satisfaction	**Normal to high life satisfaction** Percentage of students that reported normal to high life satisfaction (6 or greater on the Cantrell ladder scale) *Health Behaviour in School-aged Children survey, 2018/2019**	80.1% 82.2%	
	Low life satisfaction Percentage of students that reported low life satisfaction on the Cantrell ladder scale *Health Behaviour in School-aged Children survey, 2018/2019**	19.9% 17.8%	
Affective states	**Feelings of hopelessness and sadness** Percentage of students that reported feeling so sad or hopeless every day for two weeks or more that they stopped doing their usual activities *Health Behaviour in School-aged Children survey, 2018/2019**	33.8% 30.3%	
	Low or depressed mood Percentage of students that reported feeling low or depressed for a week or more *Health Behaviour in School-aged Children survey, 2018/2019**	30.5% 27.4%	
Mental health status	**Perceived mental health of young children** Mental health of children aged 1 to 4 years that is perceived to be very good or excellent by the person most knowledgeable about the child *Statistics Canada, Canadian Health Survey on Children and Youth, 2019* *Table: 13-10-0763-01*	91.7% 93.4%	
	Perceived mental health in middle childhood Mental health children aged 5 to 11 years that is perceived to be very good or excellent by the person most knowledgeable about the child *Statistics Canada, Canadian Health Survey on Children and Youth, 2019* *Table: 13-10-0763-01*	82.9% 81.8%	

* Indicates a custom data request from the data source indicated.

Nova Scotia
Canada

Dimension	Indicator		
Mental health status (cont'd)	**Positive self-rated mental health** Percentage of youth aged 12 to 17 years that reported their mental health status as excellent or very good *Statistics Canada, Canadian Community Health Survey, Annual Component, 2020 Table: 13-10-0096-01*	61.1% 68.6%	
	Absence from school due to mental health Percentage of students that reported missing school in the past 30 days due to mental health concerns *Province of Nova Scotia, 2018/2019 Student Success Survey*	31% N/A	
Mental health disorders	**Children and youth diagnosed with an anxiety disorder** Percentage of children and youth aged 5 to 17 years diagnosed with an anxiety disorder by a health professional, as self-reported or reported by the person most knowledgeable *Statistics Canada, Canadian Health Survey on Children and Youth, 2019 Table: 13-10-0763-01*	7.3% 5%	
	Children and youth diagnosed with a mood disorder Percentage of children and youth aged 5 to 17 years diagnosed with a mood disorder by a health professional, as self-reported or reported by the person most knowledgeable *Statistics Canada, Canadian Health Survey on Children and Youth, 2019 Table: 13-10-0763-01*	2.7% 2.1%	
Emotional skills	**Belief in one's ability to handle problems** Percentage of students that reported feeling their ability to handle unexpected and difficult problems is good, very good, or excellent *Health Behaviour in School-aged Children survey, 2018/2019**	78.9% 80.7%	
	Belief in one's ability to handle demands of daily life Percentage of students that felt their ability to handle day-to-day demands in life was good or excellent *Health Behaviour in School-aged Children survey, 2018/2019**	85.6% 86.5%	
Suicide	**One-year suicide mortality rate** Suicide rate per 100,000 population among children and youth aged 10 to 24 years *Nova Scotia Medical Examiner, 2019* *Canadian Vital Statistics, Statistics Canada, Table: 13-10-0392-01(2019)*	11.7 per 1,000,000 8.1 per 1,000,000	
	Ten-year suicide mortality rate Ten-year suicide rate per 100,000 population among children and youth aged 10 to 24 years *Nova Scotia Medical Examiner, 2019* *Canadian Vital Statistics, Statistics Canada, Table: 13-10-0392-01(2019)*	9.9 per 1,000,000 8.3 per 1,000,000	

* Indicates a custom data request from the data source indicated.

ARE CHILDREN AND YOUTH IN NOVA SCOTIA HAPPY AND THRIVING?

Happiness is a state of mind influenced by a multitude of factors such as life satisfaction, emotional status, and how well core social and psychological needs are being met (e.g., having a life purpose, feeling self-confident or being in control).[1] Children and youth in Nova Scotia are not often asked directly about their happiness. The *Health Behaviour of School-aged Children survey* gathers the responses of children and youth in grades 6 to 10 on key contributors to a state of happiness.[10]

Life satisfaction

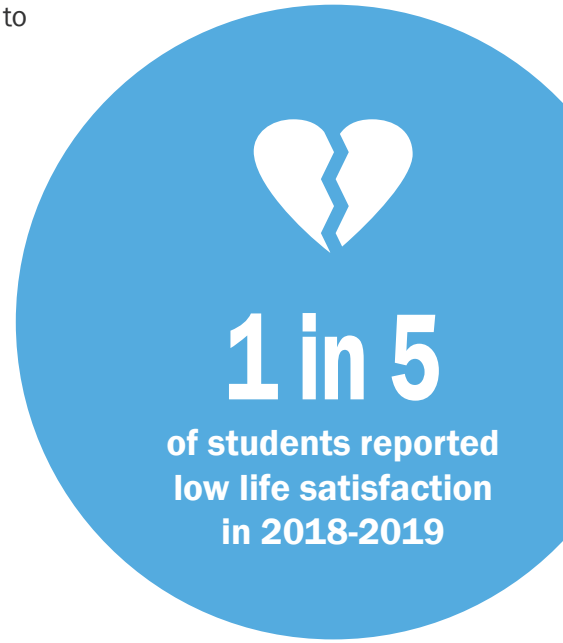
Most children and youth who responded to the *Health Behaviour of School-aged Children survey* reported normal to high life satisfaction (80.1 percent).[10] However, one in five young people reported low life satisfaction.[10] Concerning trends toward lower life satisfaction are also seen in international studies of industrialized countries, with Canada faring particularly poorly in recent years.[11]

Emotional status

Roughly 33 percent of *Health Behaviour in School-aged Children survey* respondents in Nova Scotia reported feeling so sad or hopeless every day for at least two weeks that they stopped doing some of their usual activities.[10] This was most often seen among grade 9 and 10 girls who reported feelings of sadness and hopelessness at a rate of 1 in 2 (53 percent) compared to 45 percent of their peers nationally. Feelings of loneliness were also seen, especially among teenage girls, with 45 percent of grade 9 and 10 girls agreeing that they often felt lonely. Over the six months leading up to the survey, 51 percent of students in grades 6 to 10 reported rarely or never feeling low while the remaining 49 percent of students reported feeling low at least weekly (29.8 percent) or monthly (19.2 percent).[10]

Self-confidence

Just a little over half of students in grades 6 to 8 who responded to the 2018-2019 *Health Behaviour in School-aged Children survey* reported having confidence in themselves (58.2 percent) compared to 59.6 percent nationally. Girls in grades 9 and 10 were least likely of all groups to report self-confidence at a rate of 38 percent compared to 45 percent of their peers.[10]



PASS THE MIC

> "To have a good life and be happy, it is important to do fun hobbies without feeling like you are wasting time that could be spent doing work. Everyone needs a break sometimes."
>
> *- Child participant*

Mental health

While nurturing happiness in children and youth is critical, it is not possible or necessary for individuals to always be happy. It is important that adults foster a range of healthy emotions and strong positive mental health in young people, as defined by the ability to realize one's own abilities, cope with the normal stresses of life, and work productively to contribute to one's community.[6]

In 2020, 61.1 percent of youth aged 12 to 17 years in Nova Scotia rated their mental health as very good or excellent, down from 72.2 percent in 2019.[12] This is comparable to trends seen at the national level with 68.6 percent of youth in other jurisdictions reporting very good or excellent mental health in 2020, down from 73 percent in 2019.[12] While gendered data on this topic must be used with caution for 2020, a clear gender gap was present in the respondents in 2019. Then, 61.1 percent of 12 to 17-year-old females in Nova Scotia reported excellent or very good mental health compared to 82.9 percent of males.[12] This gender gap was greater in Nova Scotian youth than nationally. There is also a data gap for children and youth who identify as 2SLGBTQ+ (see the section on the health and well-being of 2SLGBTQ+ populations for more information).

In the 2019 *Canadian Health Survey on Children and Youth*, the person most knowledgeable about children aged one to four was asked about the perceived mental health of a child in their home. This person was the birth, step, or adoptive parent for 98 percent of survey responses nationally.[13] The mental health of young children in Nova Scotia was perceived by parents in this survey as very good or excellent for 91.7 percent of children, slightly lower than the Canadian average of 93.4 percent.[13]

Data from the 2018-2019 *Health Behaviour in School-aged Children survey* indicate that most young people in Grades 6 to 10 in Nova Scotia are coping well by their own report.[10] For example, 78.9 percent of students felt their ability to handle unexpected and difficult problems was excellent, very good, or good, and 85.6 percent reported their ability to handle the day-to-day demands in life as excellent, very good, or good.[10]

However, according to the 2018-2019 *Nova Scotia Student Success Survey*, 64 percent of survey respondents missed school in the past month one or more times. Nearly one third reported mental health concerns as one reason.[14] This was lowest in grades 4 to 6 (19 percent) and highest in grades 10 to 12 (41 percent).[14] Female students were more than twice as likely to report missing school due to mental health challenges than male students.[14]

A deeper understanding of the mental health and well-being of Nova Scotian children and youth requires more opportunities to examine who is most impacted. Having more complete gender, race, and socio-economic data would support this.

MENTAL ILLNESS AMONG CHILDREN AND YOUTH IN NOVA SCOTIA

Like physical health and physical illness, positive mental health exists along a continuum with mental illness. For example, a child or youth may feel physically unwell for a period but not have a serious medical illness. In the same way, a child or youth may experience periods of decreased mental health without having one or more mental illnesses. The opposite is also true: a child or youth may live with a mental illness but have strong positive mental health and achieve a good quality of life.[15]

There are numerous mental illnesses that impact young people. While not every individual will experience a mental illness, many will face challenges to their mental health. These challenges may be short or prolonged. Similarly, symptoms of a mental illness may be experienced episodically or chronically.[15] Because 70 percent of Canadians with mental illness develop symptoms before the age of 18, it is necessary that adults and government address risk factors for mental illness while adequately supporting children and youth when mental illness is present.[16]

No existing single data source accurately reflects rates of mental illness among Nova Scotian children and youth. Administrative data from healthcare visits may serve as a proxy measure for mental illness but do not comprehensively reflect the diagnosis of a mental disorder. For example, a child or youth may visit a physician or emergency department in a time of decreased mental health, but not have a specific mental illness.

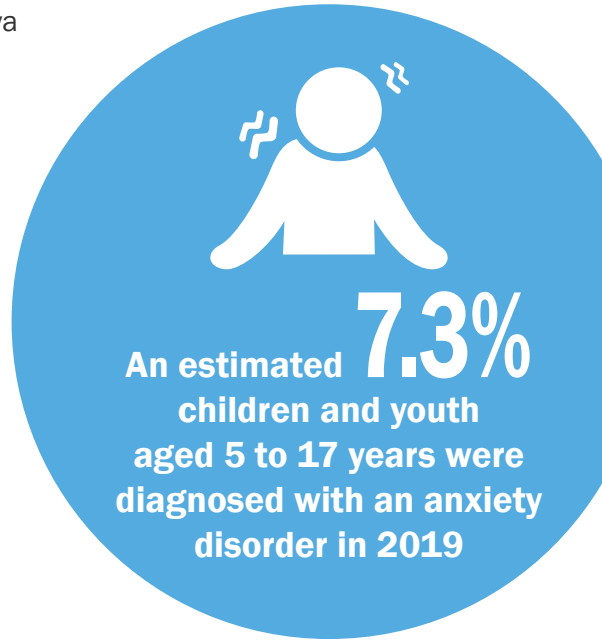
Comprehensive data pertaining to mental health-related health visits are not centrally kept or systematically compiled across the province at present.

In other jurisdictions, research has been carried out using healthcare billing data to estimate the prevalence of mental disorders,[17] but no such study has been conducted in Nova Scotia.

Studies have, however, looked at healthcare use to glean information about mental illness. Data from the Canadian Institute for Health Information for example, indicate that across Canada there has been a 61 percent increase in emergency department visits and a 60 percent increase in hospitalizations for mental disorders among children and youth aged 5 to 24 years over the past 10 years.[18] Further research is needed to understand the prevalence of mental illness among children and youth in Nova Scotia and its relationship to healthcare utilization.

National data represent our best estimate of the prevalence of certain types of mental illnesses such as rates of mood or anxiety disorders. In 2019-2020, an estimated 4.3 to 4.9 percent of Canadian young people aged 12 to 17 years old were diagnosed by a medical professional with a mood disorder such as depression, although Nova Scotia data were too unreliable to publish, likely due to small sample sizes.[19] In the first cycle of the *Canadian Health Survey on Children and Youth* in 2019, an estimated 7.3 percent of children and youth ages 5 to 17 years in Nova Scotia had been diagnosed by a health professional as having an anxiety disorder (such as phobia, obsessive-compulsive disorder, or panic disorder), either by self-report or by the report of a person most knowledgeable in the household.[13] This was compared to an estimated five percent in Canada as a whole.[13] Estimates for children and youth aged 5 to 17 years who have been diagnosed by a health professional as having a mood disorder (e.g., depression, bipolar, mania or dysthymia) either by self-report or by the report of a person most knowledgeable in the household are 2.7 percent for Nova Scotia and 2.1 percent for Canada as a whole.[13] While data about diagnosis of eating disorders is collected by this survey, they were too unreliable to publish for Nova Scotia, likely due to insufficient sample size.

When a child or youth dies by suicide, communities are reminded of the serious impacts of mental illness and poor mental well-being. Tragically, suicide is the second leading cause of death among young people aged 15 to 24 in Canada.[20] Though not always the case, suicide may be related to the presence of an underlying mental illness and therefore, is another important measure to monitor the status of mental illness. Data from the Nova Scotia Medical Examiner Service indicate that suicide mortality per 100,000 population aged 10 to 24 years in Nova Scotia was 11.7 per 100,000 in 2019.[21] This compares to 8.1 per 100,000 in Canada as a whole.[22] The rate of youth suicide has fluctuated over the last decade in Nova Scotia but has largely remained unchanged since 2008.[21]



IMPROVING CHILD AND YOUTH MENTAL HEALTH AND WELL-BEING IN NOVA SCOTIA

Due to the highly complex nature of mental health and well-being, it is critical that decision-makers follow the evidence and address modifiable risk and protective factors at a variety of levels, including the individual, family, school, community, and policy level.

Individual and family

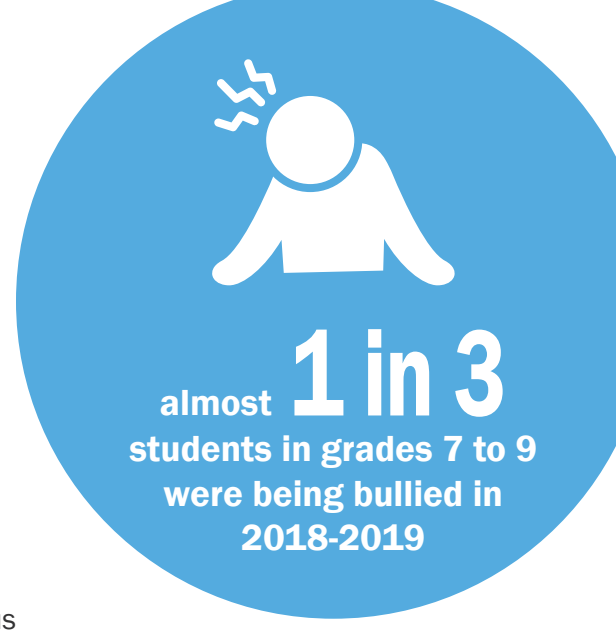
Enhancing protective healthy coping-skills and emotional regulation at the individual level can help young people deal with healthy stress throughout their life.[23] Universal access to early childhood education, delivered by trained professionals in the first five years of life, is paramount to this effort, as is raising public awareness of mental well-being in early childhood.[5,23] Efforts to increase the individual physical health of children and youth in Nova Scotia would also have direct benefits for their mental well-being.[24,25]

At the level of the family, it is important that parents are supported in achieving their own mental well-being. Reducing stressors and threats such as poverty and food and housing insecurity is as essential as low-barrier access to mental health supports.[5]

PASS THE MIC

"I wish we had better access to mental health support online and at school. I wonder if every school has a counsellor? It's good to have someone like that instead of sharing with people close to you. It can be hard to open up about stress and mental health"

- Youth participant



School

At the school level, where children and youth spend much of their waking hours, immediate efforts are required to reduce bullying through evidence-based programming and policy.[5] In 2018-2019, students in grades 7 to 12 consistently reported being bullied at a rate higher than the Canadian average: 31.2 percent of Nova Scotian students in grades 7 to 9 reported being bullied at some point in the previous 30 days vs. 23.6 percent of their Canadian peers.[26] Additionally, 27.1 percent of students in grades 10 to 12 reported being bullied at some point in the previous 30 days vs. 19.9 percent of their Canadian peers.[26] Both middle and high school students reported that non-verbal forms of bullying, (e.g., being ignored, being excluded, being given dirty looks) were most common followed by verbal and cyberattacks. The negative impacts of bullying on mental health and well-being in childhood and beyond are well documented globally.[5] Research on bullying in Nova Scotia has confirmed the adverse impacts of bullying on mental well-being.[25] A 2003 survey of grade 5 children who were victims of bullying had a higher rate of subsequently being diagnosed by a physician with an internalizing disorder such as depression or anxiety.[24]

Community and policy

At the community and policy level, efforts to prevent adverse childhood experiences, including the trauma of abuse and neglect, are needed. From data provided by the Department of Community Services, 30 percent of referrals to the Department of Community Services related to child-protection concerns were substantiated between 2015 and 2019. This translates to approximately 4,100 Nova Scotian children a year who required protection because of neglect and/or physical, emotional, or sexual abuse.

Experiences of chronic poverty and material deprivation also create toxic stress with effects on mental well-being in childhood through to adulthood.

Student respondents to *Health Behaviour of School-aged Children survey* in grades 6 to 10 identified as having low socioeconomic status were at increased risk for reporting low life satisfaction (127 percent higher risk), feelings of depression or hopelessness (50 to 74 percent higher risk), or being lonely (74 percent higher risk) compared to their higher-income peers.[10]

Swift action is needed to address the social determinants of mental health and well-being by changing community and societal conditions in which children and youth live, learn, and play. Prevention of adverse childhood experiences must also be rooted in understanding adverse community environments.[27] The levers of change here are found across our social, political, and economic systems and structures.

Ensuring that children and youth are supported through times of decreased mental well-being or mental illness is also paramount. While it is encouraging that 94 percent of Nova Scotian youth surveyed in school have a friend to talk to when in need, it is concerning that just 84 percent of grade 4 to 12 students in Nova Scotia can identify at least one adult to turn to if they are in need.[10] Enhancing the ability of children and youth to access the support of caring adults, including those with training to promote positive mental health, is critical. Promoting equity, diversity, inclusion, and reconciliation is essential to address discrimination, racism, and bullying and provide safe spaces for young people. Creating supportive, inclusive, health-promoting school environments can also help young people to achieve positive mental and physical health and well-being.[5]

Creating communities that are protective of mental well-being can reduce the need for young people to interact with care services. Although access to specialized mental health experts like psychologists and psychiatrists receives considerable attention from the public, media, and government, such services are a small piece of the effort needed to ensure mental well-being for children and youth in the province. It must be recognized that, as it relates to urgent pediatric mental health and addictions services in Nova Scotia, children and youth access care in a timely way; 90 percent of urgent cases across Nova Scotia were seen within one week of initial referral in between July 2020 to September 2020, while the remainder were seen within two weeks.[28] During that same period, non-urgent wait times varied greatly across different regions in the province from as low as 43 days in Yarmouth, to 72 days in the HRM, to as long as 257 days in Cape Breton.[28]

Waitlists for non-urgent mental health and addictions treatment would be greatly reduced if actions to address the social determinants of mental health—social inclusion, freedom from discrimination and violence, and access to economic resources—were taken.[29]

THE BOTTOM LINE

To ensure children and youth enjoy their right to the best possible health including mental health and well-being, governments have an important responsibility to enhance policies and programs that support the environments in which children and youth live, learn, and play.[3] Poverty reduction, access to nutritious food and affordable housing, increased access to green space, and opportunities for physical activity and safe, active outdoor play are all critical.[3,30]

For children and youth to experience sound mental health they must also have access to environments that promote safe attachments and secure relationships, absent of harm and discrimination.

By enhancing protective factors, minimizing threats, and providing tools to navigate the normal ups and downs of life, we can collectively optimize the mental health and well-being of young people in Nova Scotia.

SOURCES FOR THIS SECTION

1. UNICEF Canada (2019). Where Does Canada Stand? The Canadian Index of Child and Youth Well-being 2019 Baseline Report. Available from: https://oneyouth.unicef.ca/sites/default/files/2019-08/2019_Baseline_Report_Canadian_Index_of_Child_and_Youth_Well-being.pdf. Accessed February 6, 2021.
2. United Nations (1990). Convention on the Rights of the Child: General Assembly Resolution 44/25 of 20.
3. BC Provincial Health Services Authority (2019). Mental health and Well-being: Considerations for the Built Environment. Available from: https://planh.ca/sites/default/files/tools-resources/mental-health-built-environment.pdf. Accessed October 9, 2021.
4. Biddle SJH, et al (2019). Physical activity and mental health in children and adolescents: An updated review of reviews and an analysis of causality. Psychology of Sport and Exercise, 42: 146-155.
5. Mental Health Commission of Canada (2021). Supporting Early Childhood Mental Health. Available from: https://www.mentalhealthcommission.ca/sites/default/files/2020-07/early_childhood_one_pager_eng.pdf. Accessed March 21, 2021.
6. Herrman H, Saxena S, Moodie R (2005). Promoting mental health: concepts, emerging evidence, practice: a report of the World Health Organization, Department of Mental Health and Substance Abuse in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne. World Health Organization; Available from: https://www.cabdirect.org/cabdirect/abstract/20063199711, Accessed October 6, 2021.
7. Shonkoff JP, et al (2012). The Lifelong Effects of Early Childhood Adversity and Toxic Stress. Pediatrics; 129(1):e232–46.
8. Center on the Developing Child, Harvard University (2021). Toxic Stress. Available from: https://developingchild.harvard.edu/science/key-concepts/toxic-stress/. Accessed February 22, 2021.
9. Kessler RC, et al (2010). Childhood adversities and adult psychopathology in the WHO World Mental Health Surveys. Br J Psychiatry 197, 378–385.
10. Craig W, et al (2020). Health and Health-Related Behaviours among Young People: Nova Scotia Report. Kingston, ON: Queen's University.
11. UNICEF Canada (2014). Stuck in the Middle: Child Well-Being in Rich Countries: A comparative overview (Canadian Companion). Available from: https://www.unicef.ca/sites/default/files/legacy/imce_uploads/DISCOVER/OUR%20WORK/ADVOCACY/DOMESTIC/POLICY%20ADVOCACY/DOCS/unicef_rc_11_canadian_companion.pdf. Accessed October 6, 2021.
12. Statistics Canada (2021). Health characteristics, annual estimates. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310009601. Accessed February 6, 2021.
13. Statistics Canada (2020). Canadian Health Survey on Children and Youth, 2019. Available from: https://www150.statcan.gc.ca/n1/daily-quotidien/200723/dq200723a-eng.htm. Accessed October 6, 2021.
14. Province of Nova Scotia (2020). Student Success Survey, 2018-2019 Available from: https://plans.ednet.ns.ca/sites/default/files/documents/2018-2019_StudentSuccessSurvey.pdf. Accessed June 22, 2021.
15. Here to help BC (2015). What's the difference between mental health and mental illness? Available from: https://www.heretohelp.bc.ca/q-and-a/whats-the-difference-between-mental-health-and-mental-illness. Accessed October 6, 2021.
16. Government of Canada (2006). The human face of mental health and mental illness in Canada. Ottawa: Minister of Public Works and Government Services Canada.
17. Spady DW, et al (2001). Prevalence of mental disorders in children living in Alberta, Canada, as determined from physician billing data. Arch Pediatr Adolesc Med, 155(10):1153-9.
18. Canadian Institute for Health Information (2020). Child and youth mental health in Canada [infographic]. Available from: https://www.cihi.ca/en/child-and-youth-mental-health-in-canada-infographic?_ga=2.11774452.1707343405#ref1. Accessed October 6, 2021.

19. Statistics Canada (2021). Table 13-10-0096-18: Mood disorders, by age group. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310009618. Accessed October 6, 2021.

20. Korczak D (2015). Suicidal ideation and behaviour. Available from: https://www.cps.ca/en/documents/position/suicidal-ideation-and-behaviour. Accessed February 22, 2021.

21. Medical Examiner's Office (2020). Accidental Death and Suicides (2008-2019). Halifax, Nova Scotia: Nova Scotia Health.

22. Statistics Canada (2020). Table 13-10-0392-01: Deaths and age-specific mortality rates, by selected grouped causes. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=1310039201. Accessed October 8, 2021.

23. World Health Organization (2021). Adolescent mental health. Available from: https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health. Accessed March 21, 2021.

24. Wu XY, et al (2017). The importance of health behaviours in childhood for the development of internalizing disorders during adolescence. BMC Psychol 5, 38. https://doi.org/10.1186/s40359-017-0208-x.

25. Kontak J, et al (2019). The relationship between bullying behaviours in childhood and physician-diagnosed internalizing disorders. Canadian Journal of Public Health, 110(4), 497–505. https://doi.org/10.17269/s41997-019-00179-3.

26. Health Canada (2020). 2018-2019 Canadian Student Tobacco, Alcohol and Drugs survey. University of Waterloo; ON.

27. Ellis WR, Dietz WH (2017). A New Framework for Addressing Adverse Childhood and Community Experiences: The Building Community Resilience Model. Academic Pediatrics 17, S86–S93.

28. Mental Health and Addictions Child and Adolescent Services (n.d.). Nova Scotia Wait Time Information Available from: https://waittimes.novascotia.ca/procedure/mental-health-addictions-child-and-adolescent-services. Accessed February 22, 2021.

29. Centre for Addiction and Mental Health (2014). Best practice guidelines for mental health promotion programs: Children (7–12) and youth (13–19). https://www.porticonetwork.ca/documents/81358/128451/Best+Practice+Guidelines+for+Mental+Health+Promotion+Programs+-+Children+and+Youth/b5edba6a-4a11-4197-8668-42d89908b606. Accessed October 8, 2021.

30. National Collaborating Centres for Public Health (2017). Healthy Public Policies and Population Mental Health Promotion for Children and Youth. Available from: 06_Public_policy_MentalHealth_NCCPH_2017_EN.pdf. Accessed October 8, 2021.

ARE WE CONNECTED ? TO OUR ENVIRONMENT

Physical environments

ARE WE CONNECTED TO OUR ENVIRONMENT?

Physical environments

The UNCRC identifies rights related to children and youth and their physical and natural environments.[1] Every child has the right to access clean drinking water and to live free of environmental pollution to be healthy (Article 24).[1] Children also have a right to relax, play and take part in a wide range of cultural and artistic activities in the places where they live and grow (Article 31)[1]. They have a right to an education that makes it a point to foster respect for the natural environment (Article 29).[1]

Creating safe spaces for active transportation and outdoor play, easy access to nature, and clean air to breathe are examples of how built and natural environments can support child rights and enhance their well-being. Any serious effort to achieve optimal health and well-being for children and youth also requires acknowledging the very real threat posed by climate change now and in the future.[2] Climate change is already compounding disparities in well-being in Canada and around the world.[2]

As Canada's Ocean Playground, Nova Scotia is well positioned for children and youth to feel connected to and benefit from their physical environment. The province has many child-friendly natural resources like lakes, forests, and beaches. Urban areas provide a range of opportunities for children and youth to access spaces to play and be active. Yet, Nova Scotia also a history of environmental destruction that has impacted some populations more than others and created inequities that actively undermine healthy behaviours.[3]

Data about the province's natural resources, how children and youth access and enjoy the outdoors, and indicators related to climate change show there is work to be done to protect and improve the physical environment in Nova Scotia.

AT A GLANCE

Nova Scotia
Canada

Dimension	Indicator		
Community and built environment	**Access to greenspace** Percentage of households that have greenspace within 10 minutes of home *Statistics Canada Households and the Environment Survey (2019) Table: 38-10-0020-01*	80% 90%	
	Access to clean water Percentage of population with safely managed drinking water services, 2017 *Statistics Canada Goal 6 - Clean water & sanitation (2017) Table 6.3.1*	N/A 98.9%	
	Air pollution Annual premature deaths attributable to air pollution, 2016 *Health Canada - Estimates of morbidity and premature mortality outcomes. Table 5 (2016)*	29 per 1,000,000 42 per 1,000,000	
	Active travel to/from school Percentage of children in grades 6 to 8 that walk to/from school *Health Behaviour in School-aged Children survey, 2018/2019**	16% 24%	
	Safety in community Percentage of children that believe it was safe for younger children to play outside during the day *Health Behaviour in School-aged Children survey, 2018/2019**	80.8% 78.6%	

* Indicates a custom data request from the data source indicated.

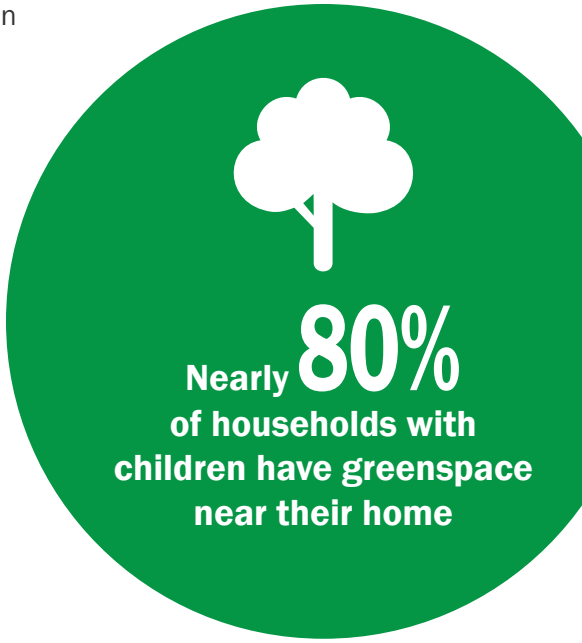
THE NATURAL ENVIRONMENT

Land

Access to nature and greenspace are associated with positive mental health and well-being among children as well as cognitive development in areas such as stress moderation, attention, and memory.[4] Access to greenspace is also associated with physical well-being, though the positive outcomes are impacted by factors such as age, socioeconomic status, and barriers to access.[4,5] Nearly 80 percent of Nova Scotian households report having greenspace near their home.[6] While comparable to New Brunswick, this is substantially below the Canadian average of 90 percent.[6] When the national data are further examined, access to greenspace is shown to be inequitable, ranging from 76 percent in households with under $20,000 annual income to 94 percent in households with $150,000 or more in income across Canada.[7]

Fostering well-being for all children and youth in the province requires eliminating inequities in access to the benefits of being in natural environments.

To ensure greenspace is always accessible for children and youth in Nova Scotia, we must protect untouched natural land. In 2019, the federal government allocated $1.4 million to protect seven sites comprising 1,200 hectares in Nova Scotia for conservation.[8] This land is considered ecologically important to maintaining and improving biodiversity. The seven sites more than double the area of land in Nova Scotia that has been protected over the past decade. The conservation of land and water benefits all Canadians and in 2020, the federal government committed to conserving 25 percent of Canadian land and oceans by 2025.[9] These actions signal an important commitment to preservation that must continue.



PASS THE MIC

"We want our leaders to protect our waters, rivers, forest, and land. We only have one world; we have to take care of it. Us kids want to grow up and have our own kids in a clean world too."

- Youth participant

Water

The importance of access to clean water has been highlighted in the United Nations Sustainable Development Goals (SDGs).[10] Clean water is essential for safe drinking, sanitation, and hygiene. However, only 69.9 percent of Canadian wastewater is being appropriately treated, and Canada has fallen short of its commitment to ensure equitable access to clean drinking water for all Canadians by March 2021.[11] Although Nova Scotia releases information about drinking water provincially as a proxy measure of water quality,[12] there is a lack of consistent reporting across provinces/territories, making it difficult to compare whether children, youth and their families in Nova Scotia enjoy the same access as others in Canada.[13] First Nation water systems, including some located in Nova Scotia, also have a disproportionately high number of long-term drinking water advisories compared to municipal and private water systems.[14]

Air

Air quality is a key driver of illness and death globally and is associated with 14,600 premature deaths in Canada every year.[15] Clean air is often taken for granted in Nova Scotia where 60 percent of residents inhabit rural areas.[16] Here the number of premature deaths attributable to air pollution is lower than the national average (29 versus 42 per 100,000 people), but this is most likely due to lower population density.[17]

Exposure to airborne pollutants is associated with decreased respiratory function; lung irritation; allergen susceptibility; asthma; ear, nose, and throat irritation; chronic obstructive pulmonary disease; cardiovascular disease; and premature death.[18] Air quality is most impacted by human activity through energy production (73 percent), transportation (15 percent), manufacturing (12 percent), agriculture (11 percent), and forestry (6 percent).[19] Nova Scotia is the sixth greatest provincial contributor to greenhouse gas (GHG) emissions in Canada (Alberta, Ontario, and Quebec account for 91 percent of national emissions).[19] Nova Scotia has reduced its GHG emissions by 30 percent since 2005, one of the highest provincial reductions in Canada during that timeframe.[20] The fact that the province remains the largest contributor to GHG emissions among the Atlantic Provinces provides momentum to continue on this path of reduction.[20]

Environmental exposures

Nova Scotia is the location of some of Canada's worst environmental health violations. The former Sydney tar ponds have left Sydney, Cape Breton as one of Canada's most contaminated locations, exceeding Canadian health guidelines for arsenic, lead, and polycyclic aromatic hydrocarbons (PAHs) in both soil and house dust.[21] As recently as 2011, spatial mapping revealed that the concentrations of these contaminants still exceeded safe quantities and other comparable industrial regions within Nova Scotia.[22] Infants in this region were found to have a significant increase in major congenital anomalies compared to the rest of Nova Scotia[23] while cancer rates were significantly higher than in any other location in the province.[24]

The negative effects of environmental exposures are disproportionately borne by communities that are systematically oppressed or living in poverty.[25] Both African Nova Scotian and Indigenous communities have been profoundly impacted by environmental health disparity. Racialized communities experience exposure to greater quantities of pollutants or contaminants from industrial sources, such as factories or waste storage, due to the proximity of this type of infrastructure relative to the places where they live.[25]

THE BUILT ENVIRONMENT

The built environment is created for humans to live, work, and play in.[26] Constructing healthy built environments promotes safety, accessibility, affordability, and equity for all. A built environment that is healthy can promote healthy habits, enhance social connection, prevent injuries, improve environmental conditions, provide access to nature, and ensure equitable access to health regardless of socioeconomic status.[26] It is crucial to recognize that certain groups face more constructed or built barriers than others, but healthy built environments must leave no one behind.[26]

Safety

Children and youth may find signs in their built environment to suggest it is not safe to enjoy play or leisure, such as busy roadways or improperly discarded waste. While there is limited data to assess how children and youth view the overall safety of the built environment, the 2018-2019 *Health Behaviour of School-aged Children survey* provides some information.[27] Encouragingly, 80.8 percent of Nova Scotian children and youth in grades 6 to 10 who responded felt it was safe for children to play outside during the day, just slightly more than the Canadian average (78.6 percent).[27]

Active transportation

The design of transportation networks influences the movement of people through their communities and impacts their health through exposure to emissions, opportunities for physical activity, and critical access to essential services.[26] How well transportation networks enable children and youth to engage in active transportation is an important reflection of the overall built environment.

Based on the 2018-2019 *Health Behaviour of School-aged Children survey*, Nova Scotian children and youth reported substantially lower engagement in active transportation to and from school than the rest of Canada.[27] They were far more likely to report using single-family transportation such as a car or motorcycle.[27] Sixteen percent of grade 6 to 8 students in Nova Scotia walked to and/or from school vs. 24 percent nationally; for students in grades 9 and 10, these figures are 11 percent and 19 percent, respectively.[27] With respect to cycling, the figures are 2 percent vs 6 percent among grades 6 to 8, and 1 percent vs 2 percent among grades 9 and 10.[27] The differences may reflect Nova Scotia's rural nature.

Support for active travel represents an important potential avenue for increasing physical activity and mitigating the impacts of climate change, but it needs to be contextualized by proximity to schools. Students living in more rural regions may not have easy access to active travel opportunities.

Investing in policy and infrastructure planning that encourages active transportation is a clear opportunity for improving child and youth health that does not involve transfer of responsibility to individual behaviours.[28] Active transportation is also an important strategy to address climate change given the urgent need to reduce GHG emissions, thereby addressing two urgent problems faced by young people.[29]

EMERGING ISSUE

LYME DISEASE

Lyme disease is a bacterial infection caused by a bite from an infected black-legged tick most often found in grassy, wooded, or shrub-covered areas.[30] Lyme disease typically manifests as a rash, but other symptoms include malaise, fatigue, fever, headache, and stiff neck. If untreated, Lyme disease may lead to chronic, debilitating illness.[30]

Climate change models predict an increase in the number of cases of Lyme disease in Nova Scotia; it is already considered endemic in Halifax, Lunenburg, Pictou, Shelburne, and Yarmouth counties.[31] Data are not currently available by age, but in 2019, there were 830 cases of confirmed and probable Lyme disease reported, up from 454 cases in 2018.[31]

Given that Lyme disease may act as a deterrent to outdoor play and exposure to nature among children and families, increased attention to this issue is needed. Recognizing and addressing the impact of climate change on the emergence of Lyme disease is essential.

THE BOTTOM LINE

The places and spaces where children and youth spend their time play a key role in supporting their health and well-being but access to safe and healthy places and spaces is not equitably distributed – too many children and youth in Nova Scotia are not able to connect directly with the natural environments where they live. The mounting threat of the climate emergency also cannot be understated. It is already impacting the well-being of young people and will continue to do so in the future.

Efforts are needed to protect the natural environment for future generations and to ensure that young people in Nova Scotia can access the benefits that come from being connected to nature. Built environments should also be designed to support well-being, such as through the adoption of child-friendly policies and the concept of play-friendly communities.[32] Improving access to safe natural spaces to play, opportunities for active transportation, and age-friendly community designs can all support children as they grow.

SOURCES FOR THIS SECTION

1. United Nations (1990). Convention on the Rights of the Child: General Assembly Resolution 44/25 of 20.
2. Canadian Medical Association (2020). The Lancet Countdown on Health and Climate Change - Policy brief for Canada. Available from: https://policybase.cma.ca/link/policy14257. Accessed October 22, 2021.
3. Waldron, I (2018). There's Something in The Water. Fernwood Publishing.
4. McCormick R (2017). Does Access to Green Space Impact the Mental Well-being of Children: A Systematic Review. Journal of Pediatric Nursing, 37, 3–7. https://doi.org/10.1016/j.pedn.2017.08.027.
5. Lachowycz K, Jones AP (2011). Greenspace and obesity: A systematic review of the evidence. Obesity Reviews, 12(5), e183–e189. https://doi.org/10.1111/j.1467-789X.2010.00827.x.
6. Statistics Canada (2019). Table 38-10-0020-01: Parks and green spaces. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810002001. Accessed September 14, 2021.
7. Statistics Canada (2021). Table 38-10-0022-01: Parks and green spaces, by household income. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3810002201. Accessed September 14, 2021.
8. Canadian Broadcasting Corporation (2019). Ottawa pledges $1.45M to protect 7 ecological sites in Nova Scotia. Available from: https://www.cbc.ca/news/canada/nova-scotia/ottawa-nova-scotia-nature-trust-protecting-land-1.5016153. Accessed September 14, 2021.
9. Government of Canada (2021). Canada Target 1 Challenge. Available from: https://www.canada.ca/en/environment-climate-change/services/nature-legacy/canada-target-one-challenge.html. Accessed September 14, 2021.
10. United Nations (2015). Sustainable Development Goals. Available from: https://sustainabledevelopment.un.org/?menu=1300. Accessed September 14, 2021.
11. Government of Canada (2021). Environmental indicators: Number of long-term drinking water advisories on public systems on reserve. Available from: https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/drinking-water-advisories-public-systems-reserve.html. Accessed September 14, 2021.
12. Open Data Nova Scotia (2021). Available from: https://data.novascotia.ca/. Accessed October 22, 2021.
13. Lane K, Gagnon G (2020). Evaluating the use and intent of drinking water advisories in Atlantic Canada. *Water Policy*: 22 (5): 908–924.
14. Thompson EE, Post YL, McBean EA (2017). A decade of drinking water advisories: Historical evidence of frequency, duration and causes. Canadian Water Resources Journal, 42:4, 378-390.
15. Government of Canada (2021). Environmental Indicators: Air pollution – drivers and impacts. Available from https://www.canada.ca/en/environment-climate-change/services/environmental-indicators/air-pollution-drivers-impacts.html. Accessed September 14, 2021.
16. Statistics Canada (2017). Nova Scotia Census Profile. 2016 Census. Statistics Canada Catalogue no. 98-316-X2016001. Ottawa. Available from: https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/index.cfm?Lang=E. Accessed September 14, 2021.
17. Health Canada (2021). Health Impacts of Air Pollution in Canada: Estimates of morbidity and premature mortality outcomes – 2021 Report. Available from: https://www.canada.ca/en/health-canada/services/publications/healthy-living/2021-health-effects-indoor-air-pollution.html. Accessed November 9, 2021.
18. Government of Canada (2021). Health effects of air pollution. Available from: https://www.canada.ca/en/health-canada/services/air-quality/health-effects-indoor-air-pollution.html. Accessed September 14, 2021.
19. Centre for Climate and Energy Solutions (2021). Global Emissions. Available from: https://www.c2es.org/content/international-emissions/. Accessed September 14, 2021.

20. Government of Canada (2021). Greenhouse gas sources and sinks: executive summary 2021. Available from: https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/sources-sinks-executive-summary-2021.html#toc6. Accessed September 14, 2021.
21. Lambert TW, Lane S. (2004). Lead, arsenic, and polycyclic aromatic hydrocarbons in soil and house dust in the communities surrounding the Sydney, Nova Scotia, tar ponds. Environmental Health Perspectives, 112(1), 35–41.
22. Lambert TW, Boehmer J, Feltham J, Guyn L, Shahid R (2011). Spatial mapping of lead, arsenic, iron, and polycyclic aromatic hydrocarbon soil contamination in Sydney, Nova Scotia: Community impact from the coke ovens and steel plant. Archives of Environmental & Occupational Health, 66(3), 128–145.
23. Dodds L, Seviour R (2001). Congenital Anomalies and Other Birth Outcomes Among Infants Born to Women Living Near a Hazardous Waste Site in Sydney, Nova Scotia. Canadian Journal of Public Health, 92(5), 331–334.
24. Guernsey JR, Dewar R, Weerasinghe S, Kirkland S, Veugelers PJ (2000). Incidence of Cancer in Sydney and Cape Breton County, Nova Scotia 1979–1997. Canadian Journal of Public Health 91(4), 285–292.
25. Waldron IRG (2015). Findings from the Series of Workshops "In Whose Backyard? Exploring Toxic Legacies in Mi'kmaw and African Nova Scotian Communities." Environmental Justice, 8(2), 33–37.
26. Tam T (2018). The Chief Public Health Officer's Report on the State of Public Health in Canada 2017 – Designing Healthy Living. Available from https://www.canada.ca/en/public-health/services/publications/chief-public-health-officer-reports-state-public-health-canada/2017-designing-healthy-living.html. Accessed June 8, 2021.
27. Craig W, Pickett W, King M, Gustafsson A, Fynn-Sackey N. (2020). Health and Health-Related Behaviours among Young People: Nova Scotia Report. Queen's University.
28. Province of Nova Scotia (2021). Let's Get Moving Nova Scotia. An action plan for increasing physical activity in Nova Scotia. Available from https://novascotia.ca/letsgetmoving/docs/letsgetmoving-en.pdf. Accessed September 16, 2021.
29. Ontario Active School Travel (2018). Making the Case for Active School Travel: Fact Sheet & Reference List. Available from: https://ontarioactiveschooltravel.ca/wp-content/uploads/2019/12/Making-the-Case-Dec-2018-En.pdf. Accessed October 22, 2021.
30. Province of Nova Scotia (2012). Lyme Disease: A report on Lyme Disease Epidemiology and Surveillance in Nova Scotia. Available from: https://novascotia.ca/dhw/populationhealth/documents/Lyme-Disease-Epidemiology-and-Surveillance-in-Nova-Scotia.pdf. Accessed December 20, 2021.
31. Province of Nova Scotia (2019). Notifiable diseases in Nova Scotia: 2019 surveillance report. Available from: https://novascotia.ca/dhw/populationhealth/documents/Annual-Notifiable-Disease-Surveillance-Report-2019.pdf. Accessed December 20, 2021.
32. Caldwell H et al (2022). Play-friendly communities in Nova Scotia, Canada: a content analysis of physical activity and active transportation strategies. International Journal of Environmental Research and Public Health, 19; 2984.

DO WE BELONG?

ARE WE PROTECTED?

Social environments

DO WE BELONG?

ARE WE PROTECTED?

Social environments

Belonging is a fundamental human need that is achieved by participating in lasting, stable, positive, interpersonal relationships. At its core, belonging reflects the belief that we are valued and cared for by others, across time, and even during periods of conflict.[1] A child's early relationships and attachments with caregivers shape their working models of self, the world, and the future close relationships they form into adulthood. The degree of connection a young person feels to siblings, caregivers, teachers, friends, extended family, community, and their culture directly impacts their overall well-being.[2]

The quality of the social environment, including how well a young person is protected from harm, is also critical to developing a sense of belonging. The UNCRC affirms that children have a fundamental right to be protected from violence, abuse, neglect, exploitation and discrimination (UNCRC Articles 2, 19, 23, 30, 32, 33, 34, 35, 36 and 37).[3] Governments also have a duty to implement appropriate measures to protect children and youth, to support families to stay together, and to provide care and rehabilitation grounded in dignity when harm occurs (UNCRC Articles 9, 10, 20 and 39).[3]

Although most children and youth in Nova Scotia are well cared for and enjoy nurturing relationships, there are too many who are hurting and deserve greater protection from harm. Improving information about this aspect of well-being is important, but we know enough now to act.

AT A GLANCE

Nova Scotia
Canada

Dimension	Indicator		
Identity and basic social-emotional needs	**Trust in others** Percentage of students in grades 6 to 10 that agreed or strongly agreed they could trust people around them *Health Behaviour in School-aged Children survey, 2018/2019**	87.9% 86.9%	
	Connection to self Percentage of students in grades 6 to 10 that reported a high connection to self *Health Behaviour in School-aged Children survey, 2018/2019**	66.9% 65.9%	
	Connection to others Percentage of students in grades 6 to 10 that reported a high connection to others *Health Behaviour in School-aged Children survey, 2018/2019**	59.7% 56.5%	
	Connection and a sense of belonging to the local community Percentage of young people 12 to 17 years of age that experienced a sense of belonging to their local community *Statistics Canada, Canadian Community Health survey, Annual Component, 2019* *Table 13-10-0096-01*	85.1% 86.5%	
	Acceptance by classmates Percentage of students in grades 6 to 10 that agreed or strongly agreed that other students accepted them as they were *Health Behaviour in School-aged Children survey, 2018/2019**	64.3% 63.9%	
	A sense of belonging at school Percentage of students in grades 4 to 12 that feel they belong at their school *Province of Nova Scotia, 2018/2019 Student Success Survey*	78% N/A	

* Indicates a custom data request from the data source indicated.

Nova Scotia

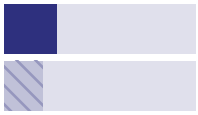
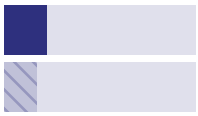
Canada

Dimension	Indicator		
Family and social relationships	**High level of family support** Percentage of students in grades 6 to 10 in the highest third of the family support scale *Health Behaviour in School-aged Children survey, 2018/2019**	38.3% 37.3%	
	High level of friend support Percentage of students in grades 6 to 10 that reported high friend support on a friend-support scale *Health Behaviour in School-aged Children survey, 2018/2019**	41.1% 42.3%	
	A friend to talk with Percentage of students in grades 4 to 12 that have at least one friend they can go to if they need to talk to someone *Province of Nova Scotia, 2018/2019 Student Success Survey*	94% N/A	
	An adult to talk with Percentage of students in grades 4 to 12 that have at least one adult they can go to if they need to talk to someone *Province of Nova Scotia, 2018/2019 Student Success Survey*	84% N/A	
	A supportive teacher Percentage of students in grades 4 to 12 that agreed or strongly agreed their teacher believes they can do well in school *Province of Nova Scotia, 2018/2019 Student Success Survey*	95% N/A	
	An encouraging teacher Percentage of students in grades 4 to 12 that agreed or strongly agreed their teacher encourages them to be themselves *Province of Nova Scotia, 2018/2019 Student Success Survey*	85% N/A	
Public policies related to family and social services	**Children and youth that received child protective services** Substantiated cases of abuse or neglect that required child protective services from the Department of Community Services *Nova Scotia Department of Community Services, 2019*	3,686 N/A	
	Children and youth in care Children and youth from birth to 24 years of age in the care of the Department of Community Services *Nova Scotia Department of Community Services, 2019*	1,622 N/A	

* Indicates a custom data request from the data source indicated.

Nova Scotia

Canada

Dimension	Indicator		
Violence and harm	**Incidence of being bullied**		
	Grades 7 to 9 Percentage of students that reported being bullied in the last 30 days *Health Canada, 2018-2019 Canadian Student Tobacco, Alcohol and Drugs survey*	31.2% 23.6%	
	Grades 10 to 12 Percentage of students that reported being bullied in the last 30 days *Health Canada, 2018-2019 Canadian Student Tobacco, Alcohol and Drugs survey*	27.1% 19.9%	
	Feelings of being unsafe or threatened in school Percentage of students in grades 4 to 12 that report feeling unsafe or threatened at school in the last 30 days *Province of Nova Scotia, 2018/2019 Student Success Survey*	19% N/A	
	Victims of family violence Rate of children and youth aged 17 years and younger that experience violence by parents, siblings, and extended family reported to police *Statistics Canada, Canadian Centre for Justice and Community Safety Statistics, Incident-based Uniform Crime Reporting Survey, 2019 Table 2.4*	343 per 1,000,000 308 per 1,000,000	
	Victims of non-family violence Rate of children and youth aged 17 years and younger that experience violence committed by non-family perpetrators *Statistics Canada, Canadian Centre for Justice and Community Safety Statistics, Incident-based Uniform Crime Reporting Survey, 2019 Table 2.4*	839 per 1,000,000 655 per 1,000,000	
	Victims of violence during dating relationship Percentage of students in grades 9 and 10 that reported being victims of teen dating violence in last 12 months *Health Behaviour in School-aged Children survey, 2018/2019**	21.9% 17%	

* Indicates a custom data request from the data source indicated.

DO CHILDREN AND YOUTH IN NOVA SCOTIA FEEL THEY BELONG?

In Nova Scotia, there is no systematic collection of data about children prior to school entry. As such, it is difficult to know the extent to which younger children feel they belong and feel connected. The *Health Behaviour in School-aged Children survey* gathers responses from children and youth in grades 6 to 10 on the quality of their relationships and connections.[15] Additional information on the quality of child and youth relationships is found in the 2018-2019 *Nova Scotia Student Success Survey*.[16]

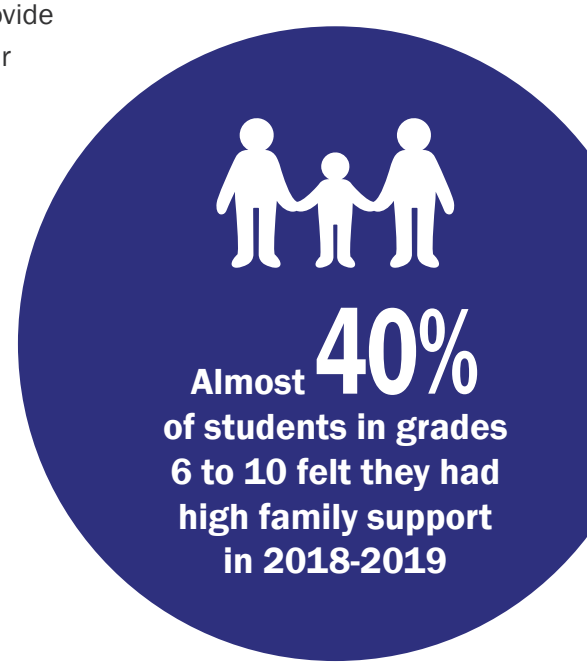
Connection with others often stems from a foundation of trust. A large number of Nova Scotian respondents in grades 6 to 10 agreed they can trust the people around them (87.9 percent).[15] Many students also reported strong feelings of connectedness to others (59.7 percent) and themselves (66.9 percent) at rates similar to their Canadian peers (Others: 56.5 percent, Self: 65.9 percent). Boys in grades 6 to 8 and grades 9 to 10 were less likely than their peers to report a high connection to others.[15]

The perception of trust, as reported by Nova Scotian students, is influenced by affluence; children who reported lower family wealth were nearly twice as likely to say they are unable to trust others compared with those who report high family affluence.[15]

Home and family

The attachments young people form with parents or caregivers provide a critical foundation for the development and organization of their emotions. It is important to recognize that family units are diverse and may include one or more adults, multiple generations, or blended families, among other possibilities.

Attachment theory stresses the need for caregivers, key players in children's psychological and emotional health, to create a safe base for children to explore their environment and return for support if distressed.[17] Obtaining consistent support and understanding helps children and youth develop the emotional regulation needed for future relationships. The family unit also influences a developing child's morals, values, and beliefs.



According to the 2018-2019 *Health Behaviour in School-aged Children survey*, the percentage of students in Nova Scotia who feel they have high family support is similar to other Canadian youth, 38.3 percent versus 37.3 percent.[15] A greater proportion of boys in grades 6 to 10 reported high family support (81 to 86 percent) than girls (70 to 80 percent). The majority of young people in grades 6 to 10 surveyed in Nova Scotia reported they feel understood by their parents at rates comparable to their Canadian peers.[15] Of note, Nova Scotian girls in grades 9 and 10 were least likely to feel understood by their parents (61 percent).[15]

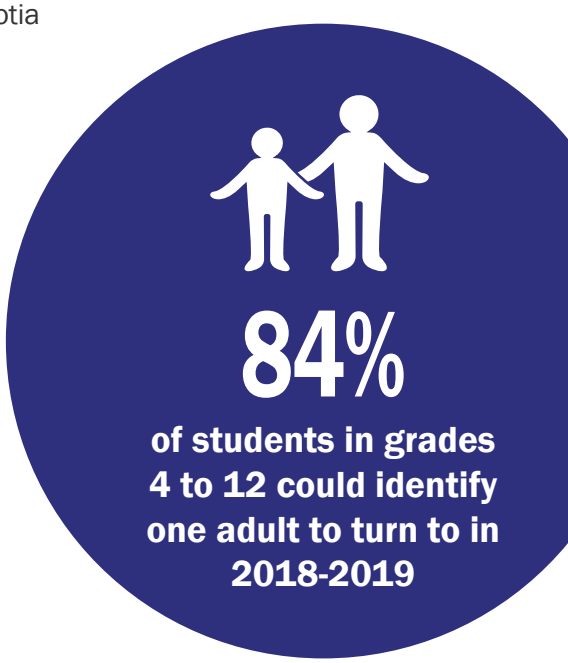
Peers

Peer relationships and friendships are also vital to nurturing a young person's sense of self. Friendship is particularly important for young people who may not find support at home. Encouragingly, 94 percent of Nova Scotian youth who responded to the 2018-2019 *Nova Scotia Student Success Survey* have a friend to talk to when in need.[16]

Results from the 2018-2019 *Health Behaviour in School-aged Children survey* suggest, however, that just 41.1 percent of Nova Scotian students in grades 6 to 10 feel high levels of friend support.[15] Girls in grades 6 to 8 were most likely to report high levels of support from friends (50 percent), while boys in grades 9 to 10 were least likely to report high levels (27 percent).[15] This feeling may be driven by acceptance, with just 64.3 percent of youth in grades 6 to 10 reporting they felt accepted by their classmates.[15]

Trusted adults and sense of community

When faced with difficult situations, proximity to a caring adult critically contributes to a child's sense of safety and can buffer the negative impacts of toxic stress.[18] Eighty-four percent of grade 4 to 12 students in Nova Scotia who responded to the 2018-2019 *Nova Scotia Student Success Survey* could identify at least one adult to turn to if they are in need.[16] While this represents most students in these grades, it is concerning that more than one in 10 of these young people cannot identify a supportive adult.



Children and youth spend many of their waking hours in school, and the relationship children forge with teachers can be central to their overall well-being. In the 2018-2019 *Nova Scotia Student Success Survey*, children and youth in grades 4 to 12 generally reported having a positive relationship with teachers, with 85 percent feeling their

teacher encouraged them to be themselves, and 95 percent feeling their teacher believed in their ability to do well.[16] Based on this same survey, just 67 percent of children and youth felt their teachers would notice if something was bothering them and only 37 percent felt teachers would know what their home life was like.[16] These troubling figures point to the need to support our province's teachers with the time and resources they require to serve as critical adults in the lives of children and youth in Nova Scotia.[16]

The percentage of young people aged 12 to 17 across Canada who experienced a sense of belonging to their local community has been stable since 2017.[19] In 2019, 85.1 percent of Nova Scotian youth reported having a sense of belonging to their community, just below the national average (86.5 percent).[19]

PROTECTION FROM HARM

Harm arising from bullying, stressors in the home (such as parental substance misuse or incarceration), witnessing domestic violence, experiencing abuse, neglect, racism, or discrimination are sometimes collectively referred to as adverse childhood experiences (ACEs).[4] When a child is exposed to these types of negative or traumatizing experiences in a repeated fashion and without the mitigating presence of a supportive adult, there can be a prolonged activation of the body's stress-response system that disrupts brain development and organ-system function. This is known as toxic stress.[5]

The toxic stress produced by ACEs has been linked to poorer physical health outcomes in adulthood including heart disease, liver disease, and cancer.[6] In addition to impacts on physical health, ACEs have been linked to poorer mental health and social outcomes beginning in early childhood and extending into adulthood. These range from challenges with social development,[7] behaviour,[8] and school readiness[9] to substance dependance and suicide attempts.[10–12] ACEs are cumulative: the greater number of traumatic events, the greater the risk of poorer health and well-being.[10]

Awareness about ACEs arose in large part due to a major longitudinal health study that began in 1995 as a joint initiative of Kaiser Permanente and the Centers for Disease Control and Prevention in the United States.[6]

The study explored 10 categories of childhood adversity that included physical, sexual, and emotional abuse; physical and emotional neglect; and five measures of household dysfunction such as domestic violence, parental mental illness, and/or substance abuse, an incarcerated

relative, and separation/divorce. The group found that such experiences in childhood were common; 61.7 percent of adults in the study reported at least one adverse childhood experience and 16.7 percent had experienced four or more.[6]

In Canada, trends are similar. Research carried out in Alberta found that almost 70 percent of participants in a study sample had experienced at least one type of adverse childhood experience, and almost one in five (18.1 percent) reported four or more.[13] A 2018 study conducted in rural Nova Scotia found 73 percent of survey respondents reported one adverse childhood experience, and 31 percent reported four or more.[14]

Bullying and discrimination

The negative impacts of bullying on broader well-being in childhood and beyond are well documented globally.[20] The harms of bullying can range from physical to emotional and can profoundly impact a young person's sense of self and their feelings of belonging and safety.[20–22]

Based on data from the 2018-2019 *Canadian Student, Tobacco, Alcohol and Drugs Survey,* Nova Scotian students in grades 7 to 12 consistently reported being bullied at a rate higher than the Canadian average.[23] Those in grades 7 to 9 reported being bullied within the last month at a rate of 31.2 percent compared to 23.6 percent of their Canadian peers.[23] Those in grades 10 to 12 reported being bullied within the previous month at a rate of 27.1 percent compared to 19.9 percent nationally.[23] Both middle and high school students reported that non-verbal forms of bullying, (e.g., being ignored, being left out or excluded, being given dirty looks) were most common, followed by verbal attacks and cyberattacks.[23]

In the 2018-2019 *Nova Scotia Student Success Survey*, on average, one out of every five Nova Scotian students in grades 4 to 12 said they felt unsafe or threatened at school over the previous 30 days.[16] Among those who felt unsafe at school, half believed that their physical appearance contributed to their mistreatment.[16] Other key reasons for feeling unsafe included how the student behaved with others (33 percent), their mental health (24 percent), their marks in school (21 percent), the way they speak (20 percent), and how much money their family has (19 percent).[16]

These high rates of bullying and discrimination are deeply concerning and must be addressed by ensuring children and youth feel safe in environments like schools where they spend a great deal of their time. Making sure support is available when bullying occurs is also essential.

Child maltreatment and trauma

Instances of physical and sexual violence against children and youth are substantially under-reported making it challenging to accurately estimate the number of children in need of protection or protective services in any jurisdiction. An estimated one in three Canadians identify as having experienced physical violence, sexual assault, or exposure to domestic abuse in childhood,[24] yet it is estimated that only 1 in 10 cases of child abuse are reported to authorities.[25]

In Nova Scotia, the Department of Community Services and the Mi'kmaw Family and Children's Services are the two agencies responsible for child protection under the *Children and Family Services Act*. Between 2015 to 2019, there were over 70,000 referrals to the Department of Community Services.[26] Reasons for referral vary but include concerns of neglect or physical, emotional, or sexual abuse. An average of 4,139 cases per year were substantiated prompting a need for protection as specified in the legislation.[26]

The number of substantiated cases by type of case (neglect, abuse, etc.) in Nova Scotia was not available for this data profile; however, across Canadian jurisdictions, neglect is consistently a top reason that children need formal protection by child welfare authorities.[28] Neglect is defined in Nova Scotia's *Children and Family Services Act* as "the chronic and serious failure to provide to the child (i) adequate food, clothing, or shelter, (ii) adequate supervision, (iii) affection, cognitive stimulation, or (iv) any other similar failure to provide."[29]

While substantiated cases referred to child protective services are one indicator of the prevalence of violence and maltreatment experienced by children and youth, cases reported to police provide additional insight into the nature of this problem. In 2018-2019, Nova Scotian children and youth were victims of police-reported violence (including physical and sexual assault) by a family member at a rate of 343 per 100,000 people, higher than the Canadian rate of 308 per 100,000.[30] Similarly, police-reported non-family violence against children and youth was higher in Nova Scotia than across Canada, at 839 per 100,000 children and youth compared to 655 per 100,000 nationally.[30]

We know that too many children and youth are facing the harms of child maltreatment, yet it must be acknowledged again that substantiated cases and those reported to police underrepresent the number of children and youth who are experiencing forms of cruelty, abuse, and neglect as many forms of maltreatment. These instances may go undiscovered, unreported, or can be challenging to substantiate.[27]

Best practices in trauma and maltreatment service provision

To support the healing of survivors of maltreatment and trauma, best practices in service provision have been developed such as a collaborative model called Child and Youth Advocacy Centres (CYACs). This model is founded on bringing together the multi-departmental services involved in responding to concerns of child abuse to create a more streamlined, coordinated approach that is client-focused and trauma-informed.

In Nova Scotia, the SeaStar CYAC, based in Halifax, is the province's first small-scale Child and Youth Advocacy Centre.[31] SeaStar primarily addresses cases of sexual and physical assault that are investigated by child welfare and/or police, providing coordinated access to medical care, mental health referrals, and victim support.[31] SeaStar serves an average of 200 children and youth each year.[31]

Despite greater demand for access, underfunding has prevented the full development and expansion of this model across the province. Given the much larger number of children and youth experiencing harm and maltreatment, there is an urgent need to expand support services for survivors.

Children and youth in care

When a family is impacted by threats to safety, children and youth may be placed in alternative care under the direction of the Nova Scotia Department of Community Services (DCS) or Mi'kmaw Family and Child Services (MFCS). Placements may be temporary or permanent, court mandated, or voluntarily agreed to. Children and youth may be placed with a relative, with an unrelated caregiver, in a place of safety as defined by the *Children and Family Services Act*, or in a residential group home. [29] They may transition through several placements across

the continuum-of-care arrangements. Transitioning through multiple care environments may negatively impact the ability of children and youth to form secure attachments and achieve a sense of belonging. This is especially the case when young people are removed from their home community, potentially resulting in feelings of diminished cultural safety and connection.

Some children and youth return to their families when there is no longer substantive ongoing risk of harm. Young people also have the option of doing so when they age out of care, which occurs at different ages depending on the type of placement. Those who cannot be reunified with family may be adopted. In general, arrangements that result in reunification with family or those that result in permanence (an enduring, safe, stable relationship) have been associated with improved outcomes.[32] Placements that favour kinship care – the placement of a child or youth in need of protection with an individual the child is biologically related to or has an existing relationship with – have been found to result in greater permanency, lower risk of the child re-entering care, and fewer placement breakdowns.[33,34]

On average, 1,723 children and youth per year were in the care of the province of Nova Scotia between 2015 and 2019.[26] There is an overall trend toward fewer children and youth in care per year during this period, with a total of 1,622 children and youth in the care of the province in 2019. It is important to note that while there is a decreasing number of children aged 12 to 19 coming into care, the number of children aged 0 to 11 years in care has largely remained unchanged between 2015 to 2019.[26]

EMERGING ISSUE

TUITION-WAIVERS FOR FORMER YOUTH IN CARE

Recently, several universities and colleges in Nova Scotia instituted tuition-waiver and support programs for students who were former youth in care to increase access to higher education.[36] It will be important to track the impact of these initiatives to better understand the effects of implementing supports aimed at targeting key inequities faced by children and youth who have been in care.

Data from DCS also indicate that there was a steady decrease in the number of kinship-care placements by almost 50 percent (385 to 202) between 2015 and 2019.[26] Rates of reunification after being in care were not available for Nova Scotia but are an important indicator.

More information is needed to understand the factors contributing to the trends seen in the data. At present, there are no published evaluations assessing the well-being of children while in care, nor the outcomes of youth who transition from child welfare programs and services in Nova Scotia.

Understanding the long-term outcomes of children and youth in care is essential.

This information could be used to design effective programs and supports for children and youth with DCS and MFCS involvement, and to appropriately prioritize family unity and reunification in home communities. In other provinces where outcomes have been studied, youth exiting the care system have been found to face greater challenges with their health and education, and are at increased risk of experiencing homelessness or involvement with the criminal justice system.[35]

Intimate partner violence and human trafficking

Children and youth may face safety issues in their own intimate relationships and need the appropriate education, supports, and protection from adults for this type of harm as well. In Nova Scotia, over one in four girls in grades 9 to 10 (26 percent) and just under one in five boys (18 percent) reported being victimized in their dating relationships over the previous year.[15] These rates are higher than the national average for girls (girls: 19 percent, boys: 18 percent).[15] Experiencing dating violence in adolescence has been shown to increase risk of re-victimization in adulthood as well as negatively impacting health outcomes including poor mental health and substance use.[37]

Commercial sexual exploitation, commonly known as trafficking, is also a devastating form of violence that impacts young people. It should alarm us all that Nova Scotia has the highest rate of human trafficking incidents in Canada, at a rate of 1.0 per 100,000 people between 2009 and 2018 compared to 0.5 incidents per 100,000 nationally.[38] The rate of incidents

Nova Scotia has the highest rate of human trafficking incidents in Canada

per 100,000 population in the census metropolitan area of Halifax was the highest nationally, at 2.1 per 100,000.[38] Nearly half (45 percent) of victims of police-reported human trafficking in Canada since 2009 were between 18 and 24 years of age, and roughly 3 in 10 victims were under the age of 18 (28 percent).[38] Data on the age composition of victims is not available at the provincial level, nor are data recorded on the longer-term outcomes these young people experience.

In February 2020, the government of Nova Scotia announced an annual investment of $1.4 million dollars over five years to support initiatives related to human trafficking in the province.[39] This includes educational outreach initiatives, improved police and justice support, and partnerships with community groups.[39] As provincial investment in supports and programs continues, attention should be given to evaluating interventions and improving information about the scale of this issue and outcomes of survivors.

Resilience: Not a reason for inaction

Despite the prevalence of many harms and stressors in childhood, many children and youth are resilient even in the face of adversity. While bolstering resilience and supporting the strengths of children and youth is important for enhancing well-being, adults cannot view this as a justification for inaction to address factors that lead to toxic stress and adverse experiences.

THE BOTTOM LINE

Many Nova Scotian children can rely on the support of their families, peers, and broader community, but too many young people in Nova Scotia face threats to their personal belonging and safety.

Failing to protect and provide healing for those who experience adversity in childhood will have long-lasting consequences. Implementing supports and services that protect child rights requires a community effort and full systems approach. Attention must be paid to the structural and systemic factors that influence experiences of neglect, bullying, discrimination, and violence in childhood, such as racism and poverty.

SOURCES FOR THIS SECTION

1. Corrales T et al (2016). Childhood adversity, sense of belonging and psychosocial outcomes in emerging adulthood: A test of mediated pathways. Children and Youth Services Review, 63:110–119.
2. Harvard University Center on the Developing Child (n.d.). Three Early Childhood Development Principles to Improve Child Outcomes. Available from: https://developingchild.harvard.edu/resources/three-early-childhood-development-principles-improve-child-family-outcomes/. Accessed September 21, 2021.
3. United Nations (1990). Convention on the Rights of the Child: General Assembly Resolution 44/25 of 20.
4. Centers for Disease Control and Prevention (2019). Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence. Available from: https://www.cdc.gov/violenceprevention/pdf/preventingACES.pdf. Accessed June 4, 2021.
5. Harvard University Center on the Developing Child (2020). Toxic Stress. Available from: https://developingchild.harvard.edu/science/key-concepts/toxic-stress/. Accessed June 4, 2021.
6. Felitti VJ, et al (1998). Relationship of Childhood Abuse and Household Dysfunction to Many of the Leading Causes of Death in Adults. American Journal of Preventive Medicine, 14:245–258.
7. Kerker BD, et al (2015). Adverse Childhood Experiences and Mental Health, Chronic Medical Conditions, and Development in Young Children. Academic Pediatrics, 15: 510–517.
8. Hunt TKA, Slack KS, Berger LM (2017). Adverse childhood experiences and behavioral problems in middle childhood. Child Abuse & Neglect 67: 391–402.
9. Jackson DB, Testa A, Vaughn MG (2021). Adverse Childhood Experiences and School Readiness Among Preschool-Aged Children. Journal of Pediatrics, 230: 191-197.e5.
10. Chapman DP, et al (2004). Adverse childhood experiences and the risk of depressive disorders in adulthood. Journal of Affective Disorders, 82: 217–225.
11. Hughes K, et al (2017). The effect of multiple adverse childhood experiences on health: a systematic review and meta-analysis. The Lancet Public Health 2:e356–e366.
12. Merrick MT, et al (2017). Unpacking the impact of adverse childhood experiences on adult mental health. Child Abuse & Neglect 69; 10–19.
13. Poole JC, Dobson KS, Pusch D (2018). Do adverse childhood experiences predict adult interpersonal difficulties? The role of emotion dysregulation. Child Abuse & Neglect, 80:123–133.
14. Ross N, et al (2020). Adverse childhood experiences: Assessing the impact on physical and psychosocial health in adulthood and the mitigating role of resilience. Child Abuse & Neglect, 103:104440.
15. Craig W, et al (2020). Health and Health-Related Behaviours among Young People: Nova Scotia Report.
16. Department of Education and Early Childhood Development and Communications Nova Scotia (2019). Student Success Survey. Available from: https://plans.ednet.ns.ca/sites/default/files/documents/2018-2019_StudentSuccessSurvey.pdf. Accessed October 8, 2021.
17. Cassidy J, Jones JD, Shaver PR (2013). Contributions of attachment theory and research: A framework for future research, translation, and policy. Dev Psychopathol 25:1415–1434.
18. Bellis MA, et al (2017). Does continuous trusted adult support in childhood impart life-course resilience against adverse childhood experiences - a retrospective study on adult health-harming behaviours and mental well-being. BMC Psychiatry, 17:110.
19. Statistics Canada (2020). Health Characteristics: Annual Estimates. Available from: https://www150.statcan.gc.ca/t1/tbl1/en/cv.action?pid=1310009601. Accessed November 10, 2021.
20. Armitage R (2021). Bullying in children: impact on child health. BMJ Pediatrics Open, 5:e000939.

21. Wu XY, Kirk SFL, Ohinmaa A, Veugelers PJ (2017). The importance of health behaviours in childhood for the development of internalizing disorders during adolescence. BMC Psychology, 5:38.

22. Kontak JCH, et al (2019). The relationship between bullying behaviours in childhood and physician-diagnosed internalizing disorders. Can J Public Health, 110:497–505.

23. Health Canada; PROPEL Centre for Population Health Impact (2020). 2018-2019 Canadian Student, Tobacco, Alcohol and Drugs Survey.

24. Afifi TO, et al (2014). Child abuse and mental disorders in Canada. CMAJ ,186:E324–E332.

25. Statistics Canada (2017). Section 1: Profile of Canadian adults who experienced childhood maltreatment. Available from: https://www150.statcan.gc.ca/n1/pub/85-002-x/2017001/article/14698/01-eng.htm. Accessed January 3, 2022.

26. Department of Community Services. (2019). DCS Data Request. Unpublished.

27. Government of Canada (2012). Child Maltreatment in Canada. Available from: https://www.canada.ca/en/public-health/services/health-promotion/stop-family-violence/prevention-resource-centre/children/child-maltreatment-canada.html. Accessed June 3, 2021.

28. Public health Agency of Canada (2008). Canadian Incidence Study of Reported Child Abuse and Neglect. Available from: https://cwrp.ca/sites/default/files/publications/en/CIS-2008-rprt-eng.pdf. Accessed October 8, 2021.

29. Nova Scotia Legislature (1990). Children and Family Services Act of Nova Scotia. Available from: https://nslegislature.ca/sites/default/files/legc/statutes/children%20and%20family%20services.pdf. Accessed November 10, 2021.

30. Statistics Canada (2021). Table 2.4 Child and youth victims of police-reported family and non-family violence, by gender of victim and province or territory, 2018 to 2019. Available from: https://www150.statcan.gc.ca/n1/pub/85-002-x/2021001/article/00001/tbl/tbl02.4-eng.htm. Accessed January 4, 2022.

31. SeaStar Centre (n.d.). About SeaStar Child & Youth Advocacy Centre. Available from: https://www.seastarcyac.ca/about/. Accessed October 13, 2021.

32. Hjern A, Vinnerljung B, Brännström (2019). Outcomes in adulthood of adoption after long-term foster care: A sibling study. Developmental Child Welfare, 1(1):61-75.

33. Province of Nova Scotia (2018). Children in Care. Available from: https://nslegislature.ca/sites/default/files/pdfs/committees/cs/subm/cs_20180109.pdf. Accessed November 8, 2021.

34. Bell T, Romano E (2017). Permanency and Safety Among Children in Foster Family and Kinship Care: A Scoping Review. Trauma, Violence, & Abuse, 18:268–286.

35. Canadian Child Welfare Research Portal (n.d.). Exploring Youth Outcomes After Aging-Out of Care. Available from: https://cwrp.ca/publications/exploring-youth-outcomes-after-aging-out-care. Accessed November 8, 2021.

36. Willick F (2021). Free tuition for former kids in care 'like a dream come true' | CBC News. Available from: https://www.cbc.ca/news/canada/nova-scotia/tuition-bursary-former-kids-youth-in-child-welfare-system-1.6179909. Accessed November 8, 2021.

37. Exner-Cortens D, Eckenrode J, Rothman E (2013). Longitudinal Associations Between Teen Dating Violence Victimization and Adverse Health Outcomes. Pediatrics, 131:71–78.

38. Statistics Canada (2020). Trafficking in persons in Canada, 2018. Available from: https://www150.statcan.gc.ca/n1/pub/85-002-x/2020001/article/00006-eng.htm. Accessed October 8, 2021.

39. Province of Nova Scotia (2020). Provincial Approach to Address Human Trafficking, Sexual Exploitation. Available from: https://novascotia.ca/news/release/?id=20200220001. Accessed November 8, 2021.

40. YWCA Halifax (n.d.). Sexual Exploitation & Trafficking. Available from: https://www.ywcahalifax.com/advocacy/sexual-exploitation-trafficking/. Accessed November 8, 2021.

SPOTLIGHT ON

THE WELL-BEING OF 2SLGBTQ+ CHILDREN AND YOUTH IN NOVA SCOTIA

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WHY WE NEED TO FOCUS OUR ATTENTION ON THIS POPULATION

In 2018-2019, approximately 10 percent of grade 7 to 12 students in Nova Scotia self-identified as lesbian, gay, bisexual, transgender, and/or queer (LGBTQ2+) through the *Nova Scotia Student Success Survey*, and among these, approximately 11 percent self-identified as transgender.[12] While the option to self-identify as LGBTQ2+ was only available to students in grades 7 to 12, we know that younger children and youth also identify in this way.

In virtually every society and institution, children and youth who identify as two-spirit, lesbian, gay, bisexual, transgender, and/or queer (2SLGBTQ+) experience threats that deny them of equal access to the opportunities and services they deserve for a fulfilling life.[1]

Data suggest that 2SLGBTQ+ populations around the globe experience worse health outcomes than those who identify as cisgender and heterosexual.[2] The key reasons for these differences stem from the long-standing stigma, discrimination, and social exclusion associated with diverse sexual orientations and gender-diverse identities in a heteronormative world.[3]

Developing an understanding of how 2SLGBTQ+ children and youth are faring in Nova Scotia is essential to shining light on how these disparities may be impacting their well-being and for improving the lives of all 2SLGBTQ+ people in the province.

A SIGNIFICANT GAP

While great strides towards advancing human rights protections and legislation for 2SLGBTQ+ citizens have taken place across Canada, public systems and services often lag behind when it comes to implementing change.[4]

For example, equity, diversity, and inclusion (EDI) policies, frameworks, and programs have increased awareness of populations that have been historically marginalized within health systems, however, there is an ongoing disconnect between meeting EDI goals and the healthcare needs of 2SLGBTQ+ children and youth.[5] This is playing out in Nova Scotia where wait times for transgender patients accessing gender-affirming hormones or surgeries are longer than those recommended in national and international guidelines.[6,7] Research also supports the fact that education systems across Canada are failing to provide adequate supports needed for 2SLGBTQ+ children, youth and their families to ensure they feel safe in school and see themselves reflected in the curriculum and related educational resources.[8,9]

THE CONSEQUENCES OF THE GAP

As indicated in the recent House of Commons Report from the Standing Committee on Health *The Health of LGBTQIA2 Communities in Canada,*[10] systemic discrimination creates disparities in housing, income, employment and access to appropriate healthcare that have lifelong consequences on well-being. [11] This is reflected in higher rates of both mental health challenges and physical health conditions including higher rates of depression, chronic diseases, cancers, suicide, and addictions.

A national transgender and non-binary youth health survey, for example, found that approximately 57 percent of youth from the Atlantic region reported having experienced discrimination based on their sex, 30 percent reported attempting suicide within the last 12 months, 22 percent have run away from home, and 71 percent reported having unmet needs for emotional or mental health services in the past year.[8]

A GLIMPSE AT THE WELL-BEING OF 2SLGBTQ+ CHILDREN AND YOUTH IN NOVA SCOTIA

In Nova Scotia, limited information about the well-being of 2SLGBTQ+ can be gleaned from the 2018-2019 *Nova Scotia Student Success Survey*. In 2018-2019, 78 percent of survey respondents who identified as LGBTQ2+ reported that they have at least one adult they can talk to versus 84 percent of respondents overall. Also of concern: 20 percent of LGBTQ2+ respondents felt disrespected because of their gender identity, and 40 percent felt disrespected because of their sexual orientation.[12] In addition, 36 percent reported feeling unsafe or threatened at school in the previous month compared with only 19 percent of respondents overall. LGBTQ2+ students said they felt unsafe or threatened in the hallways and stairwells at school (61 percent), in classrooms (51 percent), and in washrooms (49 percent).[12]

CLOSING THE GAP

More targeted efforts are urgently required to address the ongoing disparities facing 2SLGBTQ+ people, including children and youth in Nova Scotia. Without a concerted effort to tackle the system-level drivers in key sectors like education and health, these disparities will continue to have lifelong consequences for 2SLGBTQ+ children and youth, their families, and communities across the province.[13–15]

There are several key intersecting areas in need of greater attention to better meet the unique needs of 2SLGBTQ+ children and youth in Nova Scotia.

Support in schools

Existing EDI policies in schools must be reviewed and new strategies developed to train teachers, guidance counsellors, administrators, and students on gender- identity, sexual orientation, and gender-affirming interventions to ensure schools are a safe and welcoming place for all youth to learn and grow. Sexuality/sexual health education curricula need to be revised to ensure the information that 2SLGBTQ+ children and youth require is appropriate.[16,17] Ongoing monitoring and evaluation are required to ensure content is current, information is widely accessible, and resources are appropriate for diverse populations, including 2SLGBTQ+ children and youth.

Safe and responsive healthcare

There is also an urgent need to ensure healthcare providers are equipped to address the unique health needs of gender-diverse populations. Better training of practicing healthcare providers and healthcare students in existing post-secondary programs is required.[6,18] Health services and systems should be reviewed for how responsive they are to the unique needs of 2SLGBTQ+ patients and an environment of safety should be created.

Improving understanding

Improved research and evaluation processes must also be in place to allow for better and more complete data to be collected about the well-being outcomes of 2SLGBTQ+ children and youth in Nova Scotia. A shift toward resilience and well-being and away from a deficit approach that defines this population in terms of negatives is essential.[5,11]

SOURCES FOR THIS SECTION

1. Colpitts E, Gahagan J (2016a). "I feel like I am surviving the health care system": understanding LGBTQ health in Nova Scotia, Canada. BMC Public Health 16, 1005.
2. WHO (2006a). Defining sexual health: Report of a technical consultation on sexual health, 28–31 January 2002. Geneva, World Health Organization.
3. Gahagan J, Subirana-Malaret M (2018). Improving pathways to primary health care among LGBTQ populations and health care providers: key findings from Nova Scotia, Canada. Int J Equity Health 17, 76.
4. Peter T, Campbell CP, Taylor C (2021). Still in every class in every school: Final report on the second climate survey on homophobia, biphobia, and transphobia in Canadian schools. Toronto, ON: Egale Canada Human Rights Trust.
5. Gahagan J, Colpitts E (2017). Understanding and Measuring LGBTQ Pathways to Health: A Scoping Review of Strengths-Based Health Promotion Approaches in LGBTQ Health Research. J Homosex 64, 95–121.
6. Coleman E, et al (2012). Standards of Care for the Health of Transsexual, Transgender, and Gender-Nonconforming People, Version 7. International Journal of Transgenderism 13, 165–232.
7. Ehrbar RD, Gorton RN (2010). Exploring Provider Treatment Models in Interpreting the Standards of Care. International Journal of Transgenderism 12, 198–210.
8. Gahagan J, et al (2019). Being Safe, Being Me in the Atlantic Provinces: Results of the Canadian Trans youth Health Survey. https://www.saravyc.ubc.ca/2020/03/18/being-safe-being-me-2019/.
9. Taylor C, et al (2011). Every Class in Every School: The first national climate survey on homophobia, biphobia, and transphobia in Canadian schools. Egale Canada Human Rights Trust. Available from: https://egale.ca/awareness/every-class/. Accessed July 14, 2021.
10. Government of Canada (2019). The Health of LGBTQQIA2 Communities in Canada. Report of the Standing Committee on Health. Available from: http://www.cgshe.ca/app/uploads/2019/11/Health_LGBTQIA2_Communities.pdf (2019). Accessed July 14, 2021.
11. Colpitts E, Gahagan J (2016b). The utility of resilience as a conceptual framework for understanding and measuring LGBTQ health. Int J Equity Health 15, 60.
12. Department of Education and Early Childhood Development and Communications Nova Scotia (2019). Student Success Survey. Available from: https://plans.ednet.ns.ca/sites/default/files/documents/2018-2019_StudentSuccessSurvey.pdf. Accessed July 14, 2021.
13. Province of Nova Scotia (2008). Provincial School Code of Conduct Policy. Available from: https://www.ednet.ns.ca/docs/provincialschoolcodeofconduct.pdf. Accessed July 14, 2021.
14. Province of Nova Scotia (2013). Human Rights Act. Available from: https://nslegislature.ca/sites/default/files/legc/statutes/human%20rights.pdf. Accessed July 14, 2021.
15. Province of Nova Scotia (2014). Guidelines for supporting Transgender and Gender-nonconforming students. Available from: https://studentservices.ednet.ns.ca/sites/default/files/Guidelines%20for%20Supporting%20Transgender%20Students_0.pdf (2014). Accessed July 14, 2021.
16. Sex Information & Education Council of Canada (2020). Questions & Answers: Sexual Health Education in Schools and Other Settings. Toronto: ON.
17. Sex Information & Education Council of Canada (2019). Canadian Guidelines for Sexual Health Education. Toronto: ON.
18. Lev AI (2009). The Ten Tasks of the Mental Health Provider: Recommendations for Revision of the World Professional Association for Transgender Health's Standards of Care. International Journal of Transgenderism 11, 74–99.

SPOTLIGHT ON

THE WELL-BEING OF MI'KMAW CHILDREN AND YOUTH IN NOVA SCOTIA

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E'TASIW MIJUA'JI'JK MEKITE'TASIT – EVERY CHILD MATTERS

We call upon the federal, provincial, territorial, and Aboriginal governments to acknowledge that the current state of Aboriginal health in Canada is a direct result of previous Canadian government policies, including residential schools, and to recognize and implement the health-care rights of Aboriginal people as identified in international law, constitutional law, and under the Treaties.

Truth and Reconciliation Commission of Canada: Action 18.[1]

WHY WE NEED TO FOCUS OUR ATTENTION ON THIS POPULATION

For centuries, First Nations people in Canada have held the sacred belief that children are gifts from the Creator and the future of communities.[4,5] Despite exceptional barriers, First Nations parents and families have persisted in centring the well-being of their children and youth. In Nova Scotia, Mi'kmaw peoples represent the largest First Nations group, the first Peoples of the province and the fastest growing child and youth population in the province, with approximately one half of the population being under 20 years of age.[6] Engaging in reconciliation to support the well-being of Mi'kmaw communities in Nova Scotia is essential to the well-being of the province as a whole.

Indigenous children and youth in Canada, including Mi'kmaw children and youth in Nova Scotia, hold unique rights afforded by the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP) in addition to the rights outlined by the United Nations Declaration on the Rights of the Child.[7–9] UNDRIP was adopted

by the United Nations General Assembly in 2007 and establishes a universal framework of minimum standards for the survival, dignity, and well-being of all Indigenous peoples globally.[8] The UNDRIP Act was passed in 2021, meaning implementation of the UNDRIP is protected by federal law in Canada.[10]

While institutions and leaders have committed to reconciliation and to realizing the rights outlined by the UNCRC and UNDRIP, Indigenous people across Canada continue to face unkept promises, which threatens their well-being. To understand the well-being of Mi'kmaw children and youth in Nova Scotia, it is essential to recognize these shortcomings and the broader influence of distinct regional historic, cultural and political context. Recognizing data sovereignty and the right to self-determination of Mi'kmaw people is also central to any discussion of the well-being of Mi'kmaw children and youth.

HISTORIC AND CULTURAL CONTEXT

The traditional unceded territory of the Mi'kmaq is called Mi'kma'ki and includes the Maritime Provinces, parts of eastern Quebec, and northern Maine. Mi'kmaw people have lived on and traversed the waterways of Nova Scotia for over 10,000 years.[12,13] Prior to the arrival of European settlers, the Mi'kmaw population is estimated to have been around 15,000.[12] For generations, Mi'kmaw people lived in harmony with the natural environment and freely practiced their ancestral celebrations, traditions and language.[12]

With the arrival of European settlers came diseases to which the Mi'kmaq had no immunity, causing the deaths of an estimated 50 to 90 percent of the population.[12] However, the population of the Mi'kmaq is thought to have outnumbered the settlers until the early 1800s.[12]

According to the Government of Canada, the term "Indigenous" refers to the original inhabitants of the land and their descendants.[2] In Canada, Indigenous peoples include First Nations, Inuit, and Métis peoples.[3]

THE WELL-BEING OF MI'KMAW CHILDREN AND YOUTH IN NOVA SCOTIA

The treaties between the Mi'kmaq and European settlers have critical significance to the history of Mi'kmaw people in Nova Scotia. A treaty is a "solemn agreement" that sets out "long-standing promises, mutual obligations and benefits for both parties".[14] The Peace and Friendship Treaties were signed in the 1700s between the British Crown and Indigenous peoples on Turtle Island, the land mass of North America.[14] Importantly, the Mi'kmaw did not cede their traditional territory through these treaties. But as settler colonies expanded, their activities encroached further on traditional Mi'kmaw land and practices.

In 1876, the introduction of the *Indian Act* gave the federal government the exclusive right to create legislation that impacted Indigenous people in a multitude of ways by making them wards of the state.[12] Federal policy controlled where First Nations people could live, hunt, fish, and how they could identify.[12] In Nova Scotia, a government policy of centralization in the 1940s significantly contributed to the forced relocation of Mi'kmaw communities throughout the province.[15,16] This policy has been described as an effort to reduce government costs, maintain greater control over Mi'kmaw communities, and undermine cultural and political stability for Mi'kmaw communities.[15,16]

NOTE: The history of the Mi'kmaq in Nova Scotia is most meaningfully understood by listening to community elders.[11] The paragraphs that follow attempt to capture a small snapshot of the rich history of the Mi'kmaw people as well as the oppressive colonial practices and policies of assimilation used by European settlers in Nova Scotia and across Canada.

These topics may cause trauma by triggering memories of past abuse for some readers. A National Residential School Crisis Line has been set up to provide support for former residential school students. You can access information on the website or access emotional and crisis referral services by calling the **24-Hour National Crisis Line: 1-866-925-4419.**

THE WELL-BEING OF MI'KMAW CHILDREN AND YOUTH IN NOVA SCOTIA

The Indian Act also ushered in one of the most shameful periods in Canadian history with the establishment of the residential school system.[17] For more than 150 years, Indigenous children across Canada were sent to these schools in an attempt to enforce assimilation.[17] While there, many children were physically, sexually, emotionally, and spiritually abused.[18] It is no surprise that the residential school system has been described as an act of cultural genocide through "a systematic, government-sponsored attempt to destroy Aboriginal cultures and languages and to assimilate Aboriginal peoples so that they no longer existed as distinct peoples".[17] Recent news coverage of Indigenous children found buried in unmarked graves on residential school grounds has further increased awareness of the devastating legacy of residential schools.[19]

In Nova Scotia, the Shubenacadie Residential School ran from 1930-1967 on Mi'kma'ki in Sipekne'katik.[20] Mi'kmaq and Wolastoqewiyik children from across Nova Scotia, Prince Edward Island, New Brunswick and Quebec attended, many against they and their parents' wishes.[20] Many Mi'kmaw parents fought tirelessly to protect and access their children, however, the Indian Act allowed federal agents and the Royal Canadian Mounted Police to enforce attendance.[21] Poor and incomplete record keeping has made it difficult to know exactly how many attended Shubenacadie Residential School, yet it is clear that those who attended faced efforts to destroy their culture and identity.[20] Children were forbidden to speak their language and forced to carry out labour while enduring punishment, abuse, neglect, and nutritional experimentation.[20] Tragically, children died while at this institution.[20] The devastating trauma inflicted through residential school policy continues to be felt from generation to generation.[18]

While less widely known, Day Schools were also operated by the Federal government and religious groups across Canada prior to residential schools, and in greater numbers.[22] More than one dozen government-approved, church run Day Schools operated in Nova Scotia (1872-1993) prior to and during the operation of the Shubenacadie Residential School, starting with the opening of a school at Bear River in 1872.[12,23] Like residential schools, Day Schools served to erase the language and culture of First Nations children and youth.[22] Even though children returned home at the end of each day, educational quality was extremely poor and they faced the trauma of verbal, physical, cultural and sexual abuse at the schools.[22]

The cycle of trauma and assimilation did not end with the closing of residential school and day schools. Child-welfare policy dating back to the 1960s also resulted in the removal of Indigenous children from their families and placement in non-Indigenous foster care.[12,24,25] The period that marks this mass removal is commonly referred to as the "Sixties Scoop".[24]

The "sixties scoop" impacted Nova Scotian First Nations children and as with residential schools, disrupted the passage of language and cultural traditions to future generations.[12,26]

Tragically, discriminatory conduct by government in Canada has continued into recent decades. This was affirmed by a 2016 ruling by the

THE FOLLOWING REFLECTIONS AND STORIES OF SHUBENACADIE RESIDENTIAL SCHOOL SURVIVORS ARE IMPORTANT TO FURTHER UNDERSTANDING

IRS Survivor Profiles, Mi'kmawey Debert Cultural Centre
https://www.mikmaweydebert.ca/sharing-our-stories/indian-residential-schools-legacy-project/irs-survivor-profiles/

HSMBC Designation - Shubenacadie Indian Residential School, Mi'kmawey Debert Cultural Centre
https://vimeo.com/453639815

Stolen children, CBC News, June 30, 2021
https://newsinteractives.cbc.ca/longform/stolen-children

The Final Report of the Truth and Reconciliation Commission of Canada
https://publications.gc.ca/collections/collection_2015/trc/IR4-9-1-1-2015-eng.pdf

Canadian Human Rights Tribunal, which found Canada had discriminated against First Nations Children in its provision of child and family services and implementation of the legal rule known as Jordan's Principle.[27] Multiple additional affirming rulings and orders have followed, and Indigenous leaders have continued to advocate for reform and reparations. In January 2022, an agreement-in-principle was reached between the federal government and First Nations leaders. If approved, $20 billion will be provided to compensate First Nations children who were taken from their families between 1991-2022, and for those who did not receive public services between 2007-2017 they were entitled to according to Jordan's Principle. [27] Another $20 billion will be used for long-term reform of the federal First Nations Child and Family Services Program.[28]

RECLAIMING TRADITIONAL WAYS OF BEING

Following centuries of oppression, traditional ways of Mi'kmaw people are being reclaimed, including raising the next generation in a culture of nurturing love.[5] In Mi'kmaw culture, children are kept close to their mothers, celebrated around important milestones, and encouraged to support and spend time with elders.[5] Children are taught about values of respect for all living things and interdependence through storytelling and legends about nature.[5] Traditionally, Mi'kmaw people "listen with their hearts, eyes, as well as their ears", which has deep benefits for developing children who feel understood and can trust when parents "listen with their hearts."[5] Traditional customs and ceremonies along with the commitment of whole communities and multi-generations to raising children creates a sense of belonging.[5]

SOCIAL, POLITICAL CONTEXT AND GOVERNANCE

There are currently 13 distinct Mi'kmaq First Nations communities in Nova Scotia, each with their own history, culture, and spiritual belief system.[29] Today, Mi'kmaw people may live on one of 42 reserve satellite communities across the province, and many live off-reserve.[30]

Efforts by Mi'kmaw communities and their leaders have long been underway in Nova Scotia to restore self-determination and to implement the treaty rights of their people. Efforts to design and deliver culturally safe care and services that are especially critical to the well-being of Mi'kmaw children and youth living on and off reserves in Nova Scotia include:

- The establishment of the Mi'kmaw Family and Children's Services in 1985 and the child welfare initiative, Maw-Kleyu'kik

Knijannaq (MKK) – which translates to "keeping our children together". Currently this only applies to families and children living on reserves, possibly leaving some Mi'kmaw children in urban areas of NS without access to culturally safe child welfare services.

- The establishment of the Mi'kmaq Education Authority Mi'kmaw Kina'matnewey (MK) in 1997, serving 12 of 13 First Nations communities in Nova Scotia. As the collective voice for Mi'kmaq education, the primary MK mission is to actively promote excellence in Mi'kmaq education, interests and rights for our communities and to facilitate the development of lifelong learning. (https://www.kinu.ca)
- The establishment of the Mi'kmaw Client Linkage Registry, a comprehensive health care database for Mi'kmaw communities. The Mi'kmaq of Nova Scotia have achieved unparalleled access to a broad range of population level health surveillance data. Communities are using this information to monitor changes in the health status of our population, measure health equity gaps, inform our health planning processes, and advocate for the services and resources that we need. Key to our success has been the ability to take advantage of administrative health data collected by the Nova Scotia Department of Health and Wellness and provincial health authorities. (www.tuikn.ca/wp-content/uploads/2021/02/Overview-of-the-NSMCLR-Jan-2021.pdf)
- The recent establishment of Tajikeimiḱ, the new and developing Health and Wellness Authority, created to lead health transformation for the 13 Mi'kmaw First Nations in Nova Scotia. This includes the transfer of responsibility for health services from the federal government and the design and delivery of health and wellness services to improve the overall health for individuals and communities. (https://mhwns.ca)

While this path to self-governance is evolving, important aspects of the lives of Mi'kmaw children, youth, and their families on and off reserves continue to be governed by federal and provincial laws and policies. This mix of jurisdictional authority often results in a level of uncertainty and dispute surrounding the delivery of programs and services for communities and individuals. Mi'kmaw children and youth may be excluded from receiving important programs and services.

Jordan's Principle

Jordan's Principle is a legal rule in Canada established to resolve jurisdictional disputes arising between provincial, territorial and federal governments related to payment of services for First Nations children. The rule is named in honour of Jordan River Anderson, a First Nations child born with complex medical needs who died in hospital rather than in his community while waiting for the federal and provincial governments to decide who was financially responsible for his care.[31] If Jordan had been a non-Indigenous child, the Manitoba government would have covered the cost of his care in the community without delay.[31] With Jordan's Principle, the needs of First Nations children are paramount, and who is responsible for payment is decided later.[31] This principle is integral to ensuring that First Nations children and youth receive the same standard of care as non-Indigenous Canadians.[31]

In Nova Scotia, 638 First Nations children accessed Jordan's Principle between July 2016 and April 2018[32]. The most requested and approved services in the Atlantic Region during that time were for respite, 24/7 placement, childcare/fees, speech language, specialized diagnostic assessment, educational assistants, intensive behavioural interventions, special needs assistants, assisted communication devices/technology, and transportation to Jordan's Principle funded services. It will be important to seek ongoing input of community leaders regarding any ongoing unmet needs, as it is unlikely that Jordan's principle is consistently honoured and meeting the needs of Mi'kmaw communities. It will also be important to identify the growing pressure of children who are aging out of Jordan's Principle.

It is critical that both non-governmental institutions and federal, provincial, and municipal governments ensure that laws, policies, services and programs that impact Mi'kmaw people in Nova Scotia are rights respecting and do not further reinforce or create gaps for Mi'kmaw children, youth and their families.

A LOOK AT THE WELL-BEING OF MI'KMAW CHILDREN AND YOUTH

Well-being for Indigenous peoples is viewed holistically and through an understanding of the interconnectedness of the individual, community, and natural environment.[33] This view encompasses Indigenous knowledge, culture, language, worldview, and spirituality.[33]

Any data that reflect the well-being of Indigenous peoples belong to individuals and communities.[34] The principle of Indigenous data sovereignty recognizes that Indigenous peoples have the right to steward the collection, use and access to their information, and the authority to interpret information through an Indigenous lens with relevant context.[34] The data presented here belong to Mi'kmaq and other First Nations communities in Atlantic Canada.

It is also critical to appreciate that while some outcome data are important for uncovering or evaluating progress on inequities in well-being, they may be seen as deficit-based or as reinforcing negative stereotypes without consideration of the deep influence of structural, historic or cultural factors.[35] Further work is needed to ensure data are available that reflect holistic worldviews, resilience and protective factors for Mi'kmaw communities in Nova Scotia.

TWO-EYED SEEING

Developing an understanding of how health and well-being are conceptualized among Indigenous peoples is essential to improve the health and well-being of Mi'kmaw children and youth.[36] Two-eyed seeing, or etuaptmumk, attempts to bring together the lens of Indigenous knowledge and that of Western science, to see the world from both perspectives. The roots of this approach can be traced to Eskasoni Elder Albert Marshall.[37] Two eyed seeing is also described as learning "to see from your one eye with the best or the strengths in the Indigenous knowledges and ways of knowing... and learn to see from your other eye with the best or the strengths in the mainstream (Western or Eurocentric) knowledges and ways of knowing... but most importantly, learn to see with both these eyes together, for the benefit of all".[37]

Albert says "As wonderful as science is, science cannot see nature from an Aboriginal lens. The big difference is that science sees nature as an object; the Aboriginal lens sees nature as a subject. Because it's through the language, it teaches you that everything is alive, physically and spiritually."[38]

Physical, Mental, Emotional Well-being and Healthcare

The consequences of structural inequities, settler colonialism, intergenerational trauma, and persistent racism continue to impact the physical, mental and emotional well-being of Indigenous peoples across Canada. This is seen

in higher rates of physical health conditions such as arthritis, asthma and diabetes, and mental and emotional challenges including greater risk of suicide.[39] The landmark report *Empathy, dignity, and respect: Creating cultural safety for Aboriginal people in urban health care* affirmed that many Indigenous peoples feel distrustful of the healthcare system given ongoing experiences of racism and stereotyping that are well documented.[40] In addition to training in anti-racism and cultural competencies, healthcare leaders and staff must also have robust and timely accountability policies (that developed with First Nations leaders) to monitor and address racist incidents when they arise.

The Tui'kn partnership is a health partnership of the 13 First Nations bands in Nova Scotia who each deliver critical health services.[41] It also supports health-surveillance data for these Mi'kmaw communities. The partnership determined that between 2004 and 2013, 80 percent of all deaths in Nova Scotian Mi'kmaw communities were premature compared to 38 percent in Nova Scotia overall. Further, it is estimated that 6 out of 10 deaths in the Indigenous communities could have been avoided with prevention or treatment.[42]

Critical research carried out in the Atlantic Provinces through a Two-Eyed Seeing approach has also shown that disparities exist between First Nations children and their non-First Nations peers when it comes to physical, mental and emotional well-being. In one study, First Nations children including Mi'kmaw children and youth in Nova Scotia, had a higher number of admissions to neonatal intensive care units, diagnoses of dental and ear conditions, diabetes, headaches, burns, and fractures - they experienced more pain that non-First Nations children.[43] Despite this, they were less likely to be diagnosed, treated, or referred for specialist care than non-First Nations children.[43]

Addressing key social and structural determinants of health such as poverty, food insecurity and lack of access to appropriate housing, are critical to improving physical, mental and emotional well-being outcomes for Mi'kmaw children, youth and their families in Nova Scotia. It is also essential that Mi'kmaw communities in Nova Scotia be empowered to design and deliver culturally safe health programming and services that account for Indigenous ways of knowing.

ECONOMIC AND MATERIAL SECURITY

The economic and material security of Indigenous children, youth and their families across Canada is deeply influenced by colonial structural inequities and a history of inadequate infrastructure funding and other discriminatory policies.[35,44] Accurately estimating the number of children and youth from Indigenous communities experiencing poverty in Canada is complex because data are not routinely collected for all Indigenous populations. For example, the Canadian Income Survey excludes people living on-reserve.[45] Even the definition of poverty used in mainstream discourse is problematic, having its roots in colonial structures and concepts that focus on individual risk or absolute terms rather than the broader, more holistic concepts of building community that underpin Indigenous culture.[46]

Based on one available measure for estimating the burden of poverty, Mi'kmaw children and youth in Nova Scotia are experiencing poverty at a rate that is unacceptably high and higher than the general population of children and youth in Nova Scotia. Based on 2019 tax-filer data and the CFLIM-AT, well over 50 percent of children and youth were living in families experiencing poverty in postal areas that include reserve communities.[45] Data from the 2015 Census show that child poverty rates in Nova Scotia were higher for off-reserve Mi'kmaw people as well.[45] Responses to the Nova Scotia 2018-2019 *Student Success Survey* indicate children and youth are feeling the effects. Mi'kmaw/Indigenous children reported higher rates of feeling less respected because of their family's income compared to their peers (24.0 percent vs. 16 percent).[47]

High levels of income poverty further threaten the material security and broader well-being of Mi'kmaw children and youth who may be deprived of affordable, accessible, culturally appropriate food or safe, appropriate housing. While comprehensive data about food insecurity for Mi'kmaw communities in Nova Scotia is lacking, qualitative work carried out in Pictou Landing First Nation in 2014 uncovered key barriers that prevented residents from achieving food security in their community.[48] These barriers included the predominance of convenience stores and lack of proximity to grocery stores, insufficient income assistance rates for meeting a nutritious diet, and pollution from a nearby mill that threatened access to traditional foods, including the area of A'se'k, or the Boat Harbour area.[48]

There is also a need for more comprehensive data about the housing needs of Mi'kmaw people living on and off reserve in Nova Scotia.

A Housing Needs Assessment carried out by the Atlantic Policy Congress of First Nations Chiefs Secretariat in 2016, however, uncovered significant needs with respect to housing availability, appropriateness, and safety, such as presence of overcrowding and homes in need of significant repairs for health hazards such as mould.[49]

Concerted efforts are needed to erase structural inequities, to adequately fund necessary infrastructure, and to create opportunities for Indigenous peoples to shape their economic circumstances.[46]

LEARNING AND LANGUAGE

The cognitive, social, and emotional well-being and educational attainment of Indigenous peoples in Canada is influenced by historical trauma and injustice, ongoing inequities in funding, and Eurocentric curricula and practices of assessment that are prevalent in the Canadian Education system.[50] While Indigenous peoples in Canada have historically had lower educational attainment than their non-Indigenous peers, there is evidence of increasing educational attainment over recent years.[50] This change can be traced to the leadership of Indigenous communities

Eskasoni First Nation's Transformation of Youth Mental Healthcare

A partnership between the Mi'kmaw community of Eskasoni and Access Open Minds is an example of successful community-driven, transformative mental health services co-designed with youth. Using the Fish Net Model, mental health staff in Eskasoni have implemented a host of services and activities to reach out and identify youth in need of care early including recreation and cultural activities and wellness groups. Youth in need of support can choose between mainstream mental health service and Indigenous methods of improving well-being, or a combination of both. Appropriate care is accessed close to home.

https://accessopenminds.ca/our_site/eskasoni-first-nation-ns-2/

who have worked to deliver culturally safe and appropriate education and are striving to increase opportunities for participation in higher education.

In the *2018-2019 Student Success Survey*, 8 percent of respondents identified as Mi'kmaw/ Indigenous Ancestry out of 53, 578 students and 2.0 percent of these students spoke Mi'kmaq at home.[47] Mi'kmaw students may attend public schools or local band schools.[47]

Mi'kmaw Kina'matnewey (MK) is the Mi'kmaq Education Authority which supports 12 Mi'kmaw communities in Nova Scotia to deliver language immersion and other culturally important programs and activities. MK has also provided expertise to improve language and Mi'kmaw programming and curriculum in public schools. MK has overseen substantial improvements in the graduation rates of First Nations students in Nova Scotia, improved numeracy and literacy rates in elementary and secondary schools and increasing enrolment of First Nations students in post-secondary institutions.[51]

CHILD WELFARE

The Mi'kmaq were the first in the country to establish an Indigenous Child Welfare Agency to serve all FN communities in the province, and how now are in the process of creating Mi'kmaq Child Welfare Legislation.

Indigenous children and youth remain over-represented in child welfare systems across Canada. Indigenous children aged 0 to 4 years represented 52.2 percent of children in foster care in 2016, while only making up 7.7 percent of the child population within the same age group.[52] When Canada's progress was last reviewed by the United Nations Committee on the Rights of the Child in 2012, there was grave concern that Indigenous children in Canada faced discrimination by the Canadian government.[53] Unpublished data from the Department of Community Services indicate that between 2015-2019 Mi'kmaw children and youth in Nova Scotia remained over-represented in child welfare in the province.

In 2020, Federal Bill C-92, *An Act respecting First Nations, Inuit and Métis children, youth and*

families was passed and affirmed Indigenous jurisdiction over child and family services.[54] This federal legislation will further ensure that the best interests of the child come first when considering child and family services for Indigenous children, including maintaining the child's cultural connection and relationship to family and community.[55] In the words of former Paqtnkek First Nation Chief Paul Prosper (now Regional Chief of the Assembly of First Nations), "There is a critical need for the Mi'kmaq to take control and jurisdiction over our most important resource, our children. Proposed Federal Child Welfare legislation will enable the Mi'kmaq to heal our communities through our own customs, values, and traditions. Solutions in Child Welfare can't be imposed; rather, they must be developed by and for the Mi'kmaw people."[56]

MOVING FORWARD IN RECONCILIATION

The release of the Truth and Reconciliation Commission of Canada's report in 2015 represented a call to action for every Canadian to support the restoration of rights for Indigenous peoples. Although progress has been made in some areas, there is still substantial systemic change required.[1] It is incumbent on individuals and non-governmental and governmental intuitions in Nova Scotia to advance the calls to action once and for all.

Mi'kmaw people and communities in Nova Scotia are resilient and have many strengths. Honouring the treaty rights of Mi'kmaw people and their right to self-determination is critical to defining success and improving outcomes for children, youth and families. Mi'kmaw people must be heard and have the opportunity to shape their well-being using the wisdom and knowledge they hold about what their communities need to be well.[1]

SOURCES FOR THIS SECTION

1. Truth and Reconciliation Commission of Canada (2015). Calls to Action. Available from: https://ehprnh2mwo3.exactdn.com/wpcontent/uploads/2021/01/Calls_to_Action_English2.pdf. Accessed November 8, 2021.
2. Government of Canada (2021). Indigenous peoples and communities. Available from: https://www.rcaanc-cirnac.gc.ca/eng/1100100013785/1529102490303. Accessed November 8, 2021.
3. Greenwood M, Larstone R, Lindsay N (2018). Indigenous children in the context of family and nationhood. Pedagogies for Diverse Contexts (eds. Pence, A. & Harvell, J.) 97–111.
4. Greenwood M, de Leeuw, S R (2012). Social determinants of health and the future well-being of Aboriginal children in Canada. Paediatrics & Child Health, 17 (7), 381-384.
5. Martin, C (1994). Mi'kmaq Family. Available from: http://www3.onf.ca/sg/65480.pdf. Accessed March 2, 2022.
6. Rudderham S (2021). Personal Communication.
7. Blackstock C et al (2004). Keeping the Promise: The Convention on the Rights of the Child and the Lived Experience of First Nations Children and Youth. Available from: https://fncaringsociety.com/sites/default/files/docs/KeepingThePromise.pdf. Accessed March 2, 2022.
8. United Nations (2007). United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP).
9. United Nations (1990). Convention on the Rights of the Child: General Assembly Resolution 44/25 of 20.
10. Government of Canada (2022). Implementing the United Nations Declaration on the Rights of Indigenous Peoples Act. Available from: https://www.justice.gc.ca/eng/declaration/index.html. Accessed March 2, 2022.
11. Cape Breton University (n.d.). Oral Histories. Available from: https://www.cbu.ca/indigenous-affairs/mikmaq-resource-centre/mikmaq-resource-guide/essays/oral-histories/. Accessed November 8, 2021.
12. Taylor C (2016). Our History, Our Stories: Personal Narratives and Urban Aboriginal History in Nova Scotia. Available from: https://uakn.org/wp-content/uploads/2016/02/Our-History-Our-Stories-NS-online.pdf. Accessed November 8, 2021.
13. McGee HF (n.d.). Mi'kmaq. Available from: https://www.thecanadianencyclopedia.ca/en/article/micmac-mikmaq. Accessed November 8, 2021.
14. Government of Canada (2015). Peace and Friendship Treaties. Available from: https://www.rcaanc-cirnac.gc.ca/eng/1100100028589/1539608999656. Accessed November 8, 2021.
15. Tobin AM. (1999). The Effect of Centralization on the Social and Political Systems of the Mainland Nova Scotia Mi'kmaq. Available from: https://www.nlc-bnc.ca/obj/s4/f2/dsk2/ftp01/MQ40360.pdf. Accessed November 8, 2021.
16. Paul D. (n.d.). We Were Not the Savages, First Nations History: Centralization Plan Implemented 1942. Available from: http://www.danielnpaul.com/CentralizationImplemented-1942.html. Accessed March 2, 2022.
17. National Centre for Truth and Reconciliation (2021). Residential School History. Available from: https://nctr.ca/education/teaching-resources/residential-school-history/. Accessed November 8, 2021.
18. Bombay A, Matheson K, Anisman H (2014). The intergenerational effects of Indian Residential Schools: Implications for the concept of historical trauma. Transcultural Psychiatry 51, 320–338.
19. Mosby I, Millions E (2021). Canada's Residential Schools Were a Horror. Available from: https://www.scientificamerican.com/article/canadas-residential-schools-were-a-horror/. Accessed November 8, 2021.
20. Government of Canada (2021). The Former Shubenacadie Indian Residential School in Nova Scotia. Available from: https://www.pc.gc.ca/en/culture/clmhc-hsmbc/res/information-backgrounder/pensionnat-shubenacadie-residential-school. Accessed March 2, 2022.

21. Paul D. (2020). We Were Not the Savages, First Nations History: Terrified. Available from: http://www.danielnpaul.com/IndianResidentialSchools.html. Accessed March 2, 2022.

22. Whitebean WS (2019). Child-Targeted Assimilation: An Oral History of Indian Day School Education in Kahnawà:ke. Available from: https://spectrum.library.concordia.ca/id/eprint/985347/1/Whitebean_MA_S2019.pdf. Accessed March 2, 2022.

23. Federal Indian Day School Class Action (n.d.). Schedule K: List of Federal Indian Day Schools. Available from: https://indiandayschools.com/en/wp-content/uploads/schedule-k.pdf. Accessed March 2, 2022.

24. Hanson E (n.d.). Sixties Scoop: The Sixties Scoop & Aboriginal child welfare. Available from: https://indigenousfoundations.arts.ubc.ca/sixties_scoop/. Accessed March 2, 2022.

25. Carneiro S (2018). Policy, Poverty and Indigenous Child Welfare: Revisiting the Sixities Scoop. Available from: https://qspace.library.queensu.ca/bitstream/handle/1974/24304/Carneiro_Sarah_B_201806_MA.pdf?sequence=2&isAllowed=y. Accessed March 2, 2022.

26. Hardy L (2019). Sixties Scoop: A Mi'kmaq survival story. Available from: https://signalhfx.ca/sixties-scoop-a-mikmaq-survival-story/. Accessed March 2, 2022.

27. First Nations Child & Family Caring Society of Canada. (2022). Settlement Agreement in Principle Regarding Compensation for First Nations Children. Available from: https://fncaringsociety.com/sites/default/files/compensation_aip_info_sheet.pdf. Accessed March 2, 2022.

28. Indigenous Services Canada. (2022). Agreements-in-Principle reached on compensation and long-term reform of First Nations child and family services and Jordan's Principle. Available from: https://www.canada.ca/en/indigenous-services-canada/news/2022/01/agreements-in-principle-reached-on-compensation-and-long-term-reform-of-first-nations-child-and-family-services-and-jordans-principle.html. Accessed March 2, 2022.

29. Aboriginal Children's Hurt and Healing Initiative (2017). About Us: Who are the aboriginal people of Canada? Available from: https://achh.ca/about-us/. Accessed November 8, 2021.

30. Office of L'nu Affairs (2014). Aboriginal People in Nova Scotia: Facts Sheets and Additional Information. Available from: https://novascotia.ca/abor/aboriginal-people/demographics/. Accessed March 2, 2022.

31. First Nations Child and Family Caring Society (n.d.). Jordan's Principle. Available from: https://fncaringsociety.com/jordans-principle. Accessed November 8, 2021.

32. Ginn, P (2021). Personal Communication.

33. Svenson KA, Lafontaine C (1999). The search for wellness. Available from: https://fnigc.ca/wp-content/uploads/2020/09/rhs_1997_final_report.pdf. Accessed November 8, 2021.

34. The First Nations Information Governance Centre (2019). First Nations data sovereignty in Canada. Statistical Journal of the IOAS, 35, 47-69.

35. First Nations Information Governance Centre and Metis National Council. Social determinants of health and health inequalities: Indigenous perspectives. Available from: https://www.canada.ca/en/public-health/services/publications/science-research-data/key-health-inequalities-canada-national-portrait-executive-summary.html. Accessed March 7, 2022.

36. Bartlett C, Marshall M, Marshall A (2012). Two-Eyed Seeing and other lessons learned within a co-learning journey of bringing together Indigenous and mainstream knowledges and ways of knowing. J Environ Stud Sci 2012;2:331-340.

37. Author unknown (2017). Two-Eyed Seeing – Elder Albert Marshall's guiding principle for inter-cultural collaboration. Available from: http://www.integrativescience.ca/uploads/files/Two-Eyed%20Seeing-AMarshall-Thinkers%20Lodge2017(1).pdf. Accessed November 8, 2021.

38. Donovan M (2022). 'A quest for wisdom': How two-eyed seeing mixes Indigenous knowledge and Western science in N.S. Available from: https://www.cbc.ca/news/canada/nova-scotia/two-eyed-seeing-doc-1.6304574. Accessed March 5, 2022 .

39. Public Health Agency of Canada. Key Health Inequalities in Canada: A National Portrait – Executive Summary. Available from: https://www.canada.ca/en/public-health/services/publications/science-research-data/key-health-inequalities-canada-national-portrait-executive-summary.html. Accessed March 7, 2022.

40. Health Council of Canada (2012). Empathy, dignity, and respect: creating cultural safety for Aboriginal people in urban health care. Available from: https://publications.gc.ca/collections/collection_2013/ccs-hcc/H174-39-2012-eng.pdf. Accessed November 8, 2021.

41. Tui'kn Partnership (2018). Our Five Communities. Available from: http://www.tuikn.ca/our-five-communities/. Accessed November 8, 2021.

42. Tui'kn Partnership (2018). Mortality in NS Mi'kmaq Communities. Available from: http://www.tuikn.ca/wp-content/uploads/2015/03/Mortality-bulletin-FINAL.pdf. Accessed November 8, 2021.

43. Latimer M, et al (2018). Occurrence of and referral to specialists for pain-related diagnoses in First Nations and non–First Nations children and youth. Canadian Medical Association Journal 190, E1434–E1440.

44. Hajizadeh M, et al (2018). Socioeconomic inequalities in health among Indigenous peoples living off-reserve in Canada: Trends and determinants. Health Policy 122, 854–865.

45. Frank L, Fisher L, Saulnier C (2021). Report Card on Child and Family Poverty in Nova Scotia: Worst Provincial Performance over 30 Years. Available from: https://www.policyalternatives.ca/publications/reports/2021-report-card-child-and-family-poverty-nova-scotia. Accessed November 8, 2021.

46. Poverty Action Research Project (2018). Pursuing Well-being: Lessons from the First Nations Poverty Action Research Project. Available from: https://www.edo.ca/downloads/poverty-action-research-project-2.pdf. Accessed November 8, 2021.

47. Department of Education and Early Childhood Development and Communications Nova Scotia (2019). Student Success Survey. Available from: https://plans.ednet.ns.ca/sites/default/files/documents/2018-2019_StudentSuccessSurvey.pdf. Accessed November 8, 2021.

48. Pictou Landing First Nation (2014). Community Food Security in Pictou Landing First Nation. Available from: https://foodarc.ca/wp-content/uploads/2014/05/CFS-in-PLFN-project-report-UPDATED-July-2014.pdf. Accessed March 7, 2022.

49. MacKinnon J, DiCicco J, Asyyed Z (2016). Atlantic First Nations Housing Needs Assessment Analysis of Findings. Available from: https://www.apcfnc.ca/wp-content/uploads/2020/06/Atlantic_First_Nations_Housing_Needs_Assessment.pdf. Accessed March 7, 2022.

50. Charbonneau J (2016). The Educational Gap Between Indigenous and Non-Indigenous People in Canada. Journal of Student Affairs 26, 83–89.

51. Simon L (2014). Mi'kmaw Kina'matnewey: Supporting Student Success. Available from: https://indspire.ca/wp-content/uploads/2019/10/indspire-nurturing-capacity-mk-2014-en-v2.pdf. Accessed March 7, 2022.

52. Statistics Canada (2017). Census in Brief: Diverse family characteristics of Aboriginal children aged 0 to 4. Available from: https://www12.statcan.gc.ca/census-recensement/2016/as-sa/98-200-x/2016020/98-200-x2016020-eng.cfm. Accessed November 8, 2021.

53. First Nations Child and Family Caring Society (2012). UNCRC Concluding Observations: Canada. Available from: https://fncaringsociety.com/sites/default/files/UNCRC%20Briefing%20Note%202012.pdf. Accessed November 8, 2021.

54. Justice Canada (2019). An Act respecting First Nations, Inuit and Métis children, youth and families. Available from: https://laws-lois.justice.gc.ca/PDF/2019_24.pdf. Accessed November 8, 2021.

55. Government of Canada (2021). Reducing the number of Indigenous children in care. Available from: https://www.sac-isc.gc.ca/eng/1541187352297/1541187392851. Accessed November 12, 2021.

56. Government of Canada (2018). Support for Child and Family Services Co-Developed Legislation. Available from: https://www.sac-isc.gc.ca/eng/1543584936789/1543585105080. Accessed November 9, 2021.

SPOTLIGHT ON

THE WELL-BEING OF AFRICAN NOVA SCOTIAN CHILDREN AND YOUTH

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"The cumulative impact of anti-Black racism and discrimination faced by African Canadians in the enjoyment of their rights to education, health, housing, and employment, among other economic, social and cultural rights, has had serious consequences for their overall well-being."

United Nations Working Group of Experts on People of African Descent

WHY WE NEED TO FOCUS OUR ATTENTION ON THIS POPULATION

African Nova Scotians are the largest racially visible group in Nova Scotia making up 2.4 percent of Nova Scotia's total population.[1]

Those born in the province constitute 80.7 percent of the racially visible Black population. The majority of this group are at least three generations Nova Scotian, while 6.7 percent were born in other provinces and territories.[1] Nova Scotia is generally trending toward an aging population. However, African Nova Scotian communities are comparatively younger, with nearly half of individuals below 25 years of age.[2]

Unfortunately, there is no existing system to collect race-based data that would holistically reflect the status of well-being for African Nova Scotian children, youth, and their families. Available data suggest that this community is compromised by a lack of access to supports, services, and resources that are culturally relevant.[2,3] More data are needed, and a commitment to collect these data is vital.

ACKNOWLEDGING THE PAST

To understand well-being among African Nova Scotian children and their families, acknowledging historical and generational trauma—a direct result of colonialism, segregation, discrimination, and structural and systemic racism—is essential.

The trauma endured by the African Nova Scotian community can be traced back primarily to a period in the province's history where people of African descent were either enslaved and brought to Nova Scotia through the Atlantic Slave Trade, or migrated to the province as Maroons, Black Loyalists, refugees, planters, and domestic workers.[4–7]

Today anti-Black racism is systemically embedded within Canadian institutions and underlies long-standing inequalities experienced by people of African descent, including un/underemployment, poverty, racial profiling, law enforcement violence, incarceration, immigration detention, deportation, exploitative migrant labour practices, disproportionate child removal, and low graduation rates.[8]

The story of Africville

In the late 1700s and early 1800s, people of African descent arriving in Nova Scotia in search of freedom or a better life faced discrimination by white settlers and were forced to live on the least-hospitable land where, nonetheless, vibrant communities were born.[9] Sadly, this sowed the seeds for ongoing trauma and continued discrimination, including social and structural racism.

The story that illustrates this best is that of Africville, an African Nova Scotian community located on the Bedford Basin, just outside of Halifax. In 1964, this community experienced forced relocation by the City of Halifax which sought to develop industry and infrastructure in the area.

Former residents of Africville, including Irvine Carvery, describe a community that provided a strong place of belonging. Carvery states, "You weren't isolated at any time living in Africville. You always felt at home; the doors were open. That is one of the most important things that has stayed with me throughout my life."

Africville provided residents access to the ocean for fishing and swimming, fields for blueberry picking and playing, and a church in the center of their community to unite them. Residents in Africville owned their land and homes and had a strong sense of community. Children had places to play, and families had places to gather and worship.

Even though the residents of this community thrived and paid city taxes, the municipal government refused to provide many amenities offered to other residents of Halifax such as garbage removal, water, and sewage. The city also built a prison, an infectious diseases hospital, and a dump near the community. The city council of the time approved the forced relocation of the residents of Africville to public housing in Uniacke Square and Mulgrave Park, and Africville was destroyed to make way for infrastructure development.[9]

Research examining the impact of environmental racism has revealed that some rural African Nova Scotian communities have higher rates of cancer, kidney disorders, heart disease, and other conditions as a result of being located in close proximity to garbage dumping sites and other environmental hazards.[10]

The Nova Scotia Home for Colored Children

Governments have a legal and ethical obligation to protect all children from violence, abuse, and neglect regardless of the colour of their skin.[11] The Nova Scotia Home for Colored Children (later named the Akoma Family Centre) represents another dismal chapter of colonial and systemic racism in Nova Scotia.

In June 1921, the home was created to provide care for children of African descent who were not accepted or allowed in white-care institutions. Although seen as a place of safety for some, many children and youth suffered physical, sexual, and emotional abuse while living at the home. A recent restorative inquiry into the abuses suffered by some residents stressed the importance of educating everyone about this grave period in our history.[12] Both the inquiry members and premier publicly acknowledged the legacy of systemic racism and inequality that persists in Nova Scotia.

INCOME AND EMPLOYMENT

The history of enslavement, displacement, systemic oppression, and trauma inflicted upon communities of African descent continues to impact the well-being of African Nova Scotian communities. Children and families of African descent experience inequalities based on their race, community, income, education, and other social and structural determinants of health. Income is a core determinant of health and well-being for all children and families.

Due to historical anti-Black racism, colonization, sexism, and oppression, some members of African Nova Scotian communities face higher

rates of poverty than the general population. In fact, 40 percent of Black children in Nova Scotia live in poverty compared to the provincial child poverty rate of 22.2 percent and the national child poverty rate of 17 percent.[13] In Nova Scotia, census data indicate that 18.5 percent of women and men of African descent experience low income compared to 6.7 percent of the general population.[14]

In 2011, the unemployment rate for African Nova Scotians was 14.5 percent, higher than the rest of Nova Scotia (9.9 percent).[14] Much work remains to be done to build a more inclusive workforce that would lower the unemployment rate for African Nova Scotians to the provincial average. As outlined in a report from the Nova Scotia Commission on Building Our New Economy,[15] increased employment could be achieved through an economic development strategy that focuses on opportunities for African Nova Scotian youth including education, training, apprenticeship, and mentorship. This strategy could also address system barriers; promote and support African Nova Scotians to become entrepreneurs; and focus on improving work environments.[15]

PASS THE MIC

"When I know that my children are hurt, it eats at my stomach. I feel my stress internally. When our kids hurt, we hurt. There are days when I went to work with a smile all the while thinking that one more thing might push me over the edge or what might happen to my child. "

- African Canadian Parent

EDUCATION

African Nova Scotian children and their families have experienced inequities within the school system for decades.[16] It must not be forgotten that segregated schools existed in the province until the 1960s.[17]

The 1994 Black Learners Advisory Committee (BLAC) report identified several gaps for African Nova Scotian learners.[18] Years later, evidence continues to demonstrate a disparity in learning outcomes fuelled by inequity.[19,20]

A 2016 study assessing the use of individual program plans (IPPs) in Nova Scotia's education system found that while 5.4 percent of students overall are taught on an IPP, this rises to 7.9 percent of students of African descent.[20] An IPP is put in place when provincial learning outcomes may not be applicable or achievable, even with adaptations, for students. The student's program planning team develops an individual program plan that changes the prescribed outcomes and/or adds new outcomes for the student.

Students who are placed on an IPP throughout their public education find it challenging to access post-secondary education that could, in turn, increase income, create employment opportunities, and enhance the work environment and conditions.[20]

African Nova Scotian students do not feel integrated in a meaningful way in the public education system.[16] They report feeling teachers neither sufficiently understand African Nova Scotian culture nor have relevant training in Black history, race relations, and cross-cultural understanding.[16,18] As a result, teachers may not appreciate the difficulties and enormous challenges students face in getting an education or offer enough help to overcome the challenges.

PHYSICAL WELL-BEING AND ACCESS TO HEALTH CARE

Research has confirmed that long-term exposure to structural and systemic racism can drastically impact a person's health and increase their risk of type II diabetes, high blood pressure, heart disease, cancer, and other health-related conditions.[21,22]

Black Canadians (African, Black, Caribbean) are 2.1 times more likely than white Canadians to have diabetes and 1.8 times more likely to experience circulatory diseases.[23] As well, 54.2 percent of white Canadians are moderately active compared to 40.8 percent

of Black Canadians age 18 years and older.[24] In the United States between 2009-2012, the age-adjusted prevalence of hypertension for Black men was 44.9 percent compared to 32.9 percent for white men and 46.1 percent for Black women compared to 30.1 percent for white women.[25]

Access to healthcare and the cultural safety of that care also contribute to physical well-being for many African Nova Scotians. Most healthcare facilities are in larger cities, whereas several African Nova Scotian communities are in rural areas with limited, restricted, or no access to public transportation. This structural barrier has a particularly challenging impact on families trying to access specialized care for their children, especially those living with disability.

Not only is there limited access to care, but there is a level of mistrust towards healthcare practitioners that is intergenerational and must be corrected to improve health outcomes. Lack of representation among healthcare providers and a lack of cultural competency further contribute to this problem. A recognition of historical trauma and adverse childhood experiences is key to enhancing quality of care for people of African descent. A trauma-informed approach is critical. This provides an opportunity to develop and build trusting relationships from a patient-centered perspective in a space that allows people to feel safe physically, emotionally, psychologically, and culturally.

ALTERNATE CARE

Children and youth of African descent continue to be over-represented in child-welfare institutions. In March 2016, children of African descent constituted 2.3 percent of children in care and 8.3 percent identified as mixed-race (African Nova Scotian and other).[26] It is important to recognize that many of the families and children who engage with public systems may be children and/or grandchildren connected to and oppressed by these systems.

MOVING FORWARD IN A SPIRIT OF JUSTICE AND REPARATION

In Nova Scotia, we must all work to improve the quality of life and well-being of children and youth who are of African descent. We must see them for everything they are and appreciate the resilience of the community. We must dispel the harmful stereotypes and myths we hear about people of African descent and move to a place of equity.

To do so, many Nova Scotians must acknowledge their privilege and educate themselves on the history and experiences of people of African descent. Government departments and organizations that work with children and youth of African descent must build trusting relationships with the community and acknowledge systemic, structural, and institutional racism that continues to impact the well-being of children and their families.[12] It is paramount that governments begin monitoring the status of well-being for children and youth in African Nova Scotian communities by developing a system for collecting appropriate race-based data that is informed by the communities themselves.

SOURCES FOR THIS SECTION

1. Statistics Canada (2019). Canada's Black population: growing in number and diversity. Available from: http://publications.gc.ca/collections/collection_2019/statcan/11-627-m/11-627-m2019006-eng.pdf. Accessed July 14, 2021.
2. Statistics Canada (2019). Diversity of the Black population in Canada: An overview. Available from: https://www150.statcan.gc.ca/n1/pub/89-657-x/89-657-x2019002-eng.htm. Accessed July 14, 2021.
3. National Collaborating Centre for Determinants of Health (2017). Pan-Canadian Health Inequalities data tool, 2017 edition. Available from: https://nccdh.ca/resources/entry/pan-canadian-health-inequalities-data-tool-2017-edition. Accessed July 14, 2021.
4. Black Cultural Centre for Nova Scotia (n.d.). Our History. Available from: https://bccns.com/our-history/. Accessed October 8, 2021.
5. Calliste A (1989). Canada's immigration policy and domestics from the Caribbean: The second domestic scheme. Race, Class, Gender: Bonds and Barriers 5, 133–165.
6. Hamilton S (1994). Naming names, naming ourselves: A survey of early Black women in Nova Scotia. in We're rooted here, and they can't pull us up: Essays in African Canadian Women's History 13–40. University of Toronto Press.
7. Pachai B (1987). Blacks. Tantallon, NS.
8. Canadian Public Health Association (2018). Racism in Public Health: Position Statement. Available from: https://www.cpha.ca/sites/default/files/uploads/policy/positionstatements/racism-positionstatement-e.pdf. Accessed July 14, 2021.
9. Canadian Museum of Human Rights (n.d.). The story of Africville. Available from: https://humanrights.ca/story/the-story-of-africville. Accessed July 14, 2021.
10. Waldron I (2018). There's Something in the Water. Available from: https://fernwoodpublishing.ca/book/there8217s-something-in-the-water. Accessed July 14, 2021.
11. United Nations (1990). Convention on the Rights of the Child: General Assembly Resolution 44/25 of 20.
12. Council of Parties (2019). Journey to Light: A Different Way Forward. Final Report of the RestorativeInquiry – Nova Scotia Home for Colored Children. Available from: https://restorativeinquiry.ca/. Accessed November 8, 2021.
13. Canadian Centre for Policy Alternatives (n.d.). Child and Family Poverty in Nova Scotia: Anti-Racism, Anti-Poverty Statement. Available from: https://www.policyalternatives.ca/newsroom/updates/child-and-family-poverty-nova-scotia-anti-racism-anti-poverty-statement. Accessed July 14, 2021.
14. Statistics Canada (2017). Census Profile, 2016 Census - Nova Scotia [Province] and Black Lake [Population centre], Quebec. Available from: https://www12.statcan.gc.ca/census-recensement/2016/dp-pd/prof/details/page.cfm?Lang=E&Geo1=PR&Code1=12&Geo2=POPC&Code2=1458&Data=Count&SearchText=Black%20Lake&SearchType=Begins&SearchPR=01&B1=All. Accessed July 14, 2021.
15. The Nova Scotia Commission on Building Our New Economy (2014). Now or Never: An Urgent Call to Action for Nova Scotians. Available from: https://www.onens.ca/sites/default/files/editor-uploads/now-or-never.pdf. Accessed July 14, 2021.
16. Hamilton-Hinch BA, et al. (2021). A Call for Change in the Public Education System in Nova Scotia. 1 44, CI64–CI92.
17. Maroon Films (2014). The Little Black School House. Available from: https://maroonfilmsinc.wordpress.com/2014/12/04/the-little-black-school-house/. Accessed November 8, 2021.
18. The Black Learners Advisory Committee (BLAC) (1994). The BLAC Report on Education: Redressing inequity - empowering black learners. Available from: https://www.ednet.ns.ca/docs/blac-report-education-redressing-inequity.pdf. Accessed July 14, 2021.

19. Frank B (2010). Review of Cole Harbour District High School. Available from: https://www.edcan.ca/wp-content/uploads/EdCan-2002-v42-n3-Frank.pdf. Accessed July 14, 2021.
20. Government of Nova Scotia (2016). individual Program Plan Review. Available from: https://www.ednet.ns.ca/docs/individualprogramplanreview.pdf. Accessed July 14, 2021.
21. James C, et al. (2010). Race & well-being: the lives, hopes and activism of African Canadians. Fernwood Publishing.
22. McGibbon E, et al. (2013). The social determinants of cardiovascular health: Time for a focus on racism. Diversity & Equality in Health & Care 10, 139–142.
23. Kisley S, et al. (2008). A population-based analysis of the health experience of African Nova Scotians. Canadian Medical Association Journal, 179.
24. National Collaborating Centre for Determinants of Health (2017). Pan-Canadian Health Inequalities data tool, 2017 edition. Available from: https://nccdh.ca/resources/entry/pan-canadian-health-inequalities-data-tool-2017-edition. Accessed July 14, 2021.
25. Spence JD, Rayner BL (2018) Hypertension in Blacks: Individualized Therapy Based on Renin/Aldosterone Phenotyping. Hypertension 72, 263–269.
26. Province of Nova Scotia (2016). Meetings with African Nova Scotian Communities Regarding Amendments to the Children and Family Services Act. Available from: https://novascotia.ca/coms/families/changestocfsa/What-we-heard-from-African-Nova-Scotian-Communities-about-Amendments-to-Child-Family-Services-Act.pdf. Accessed July 14, 2021.

SPOTLIGHT ON

THE WELL-BEING OF CHILDREN AND YOUTH WHO ARE NEWCOMERS TO NOVA SCOTIA

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WHY WE NEED TO FOCUS OUR ATTENTION ON THIS POPULATION

Nova Scotia celebrated the arrival of a record-breaking 7,580 new permanent residents in 2019.[1] Initiatives such as the federal government's Provincial Nominee Program and the Atlantic Pilot Program have attracted skilled individuals and their families to Nova Scotia. This trend is likely to continue as federal and provincial targets for growth remain ambitious.[2]

Settling in a new country adds layers of complexity to life and directly influences the well-being of children and youth. Although all families share many of the same stressors, newcomer families may face additional – and significant – challenges. These include trauma, loss, culture shock, new societal expectations, racism, discrimination, and poverty.

Understanding the needs of newcomer families in Nova Scotia is vital in our ongoing efforts to make life better for all children and youth.

THE EXPERIENCE OF NEWCOMERS TO NOVA SCOTIA

Early Childhood Educators (ECEs) with the Immigrant Services Association of Nova Scotia (ISANS) Early Childhood Education Centre work with children ages six months to 13 years. ECEs have observed that well-being for many newcomer families is initially tied to basic needs such as housing, finances, and health. As families establish these foundations, they may grapple with psychosocial and cultural changes. Families must navigate new healthcare, education, and transportation systems. They may have also been separated from family and friends in other areas of the world through their resettlement journeys.

This, coupled with differences in language and communication, can leave newcomers feeling particularly isolated.

As families move from survival to integration, their definition of well-being may expand. In some cases, they may begin to encounter cultural tensions and face racial discrimination or xenophobia.

Depending on their country of origin, newcomers may experience the healthy immigrant effect: they arrive healthier than the Canadian-born population but experience declining health over time.[3] This could be the result of changing access to fresh, nutritious foods; limited capacity to grow food; less physical activity; increased stress; and few social supports. Other newcomers, particularly those with a refugee background or those seeking asylum, may experience negative health outcomes because of impaired or limited access to healthcare in refugee camps and other temporary dwellings. After arriving in Canada, newcomers may face barriers to healthcare due to a lack of linguistic interpreters, difficulty navigating the health system, and limited health insurance.[7]

The age of children and youth upon arrival also influences well-being. Older children can inadvertently take on parental roles for younger siblings and act as interpreters for their parents. This added responsibility may compromise their mental health and childhood experiences. Older children can have a harder time learning a new language, and some school-aged children report experiencing bullying, racism, and discrimination.

MIGRATION JOURNEY AND RESETTLEMENT

The journey from a country of origin to Canada is a shared experience that impacts the health and well-being of newcomers. It is vital to recognize the unique experience of refugee children and youth. After fleeing their home country, individuals traveling as refugees spend time in at least one transit country where they endure a lengthy, stressful, and uncertain process to be granted refugee status and to be identified for settlement.[4]

Refugees may have varying levels of community support. When families arrive as part of a large group or are joining an already-settled large community of shared ethnicity or culture, there is often added support in contrast to those who arrive in smaller groups or as individuals. Groups arriving in large numbers can be positively impacted by tremendous community support and existing communities play a huge role in helping to integrate families and their

children into a new home. For some, however, there may be periods of social isolation while they build a new support network.

CAREGIVER TRAUMA AND MENTAL HEALTH

Trauma experienced before and during the immigration journey can affect a caregiver's capacity to assess safety, regulate their emotions, and build secure attachment with their children. This may lead to insecure caregiver-child-attachment relationships and poor mental health, even after arrival in a safe country. When past trauma is not resolved, it remains present and can be compounded by homesickness, extreme loneliness, and worry for their country. Even for children born in the new country, parental trauma may be transmitted across generations.

Newcomers who have fled countries experiencing systemic violence by government or who have concerns about their precarious migration status in Canada may hesitate to trust government institutions, thereby impacting their access to services. Leaving a child with a babysitter or at a daycare for the first time is a daunting experience for most Canadian parents. Newcomers who have experienced state-sanctioned trauma may experience heightened anxiety around this separation from their children. The potential impact of previous trauma and distrust on access to public services may be increased. Newcomers may lack knowledge about what services are available, how to access and navigate these services, and how to ask for interpretation services to address language barriers. They may be unaware that many services are free of charge and fear additional costs. All these factors combined may increase caregiver stress and limit families' access to important health services and other community supports for children and youth.

WHAT WE KNOW ABOUT THE WELL-BEING OF CHILDREN AND YOUTH NEW TO NOVA SCOTIA

There are limited data that reflect the well-being of newcomer children and youth in Nova Scotia. In the *2018-2019 Student Success Survey*, 9 percent of 54,004 students identified as first-generation Canadians.[5] The survey, which captures self-reported outcomes in a variety of areas, provides a window into experiences for newcomer children and youth. Indeed, first-generation Canadian children and youth in grades 4 to 10 provided more positive responses on average than their peers. For example, these students were least likely to miss school. These data provide a foundation for some optimism but must be interpreted with caution recognizing that cultural interpretation

of a such a survey may be impacted by factors like language and experience.

A major area of concern for many newcomer families is poverty. The 2016 Canadian census provides the most recent available data identifying poverty rates by distinct groups of children. These data demonstrate that a shocking one in every two new immigrant children live in poverty compared to approximately one in five non-immigrant children.[6] Data from the Nova Scotia Department of Community Services also point to a significant over-representation of newcomer families with children who must access income assistance.

There are several potential factors that may impact this greater degree of poverty. Immigrants frequently face more challenges in obtaining employment and higher-paid jobs. These challenges include language barriers, access to child care, and lack of credential recognition. Some newcomers may spend their first year struggling to find a job while spending precious savings on the basics of living. Many are ultimately forced to take on a lower-paid job than they are qualified for. Unemployment and underemployment further contribute to the trauma experienced by adult caregivers compounding potential mental health challenges for other adults, children, and youth in the family.

STEPS FORWARD

Much work is needed to better understand the status of well-being for newcomer children and youth in Nova Scotia. Policy and program changes implemented now, however, could enhance the well-being of children and youth new to the province.

Addressing poverty

A comprehensive child poverty reduction strategy could lift all children and youth out of poverty, including those from newcomer families. For example, indexing tax benefits and credit programs to inflation, such as with the Nova Scotia child benefit, can provide incomes commensurate with existing living expenses. It is important to ensure that immigration policies prioritize family reunification to help strengthen families and offer culturally safe and accessible mental healthcare services as well as universally accessible interpretation services for all essential community and government-provided health and social services.

Reassessing Public Service Delivery

If organizations responsible for delivering a public service, such as government, health services, family courts, and schools, adopt a trauma-informed approach to how they deliver services, this would mitigate re-traumatization. Referral processes are often complex and lengthy for newcomer families

attempting to access services directly (for example, leaving a message in a language in which they are not fluent or registering online). Services should be easily accessible and culturally appropriate.[7]

Affordable Housing

There is a need to invest in affordable housing for larger newcomer families.[8] This might include revisions to tenancy laws to provide homes that can accommodate larger families or raise the maximum number of people permitted in a home. Revising these laws will reduce family stress. As noted elsewhere in this data profile, investing in the development of a culturally safe, affordable, and quality early-learning and child-care system beyond the pre-primary program will help children up to two years – those most vulnerable to poverty and its subsequent long-term poor health outcomes

The time to act is now. For all of our children.

SOURCES FOR THIS SECTION

1. Ziafati N (2020). Feds' immigration levels plan will help Halifax and Nova Scotia continue on long-term path of growth: economist. Available from: https://www.thechronicleherald.ca/news/local/feds-immigration-levels-plan-will-help-halifax-nova-scotia-continue-on-long-term-path-of-growth-economist-516188/. Accessed October 12, 2021.
2. Government of Canada (2020). Notice – Supplementary Information for the 2021-2023 Immigration Levels Plan. Available from: https://www.canada.ca/en/immigration-refugees-citizenship/news/notices/supplementary-immigration-levels-2021-2023.html. Accessed October 12, 2021.
3. Lu C, Ng E (2019). Healthy immigrant effect by immigrant category in Canada. Available from: https://www150.statcan.gc.ca/n1/pub/82-003-x/2019004/article/00001-eng.htm. Accessed October 12, 2021.
4. New Hope Community Services (2018). A refugee's journey to Canada. Available from: https://newhopecs.org/blog/news/a-refugees-journey-to-canada/. Accessed October 12, 2021.
5. Province of Nova Scotia (2020). Student Success Survey, 2018-2019 Available from: https://plans.ednet.ns.ca/sites/default/files/documents/2018-2019_StudentSuccessSurvey.pdf. Accessed June 22, 2021.
6. Frank L, Fisher L (2020). 2019 Report Card on Child and Family Poverty in Nova Scotia. Available from: https://www.policyalternatives.ca/publications/reports/2019-report-card-child-and-family-poverty-nova-scotia. Accessed October 12, 2021.
7. Stirling Cameron E et al. (2022). The postnatal experiences of resettled Syrian refugee women: Access to healthcare and social support in Nova Scotia, Canada. *Midwifery* 104, 103171.
8. Wayland S (2007). The Housing Needs of Immigrants and Refugees in Canada. Available from: https://homelesshub.ca/sites/default/files/FinalReport_CHRAImmigrationHousing_June_2007.pdf. Accessed October 12, 2021.

SPOTLIGHT ON

THE WELL-BEING OF CHILDREN AND YOUTH LIVING WITH DISABILITY IN NOVA SCOTIA

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WHY WE NEED TO FOCUS OUR ATTENTION ON THIS POPULATION

There are significant barriers for children and youth living with disability when it comes to participating in activities that support their well-being. Such barriers may be related to a number of factors: individual (e.g., pain), sociocultural (e.g., stigma), environmental (e.g., the built environment), and systemic (e.g., inadequate or inaccessible facilities).[1–3] It is important to identify ways to track and evaluate indicators of well-being for all children and youth; identify equity gaps; and optimize participation in activities that promote well-being.

In Canada, approximately four percent of children under 15[4] and 13 percent of youth ages 15 to 24 live with disability.[5] In Nova Scotia, information on children under 15 is not available, but 21 percent of those aged 15 to 24 live with disability.[5] Because a larger proportion of Nova Scotian youth live with disability, there is an even greater need to provide support. The goal is to help them feel respected, secure and safe, that they belong, that they can participate socially, academically and in play, be connected with their environment and feel and be healthy.[6]

THE WELL-BEING OF CHILDREN AND YOUTH LIVING WITH DISABILITY IN NOVA SCOTIA

We must identify ways to achieve well-being for children and youth living with disability. That need is immediate.

WHAT WE KNOW

There are very limited data on the well-being of children and youth living with disability. The 2018-2019 *Nova Scotia Student Success Survey* included over 5,600 Nova Scotian children and youth living with learning disabilities and over 1,000 living with physical disabilities.[10] The data from this survey indicate inequities are experienced in four key areas: their sense of belonging; feelings of security and safety; the ability to participate socially, academically, and in play; and being active and healthy.[10]

Among the findings:

- Fewer children (grades 4 to 6) and youth (grades 7 to 12) living with learning or physical disability felt they had friend and teacher supports at school compared with their peers.
- Fewer felt they belonged at school and enjoyed learning.
- Fewer ate lunch at school, and fewer consumed fruits and vegetables.
- Fewer met the recommendations for physical activity.
- More felt unsafe or threatened at school.
- More felt socially excluded and had experienced physical or verbal abuse or threats.
- More missed school due to illness, injury, medical appointments, or not wanting to attend.

Recent evidence suggests that the COVID-19 pandemic and the related public health restrictions have further exacerbated barriers to well-being for children and youth living with disability. For example, many parents felt

DEFINITION

Disability is most commonly defined narrowly as a long-lasting physical, mental, sensory, psychiatric, or intellectual impairment.[7] The social and cultural models of disability, however, suggest that children and youth are not disabled by their biological impairments but rather by societal barriers that limit opportunities for inclusion, belonging, and a sense of well-being.[8,9]

that their child's ordinary daily activities (e.g., play, therapies) were hazardous during the pandemic.[11] In a Canadian study of 151 parents of children and youth living with disability, 17 and 24 percent reported a decline in their child's physical or mental health, respectively, during the pandemic.[12] Parents also reported that their child's screen time increased while physical activity decreased.[12] As well, there was reduced physiotherapy time and challenges with virtual delivery of therapy and other services, in addition to more unoccupied and unprogrammed time.[13]

These findings highlight continued disparities. We must find ways to address inequitable access to programs, services, and spaces that support well-being. Data collection efforts can support our understanding of how children and youth living with disability are achieving well-being and mitigate the adverse effects of the pandemic. Opportunities can, and must, be created to support these children and youth so they can achieve optimal well-being.[6]

PASS THE MIC

"Our son Eli was born at the IWK and lives with cerebral palsy. As his parents, our goal for Eli is that he is given the opportunity to reach his fullest potential while living a happy life. All children living with disability should have equal access to supports, programs, and services that optimize their unique needs and well-being."

- Meredith & George Tasiopoulos, Parents of Eli (age 7)

MAKING THINGS BETTER

While this spotlight highlights Canadian and Nova Scotian data on indicators of well-being among children and youth living with disability, much remains unknown, and there is considerable work to be done to reduce equity gaps. There is a need to:

1. **Collect provincial- and national-level data on the indicators of childhood well-being, particularly data that relates to children and youth who may experience marginalization, including those who live with disability.**
2. **Engage children and youth living with disability and their families in this work, to recognize that they have existing goals, resources, and competencies, and can contribute to their well-being.**
3. **Understand that there are children and youth with disability who are further disadvantaged. There is a need to recognize how disability, race, gender, sexuality, and socioeconomic status intersect.**
4. **Consider disparities exacerbated by the COVID-19 pandemic and recognize that the pathway to well-being may look different for children and youth with disability as we address this global health crisis.**
5. **Improve accessibility and inclusion in programs, services, and spaces that promote well-being, and understand the societal barriers that limit inclusion, belonging, and well-being.**

SOURCES FOR THIS SECTION

1. Shields N, Synnot AJ, Barr M (2021). Perceived barriers and facilitators to physical activity for children with disability: a systematic review. Br J Sports Med 46, 989–997.
2. Bedall G, et al (2013). Community participation, supports, and barriers of school-age children with and without disabilities. Arch Phys Med Rehabil 94, 315–323.
3. Bassett-Gunter R, et al (2017). Parent support for children's physical activity: A qualitative Investigation of barriers and strategies. Research Quarterly for Exercise and Sport; 88(3): 282-292.
4. Human Resources and Skills Development Canada (2006). Disability in Canada: A 2006 Profile. Available from: https://www.canada.ca/en/employment-social-development/programs/disability/arc/disability-2006.html. Accessed October 22, 2021.
5. Statistics Canada (2018). Canadian Survey on Disability, 2017. Available from: https://www150.statcan.gc.ca/n1/en/catalogue/89-654-X & https://novascotia.ca/accessibility/prevalence/. Accessed October 22, 2021.
6. UNICEF Canada (2019). Where Does Canada Stand? The Canadian Index of Child and Youth Well-being 2019 Baseline Report. Available from: https://oneyouth.unicef.ca/sites/default/files/2019-08/2019_Baseline_Report_Canadian_Index_of_Child_and_Youth_Well-being.pdf. Accessed October 22, 2021.
7. United Nations (1990). Convention on the Rights of the Child: General Assembly Resolution 44/25 of 20, November 1989. Available from https://www.ohchr.org/en/professionalinterest/pages/crc.aspx. Accessed October 22, 20218.
8. Oliver M (2013). The social model of disability: Thirty years on. Disability and Society 28, 1024–1026.
9. Goodley D (2017). Disability studies: An interdisciplinary introduction. Sage.
10. Department of Education and Early Childhood Development and Communications Nova Scotia (2019). Student Success Survey. Available from: https://plans.ednet.ns.ca/sites/default/files/documents/2018-2019_StudentSuccessSurvey.pdf. Accessed October 22, 2021.
11. Embregts P, et al (2021). Experiences of mothers caring for a child with an intellectual disability during the COVID-19 pandemic in the Netherlands. Journal of Intellectual Disability Research; 65, 760–771.
12. Moore SA, et al (2021). Adverse effects of the COVID-19 pandemic on movement and play behaviours of children and youth living with disabilities: Findings from the National Physical Activity Measurement (NPAM) study. Int J Environ Res Public Health; 8;18(24):12950.
13. Arbour-Nicitopoulos K, et al (2021). Movement behaviours and health of children and youth with disabilities: Impact of the 2020 COVID-19 pandemic (in press).

SPOTLIGHT ON

FOOD SECURITY

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Young people in Nova Scotia understand and value having access to healthy food options, yet too many are living with food insecurity. Disparities and inequities, influenced by race and socioeconomic status, are significant contributors to this challenge, which requires urgent action.

WHY WE NEED TO FOCUS OUR ATTENTION ON FOOD SECURITY

The right to healthy, nutritious food is a fundamental right for all children.[1] Indeed, this right is enshrined in various articles of the United Nations Convention on the Rights of the Child, and ending hunger in all its forms is a United Nations Sustainable Development Goal.[2]

Research shows that children and youth who experience food insecurity are at a substantially greater risk of poorer mental and physical health outcomes.[3–5] Yet in Nova Scotia and across Canada, too many children continue to live in food-insecure households. In fact, households across the country with children under 18 years of age routinely have higher food insecurity than those without children.[6]

Data from a Nova Scotian study conducted in 2011 found that school children experiencing moderate to severe food insecurity reported

more mood problems and a lower health-related quality of life than children from food-secure households.[7] Mood problems were common even among children from households classified as only marginally food insecure.

In another Nova Scotian study children with type 1 diabetes mellitus who were living with families facing food insecurity had higher rates of hospitalization, where their family's food insecurity was the factor that independently predicted whether they would be hospitalized or not.[8] This demonstrates how the presence of food insecurity can worsen the challenges created by existing health conditions.

Qualitative research about infant food-insecurity in Nova Scotia has also shown that when parents live with food insecurity, infant children may also experience food insecurity and sub-optimal feeding practices.[9] One reason is that when a parent lacks access to sufficient, healthy food while breastfeeding, they may have poorer nutritional status, which could lead to breastfeeding being stopped early. Another reason is that food insecure families with infants can also have difficulty affording breast milk alternatives (formula). This is concerning as researchers have shown that the first 1,000 days, from conception to two years, is the most critical time for optimizing growth and development through the life course.[10]

FOOD SECURITY
exists when all people—at all times—have physical and economic access to sufficient, safe, and nutritious food to meet their needs.

Conversely, food insecurity occurs when members of a household have inadequate or insecure access to food due to economic or other constraints. The degree to which this occurs is further defined as marginal, moderate, or severe food insecurity.

MONITORING AND ANALYSIS IN CANADA

Canada has regularly monitored the prevalence of rising food insecurity at the population level through the *Household Food Security Survey Module*, which was administered in the *Canadian Community Health Survey* and more recently through Statistics Canada's *Canadian Income Survey.*[11] The *Household Food Security Survey Module* captures marginal, moderate, and severe food insecurity: from worrying about the ability to afford food to restricting the quality and quantity of food purchased, and, ultimately, to skipping meals in response to economic compromises.[11]

The *Household Food Security Survey Module* measures a family's capacity to afford food. This is an important way to assess the complex state of how food fits into the constraints of a household's economic stability, financial assets, and budget.[11] The module also helps enhance understanding of how food insecurity can predict adverse mental and physical health and how food insecurity changes as a result of policy interventions.[11]

Based on the *Household Food Security Survey Module* in 2017-2018, 12.7 percent of households in Canada experienced some level of food insecurity in the previous 12 months, including more than 1.2 million children under the age of 18.[12] The proportion of children under 18 living in households experiencing food insecurity (17.3 percent), was higher than any prior national estimate.[12]

FOOD INSECURITY IN NOVA SCOTIAN CHILDREN

Based on the 2017-2018 *Household Food Security Survey Module,* 19.5 percent of Nova Scotian children—nearly one in five—resided in a food-insecure household, higher than the national average.[12]

Household food insecurity is a highly sensitive measure of material deprivation, a serious indicator of social inequity, and a predictor of child and youth health and well-being. The number of children and youth in Nova Scotia facing food insecurity, is therefore, a grave concern.

FACTORS AFFECTING FOOD SECURITY

Food insecurity is driven by multiple exacerbating factors and can also compound existing vulnerabilities faced by families. The following four important health and social considerations demonstrate this and why food-insecurity risk among households and children is a serious problem.

1. **Access to social assistance**: The greatest risk factor for household food insecurity in Canada is social assistance.[12] In Nova Scotia, 80.1 percent of households receiving social assistance—a vast majority—reported food insecurity in 2017/2018; this is the third highest among all provinces and territories, exceeded only by Nunavut and Prince Edward Island, and far greater than the other two Atlantic provinces.[12] Those receiving income assistance in New Brunswick reported the lowest food-insecurity rate in Canada (54.9 percent). Newfoundland and Labrador is also well below the Nova Scotia rate (65 percent).[12]

   This is deeply troubling. It indicates that current social assistance programs are insufficient to prevent food insecurity. It has been well documented that social assistance levels in Nova Scotia are substantially lower than in other jurisdictions, and moreover, they have not increased routinely over time with inflation and other changing economic conditions.[16,17] There is ample evidence that comprehensive improvements to social assistance that integrate features such as indexing to inflation, a poverty-reduction strategy, and targeted benefits (e.g., seniors' pensions and the Canada child benefit) can have demonstrable effects on reducing food insecurity.[13]

2. **Poverty**: Households living in poverty are more likely to be food insecure.[12] Given the number of children and youth in Nova Scotia living in poverty, it is no surprise that an unacceptable number of Nova Scotian children are also experiencing food insecurity. Too many children lack access to sufficient nutritious food for their optimal growth and development.

   The *2019 Nova Scotia Quality of Life Survey* reinforces this stark reality. For example, between one in five and one in three parents reported that they ate less at least once a month because there was not enough food or money for food.[14] Between one in five and one in four reported being unable to purchase affordable nutritious foods at least once a month.[14]

3. **Type of employment**: Having a job does not prevent food insecurity. Employment factors that drive food-insecurity risk include the uncertainty of work (temporary or gig work), seasonal work, low wages, or wages that do not increase with the cost of living.[15] These factors all represent concerns for too many Nova Scotians.[16]

4. **Type of housing**: Lack of affordable housing in Nova Scotia is a further compounding stressor on families and a risk factor for food insecurity. Renters are more vulnerable to food insecurity than those who own a home.[17] According to data from Food Banks Canada, the high cost of housing is consistently a factor in increasing food bank use. In Nova Scotia, 69.2 percent of food bank clients live in market-rent housing, a figure that has been steadily increasing.[18] This reflects a growing concern provincially around a lack of affordable housing for residents. In 2017-18, for example, Halifax had the second-highest prevalence of food insecurity in Canada (16.3 percent) among census metropolitan areas (CMAs).[12]

IMPACT OF THE COVID-19 PANDEMIC

Early research by Statistics Canada indicates that food insecurity has risen significantly across Canada because of the COVID-19 pandemic.[19] The study found that Canadian households with children were more likely to report food insecurity (19.2 percent) compared to households with no children (12.2 percent).[19]

With baseline food-insecurity rates already above the national average, the impact of the pandemic is likely to be considerable for Nova Scotian children and families.

COMMUNITY RESPONSE

Despite the compelling evidence that Nova Scotia has long had a high prevalence of, and critical risk factors for food insecurity among children, dedicated policy responses to increase economic security for families have been few and far between. In their absence, food-based programs including food charities have arisen as a stopgap.

FOOD SECURITY

Food banks, in existence in Canada since the 1980s, were introduced as a temporary measure to support people impacted by economic recession.[15] However, food banks have since become institutionalized as a form of social assistance despite being funded predominantly through community donations.[15,20] The use of food banks is continuing to increase nationally.

Food bank figures capture only a fraction of those who are food insecure. Although there is some food bank usage data for Nova Scotia, it is not suitable for monitoring the status of food insecurity at a population level. An analysis of Statistics Canada data from the early months of the pandemic showed that just 7.4 percent of food-insecure households made use of charity to access food in the 30 days prior.[21] Furthermore, research has demonstrated that food banks and other community organizations cannot adequately respond to the range of food needs of different families, such as those with infants.[22]

Globally, school food programs play an important role in mitigating some of the adverse effects of food insecurity among school-aged children and youth.[23] The estimated return on investment for school food programs globally is $3 to $10 USD, making this a viable social policy option.[23] In 2019, the Canadian government announced its intention to work towards a national school food program.[24] A lack of such a program has meant that access to nutritious foods in schools is patchy across Canada.[25]

According to Nourish Nova Scotia, 95 percent of schools in Nova Scotia report having a school breakfast program, and participation is trending upwards. Unfortunately, research has shown that the quality of food available in schools is variable and not always in adherence with the provincial school food and nutrition policy.[26] The proportion of students accessing school breakfast programs who live in food insecure households in Nova Scotia is not known.

Survey data that reflect the responses of youth provide a small glimpse into the experience of hunger and food access for older children and youth in Nova Scotia. Responses from the *2018-2019 Student Success Survey* indicate that 35 percent of school-aged children and youth struggled to pay attention in class because of hunger.[27] The survey also found that roughly 15 percent of students did not or were not planning to eat lunch on the day of the survey.[27] Of these, 26 percent did not have anything to eat, and 20 percent said they could not afford to buy lunch.[27] Concerningly, almost one in five students in grades 6 to 10 who responded to the *Health Behaviours in School-aged Children*

survey in Nova Scotia also reported going to school or bed hungry sometimes because there is not enough food at home.[28]

While these data are self-reported and provide only a snapshot of one point in time, they suggest a troubling number of students do not have access to adequate nutritious food in schools. Furthermore, it is apparent that there is a lack of robust provincial data on food insecurity. Much of the evidence on food insecurity in Nova Scotia relies on indirect measures of risk. Although newer efforts by Statistics Canada to measure food insecurity hold promise, it will be important to monitor food-insecurity rates among children and youth in Nova Scotia and implement policy responses that support a food-secure future for all children and youth in the province.

THE BOTTOM LINE

- **Food insecurity remains a significant and growing problem for Nova Scotia, and Nova Scotian families with children suffer disproportionately from food insecurity.**
- **The root cause of food insecurity is poverty. Food banks, introduced as a temporary measure, are in greater demand than ever but are not the solution to this complex problem.**
- **A key solution to food insecurity is poverty reduction. Passing legislation that ensures current and future governments in Nova Scotia must have a plan to reduce poverty is an important step for creating ongoing accountability for change.**
- **A clearer picture and fuller understanding of food insecurity among children and youth in Nova Scotia is essential.**

SOURCES FOR THIS SECTION

1. United Nations (1989). Convention on the rights of the child: Treaty no. 27531. United Nations Treaty Series, 1577; 3-178. Available from: https://treaties.un.org/doc/Treaties/1990/09/19900902%2003-14%20AM/Ch_IV_11p.pdf. Accessed November 6, 2019.
2. United Nations (2015). Sustainable Development Goals. Available from: https://sustainabledevelopment.un.org/?menu=1300. Accessed October 5, 2021.
3. Kirkpatrick SI, et al. (2010). Child Hunger and Long-term Adverse Consequences for Health. Arch Pediatr Adolesc Med, 164(8).
4. McIntyre L, et al. (2012). Depression and suicide ideation in late adolescence and early adulthood are an outcome of child hunger. J Affect Disord,150(1):123–9.
5. McIntyre L, et al. (2017). The pervasive effect of youth self-report of hunger on depression over 6 years of follow up. Soc Psychiatry Psychiatr Epidemiol, 52:537–47.
6. Tarasuk V, et al. (2016). Household Food Insecurity in Canada 2014. Available from: https://proof.utoronto.ca/wp-content/uploads/2016/04/Household-Food-Insecurity-in-Canada-2014.pdf. Accessed November 1, 2020.
7. Kirk SF, et al (2015). Food security status among Grade 5 students in Nova Scotia, Canada and its association with health outcomes. Public Health Nutr. 18(16):2943–51.
8. Marjerrison S, et al (2011). Prevalance and Associations of Food Insecurity in Children with Diabetes Mellitus. The Journal of Pediatrics. 2011 Apr;158(4):607–11.
9. Frank L (2020). Out of milk: Infant food insecurity in a rich nation. UBC Press, Vancouver.
10. Martorell R (2017). Improved nutrition in the first 1000 days and adult human capital and health. Am. J. Hum. Biol. 29, e22952.
11. PROOF (2018). Household Food Insecurity in Canada: A Guide to Measurement and Interpretation. Available from: https://proof.utoronto.ca/resources/measurement-guide/. Accessed October 5, 2021.
12. Tarasuk V, Mitchell A (2020). Household Food Insecurity in Canada, 2017-2018. Available from: https://proof.utoronto.ca/wp-content/uploads/2020/03/Household-Food-Insecurity-in-Canada-2017-2018-Full-Reportpdf.pdf. Accessed November 1, 2020.
13. Loopstra R, et al. (2015). An exploration of the unprecedented decline in the prevalence of household food insecurity in Newfoundland and Labrador, 2007-2012. Can Pub Pol. 2015;41(3):191–206.
14. Engage Nova Scotia (2019). Quality of Life Survey. Available from: https://engagenovascotia.ca/aboutsurvey. Accessed March 2, 2021.
15. McIntyre L (2011). Food insecurity policy is not the flipside of food security policy. Available from: https://policyoptions.irpp.org/magazines/agri-food-policy/food-insecurity-policy-is-not-the-flipside-of-food-security-policy. Accessed October 5, 2021.
16. Frank L, et al. (2021). Report Card on Child and Family Poverty in Nova Scotia: Worst Provincial Performance over 30 Years. Available from https://www.policyalternatives.ca/publications/reports/2021-report-card-child-and-family-poverty-nova-scotia. Accessed November 24, 2021.
17. McIntyre L, et al. (2016). Homeowner versus non-homeowner differences in household food insecurity in Canada. J Hous and the Built Environ, 31(2):349–66.
18. Food Banks Canada (2019). Hunger Count 2019. Available from: https://hungercount.foodbankscanada.ca/. Accessed October 5, 2021.
19. Statistics Canada (2020). Food insecurity during the COVID-19 pandemic. Available from: https://www150.statcan.gc.ca/n1/pub/45-28-0001/2020001/article/00039-eng.htm. Accessed October 5, 2021.

20. McIntyre L, et al. (2016). Legislation debated as responses to household food insecurity in Canada, 1995–2012. Journal of Hunger & Environmental Nutrition. 11, 441–455.

21. Men F, Tarasuk V (2021). Food Insecurity amid the COVID-19 Pandemic: Food Charity, Government Assistance, and Employment. Canadian Public Policy, 47(2), 202-230.

22. Frank, L (2018). Finding formula: Community-based organizational responses to infant formula needs due to household food insecurity. Canadian Food Studies, 5, 90–112.

23. World Food Program (2016). Cost-Benefit Analysis: School Feeding Investment Case. Available from: https://documents.wfp.org/stellent/groups/public/documents/resources/wfp281517.pdf. Accessed October 6, 2021.

24. Government of Canada (2019). Introducing a Food Policy for Canada. Available from: https://www.budget.gc.ca/2019/docs/plan/chap-04-en.html#Introducing-a-Food-Policy-for-Canada. Accessed November 10, 2021.

25. Hernandez K, et al. (2018). The case for a Canadian national school food program. Canadian Food Studies, 5:208–229.

26. McIsaac JLD, et al. (2018). Moving from Policy to Practice: A Report of School Nutrition Policy Adherence in Nova Scotia. Canadian Journal of Dietetic Practice and Research, 79:196–199.

27. Department of Education and Early Childhood Development and Communications Nova Scotia (2019). Student Success Survey. Available from: https://plans.ednet.ns.ca/sites/default/files/documents/2018-2019_StudentSuccessSurvey.pdf. Accessed October 22, 2021.

28. Craig W, et al. (2020). Health and Health-Related Behaviours among Young People: Nova Scotia Report. Kingston, ON: Queen's University.

SPOTLIGHT ON

ORAL HEALTH

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Oral health is a critical issue for young people in Nova Scotia. There is an immediate need for a greater understanding of the issue and for ongoing, effective intervention.

WHY WE NEED TO FOCUS OUR ATTENTION ON ORAL HEALTH

Good oral health is a key factor in the overall health and well-being of children and youth. Social determinants such as income, access to health services, and food security provide a critical foundation.[1]

Dental decay, also known as dental caries, can result in acute and chronic pain and infection that affect a child's ability to eat, sleep, talk, and play. Ultimately, it can limit their growth and development.

Remarkably, although dental decay is generally preventable, it remains the most common chronic disease among children in Canada, and it is the leading cause of day surgery for children in the country.[2,3]

THOSE MOST AFFECTED

Canadian children living in low-income families; those who are impacted by the consequences of racism, those who face migration inequities; and those living in rural and remote areas, are most affected by dental decay.[6,7] Surgical rates for dental decay are 3.9 times higher among Canadian children from less affluent neighbourhoods and 3.1 times higher among Canadian children from rural neighbourhoods.[2]

Similar trends are seen in Nova Scotia. For example, children who live in families with low incomes, or who are from small towns

or rural communities, are disproportionately over-represented in seeking hospital-based treatment for preventable oral diseases.[8]

ORAL HEALTH IN NOVA SCOTIA CHILDREN: THEN AND NOW

The last province-wide review of the oral health status of children in Nova Scotia took place in 1995-96. Two researchers, A.I. Ismail and W. Sohn, analyzed data from three sources: the *Nova Scotia Oral Health Survey of children and adolescents*, a parental questionnaire, and intraoral screening of first-grade children.[9]

Of the 1,614 first-grade children surveyed, 91.6 percent had not had their first dental visit until at least age two,[9] contrary to the recommendation that all children see an oral health provider within six months of their first tooth and not later than one year of age.[10] Ismail and Sohn also recognized that the burden of oral disease is experienced most by socioeconomically disadvantaged children while children from socioeconomically advantaged families are more likely to receive early preventive oral health care.[9]

Following the provincial review, numerous recommendations were made including putting in place:

1. A multifaceted approach to prevention and treatment of oral disease that addresses the social determinants of health,
2. Community-based preventive services, and
3. Health promotion programs such as school-based education and media promotion.[9]

In 2013/2014, a dental screening program was launched in Cape Breton. It is the largest recent screening of oral health for children in Nova Scotia. The program found that 55 percent of children in grade primary had tooth decay, which means only 45 percent had no dental decay. Because future risk of dental decay is predicted by any tooth decay in a child before six years of age, 55 percent of grade primary students in the screening program are at risk for future decay.[11] From the group of grade primary children screened, 34 percent had unmet dental needs such as unfilled cavities, broken or missing fillings, abscesses, pain, or broken teeth. [11]

DEFINITION

***Oral health*: the ability to eat, drink, communicate, and convey emotion with freedom from pain, discomfort, and disease.[4,5]**

When the program assessed older children in grade six, they found that 57 percent of children had tooth decay and 26 percent had unmet dental needs.

The proportion of children who were found to have unmet dental needs and dental decay in this screening program was higher than national standards for ensuring oral health.[11]

A recent study of hospital-based treatment for preventable oral diseases in Nova Scotia found results that are not surprising given the level of need seen in the 2013/2014 screening in Cape Breton.[8] The study found that 76.8 percent of children had not had their first dental visit by the recommended age of one year. The average age of the first visit was 2.69 years, and 44.1 percent of the children had developed caries by this time.[8] Furthermore, data from the Canadian Institute of Health Information National Ambulatory Care Reporting System show that a total of 2258 children under age five had day surgery to treat dental decay in Nova Scotia between 2015 and 2019.

Although the data are limited, findings clearly indicate that lack of attention to the issue of oral health is adversely impacting children and young people in this province. They are facing substantive and ongoing oral health challenges.

IMPROVING THE ORAL HEALTH OF CHILDREN AND YOUTH

Data and surveillance

Available data point to a high burden of oral decay as well as disparities in access to care and oral health outcomes for certain groups of children and youth in Nova Scotia. Systematic monitoring of oral health status and evaluation of oral health programming are necessary to create a comprehensive oral health strategy in Nova Scotia that is grounded in addressing the social determinants of oral health.[12]

Unfortunately, the current oral health status of Nova Scotia's child and youth population as a whole is largely unknown due to a lack of data collection and surveillance measures.[13,14] A Provincial Chief Dental Officer with a mandate to develop and implement a provincial strategy would be instrumental for improving access to oral health care and oral health outcomes for children and youth.

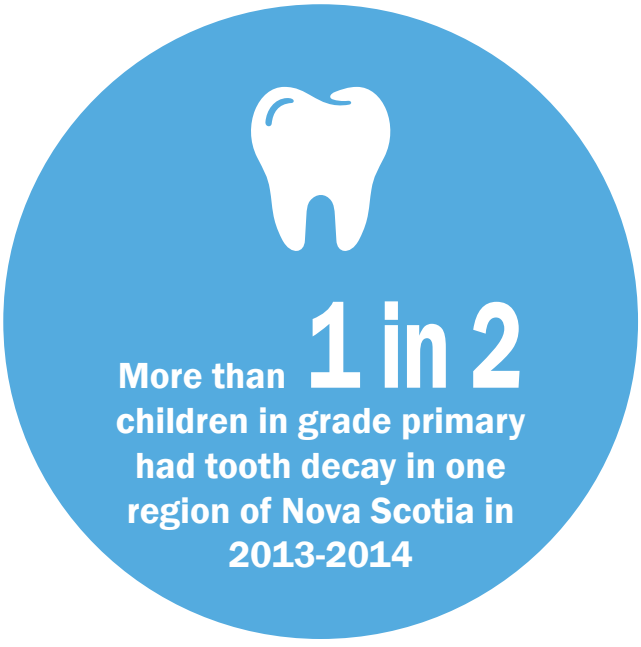
Access to care

Since 1974, the Nova Scotia Government has provided universal dental insurance for children through the Children's Oral Health Program (COHP). The COHP is currently delivered through the Nova Scotia Medical Services Insurance (MSI). The amount of dental coverage offered and the age limitations of recipients have varied

over the life of the program.[15] Currently, the COHP focuses on publicly financed oral health care, diagnostic, preventive, and treatment services, which are delivered primarily in private dental offices for all children until age 15.[13,16] Nova Scotia MSI is considered the payer of last resort for dental services through the COHP. This means that if a family has private dental insurance, it will be used to cover the cost of dental care first and MSI will cover the difference up to a regulated amount. Children under 15 years without private dental insurance are fully covered for a limited range of services.

Medical Services Insurance (MSI) data show that only 36 percent of eligible children used the COHP in 2019/2020, and the rate of program use has steadily declined since 2015/16 despite the fact that the maximum age of eligibility increased from 10 to 14 years in 2014.[17] Given that MSI is the payer of last resort, there may be children who do not need to access this program for the cost of their dental care because their families have private health and dental insurance. Children who are fully covered by private insurance, however, are unlikely to be those most vulnerable to dental disease. National data indicate that children belonging to priority populations most at risk for dental decay are less likely to have private dental insurance.[6] It is likely that many children at highest-risk of poor oral health are among the 64 percent of eligible children not accessing the COHP, although a lack of surveillance data means this conclusion cannot be confirmed.

A report by the Nova Scotia Oral Health Advisory Group showed that in 2013-14 use of services through the COHP among children 0-3 years was very low. However, there is no research as to why utilization is so low. The Advisory group surmised that parents avoid seeking care for their young children because they did not know the recommended age for first dental visits, were unaware of the COHP, or worried about out-of-pocket expenses for uninsured services. It is believed that a lack of knowledge of the program and fear of additional out-of-pocket expenses likely impact the overall use of the COHP for all ages.[13]



Screening: sooner and more frequently

Reducing Dental Disease: A Canadian Oral Health Framework, the second national oral health framework produced by the Federal, Provincial and Territorial Dental Working Group, recommends oral health screening for preschool-age children.[18] Screening for oral diseases upon entry into the public school system would provide an important opportunity to identify children who have yet to establish a "dental home", defined as an ongoing relationship of accessible dental care delivered by consistent providers, or who have unmet dental needs that may negatively impact their ability to learn. This initiative would be similar to the existing vision-screening program in Nova Scotia for children entering grade primary.[19] The province's newly implemented Pre-Primary Program also offers a key opportunity to implement surveillance measures and to provide oral health screenings for children.[20]

Ensuring a first dental visit by age one, establishing a "dental home", and developing an ongoing relationship with an oral health care provider can reduce future restorative care in later life. This is especially important for children at high risk for oral diseases.[3,21,22] Implementing early examinations for children in Nova Scotia would broaden public awareness of the COHP and could address the lack of utilization among children up to three years of age. Initiatives in early oral health screening, as previously mentioned, and referrals, education, and school- and community-based interventions could also be developed in Nova Scotia to achieve early dental care and caries prevention.[8] Non-dental health professionals are also well-positioned to help improve access to care as they often have early contact with priority populations. The Canadian Paediatric Society (CPS) supports a multidisciplinary approach to managing pediatric oral health care.[3]

Caries prevention

Since 1998, the Fluoride Mouth Rinse Program has been one of Nova Scotia's key preventive oral health initiatives. In 2019 the Fluoride Mouth Rinse Program was paused as the fluoride product used was no longer available through the province's distributor and public health officials at Nova Scotia Health (NSH) were conducting a review of the program.

The program was coordinated by dental hygienists who trained volunteers to administer a rinse weekly to children in grades primary through six at designated schools. Schools were initially selected based on the rate of dental caries identified in the 1995-96 NSOHS, socioeconomic risk factors, interest of school personnel, and the availability of dental

hygienists to implement the program. Due to lack of program consistency and standardization, the program underwent a review in 2001 that identified education, income, and employment as the best socioeconomic factors to determine caries risk and the need for fluoride mouth rinse.

A new model, the Fluoride Mouth Rinse School Eligibility Index (FMSEI), was then developed for identifying schools with the highest-risk children. It was to be validated through a baseline intraoral screening of children in eligible schools, which would then be compared to a follow-up screening four to five years later.[23] There is no public record that the recommended follow-up screening and validation of the FMSEI was completed.

Prior to the COVID-19 pandemic, it was the intent of the province to introduce a school-based fluoride-varnish program for elementary school children in the fall of 2020, which is a newer fluoride modality supported by current literature.[3,24,25] The new program would be administered by public health hygienists. Its initiation is currently on hold.

Community water fluoridation (CWF) has also been shown to be a major, cost-effective public health initiative and the most effective measure to prevent dental caries.[3,24,25] Unfortunately, not all municipalities in Nova Scotia fluoridate their water supply. As of 2017, 53 percent of the province's population does not have access to fluoridated water.[26] Furthermore, detailed information regarding Nova Scotia's public water fluoridation is not readily available.

In addition to CWF, reaching children who are most at risk for dental decay may be carried out by offering school- and community-based preventive and treatment services[18]. The province's fluoride varnish program represents one such opportunity but must be introduced in a way that adequately targets Nova Scotia children with the highest risk and need. Also, schools with children at higher risk could offer a full range of preventive services, including pit and fissure sealants, which are an effective way to prevent caries in permanent teeth.[27,28]

Children who have early preventive dental visits are more likely to continue to seek preventive care and less likely to need costly restorative or emergency treatments.[29] Promoting targeted preventive efforts and access to oral health care is necessary but cannot alone lead to the elimination of disparities in dental disease. Determinants of oral health inequities are also the determinants of overall health and well-being. Efforts to reduce fundamental challenges such as child poverty and food insecurity are also critical to improving the oral health status of children and youth in Nova Scotia.

SOURCES FOR THIS SECTION

1. Kirkpatrick SI, McIntyre L, Potestio ML (2010). Child Hunger and Long-term Adverse Consequences for Health. Arch Pediatr Adolesc Med 164.
2. Canadian Institute for Health Information (2013). Treatment of Preventable Dental Cavities in Preschoolers: A Focus on Day Surgery Under General Anesthesia. Available from: https://publications.gc.ca/collections/collection_2014/icis-cihi/H118-94-2013-eng.pdf. Accessed October 6, 2021.
3. Rowan-Legg A (2017) Oral health care for children - a call for action. Paediatrics & Child Health 18, 37–50.
4. FDI World Dental Foundation (2017). FDI's definition of oral health. Avilable from: http://www.fdiworlddental.org/fdis-definition-oral-health. Accessed October 6, 2021.
5. Petersen PE (2003). World Health Organization World Oral Health Report. 1–38.
6. Health Canada (2010). Report on the Findings of the Oral Health Component of the Canadian Health Measures Survey 2007–2009. Available from: https://publications.gc.ca/collections/collection_2010/sc-hc/H34-221-2010-eng.pdf. Accessed October 6, 2021.
7. Canadian Academy of Health Sciences (2014). Improving access to oral health care for vulnerable people living in Canada. Available from: https://cahs-acss.ca/wp-content/uploads/2015/07/Access_to_Oral_Care_FINAL_REPORT_EN.pdf. Accessed October 6, 2021.
8. Hachey S, Clovis J, Lamarche K (2019). Children's Oral Health and Barriers to Seeking Care: Perspectives of Caregivers Seeking Pediatric Hospital Dental Treatment. Health Policy, 15, 29–39.
9. Ismail AI, Sohn W (2001). The impact of universal access to dental care on disparities in caries experience in children. J Am Dent Assoc 132, 295–303.
10. Canadian Dental Association (2017). Your Child's First Visit. Available from: http://www.cda-adc.ca/en/oral_health/cfyt/dental_care_children/first_visit.asp. Accessed October 6, 2021.
11. Nova Scotia Health Authority (n.d.). Oral Health of our Children Dental Screening Program 2013 & 2014.
12. Hachey S, Clovis J, Lamarche K (2020). Strengthening the approach to oral health policy and practice in Canada. Paediatr Child Health 25, 82–85.
13. Oral Health Advisory Group (2015). Oral Health Advisory Group Phase I Report to the Minister of Health and Wellness. Available from: https://novascotia.ca/dhw/publications/Oral-Health-Advisory-Group-Phase-1-Report-to-the-Minister.pdf. Accessed October 6, 2021.
14. Shaw JL, Farmer JW (2016). An environmental scan of publicly financed dental care in Canada: 2015 update. Available from: https://www.caphd.ca/sites/default/files/FINAL%20-%202015%20Environmental%20Scan%20-%20ENGLISH%20-%2016%20Feb%2016.pdf. Accessed October 6, 2021.
15. Kraglund F, Cooney P (2008). Nova Scotia Oral Health Review. Available from: https://novascotia.ca/dhw/healthy-development/documents/Nova-Scotia-Oral-Health-Review.pdf. Accessed October 6, 2021.
16. Province of Nova Scotia (2020). Nova Scotia Children's Oral Health Program. Available from: https://novascotia.ca/dhw/children-dental/. Accessed October 6, 2021.
17. MSI Health Information Department (2020). Medical Insurance Services R-70 Annual Statistical Tables. Available from: https://novascotia.ca/dhw/publications/annual-statistical-reports/DHW_Annual_Stats_Report_MSI_2019_20.pdf. Accessed October 6, 2021.
18. Federal, Provincial and Territorial Dental Working Group (2013). Reducing Dental Disease: A Canadian Oral Health Framework. Available from: https://www.caphd.ca/sites/default/files/FrameworkOctober%202014%20-%20FINAL%20English.pdf. Accessed October 6, 2021.
19. Nova Scotia Department of Health (1998). A Healthy Start to School. Available from: https://novascotia.ca/dhw/healthy-development/documents/A-Healthy-Start-to-School.pdf. Accessed October 6, 2021.

20. Province of Nova Scotia (2021). Pre-Primary Program. Available from: https://www.ednet.ns.ca/pre-primary. Accessed October 6, 2021.
21. Olley RC, Hosey MT, Renton T, Gallagher J (2011). Why are children still having preventable extractions under general anaesthetic? A service evaluation of the views of parents of a high caries risk group of children. Br Dent J 210, E13.
22. American Academy of Pediatric Dentistry (2021). Oral Health Policies and Recommendations (The Reference Manual of Pediatric Dentistry). Available from: https://www.aapd.org/research/oral-health-policies--recommendations/Dental-home-2/. Accessed October 6, 2021.
23. Nova Scotia Fluoride Mouthrinse Program Ad Hoc Fluoride Mouthrinse Review Committee (2004). Development of an Innovative Population Health Measurement Tool to Determine Eligibility for the Fluoride Mouthrinse Program. Available from: https://novascotia.ca/dhw/publications/Public-Health-Education/Final_Rep_FMP_Crit_Com.pdf. Accessed October 6, 2021.
24. Iheozor-Ejiofor Z et al (2015). Water fluoridation for the prevention of dental caries. Cochrane Database Syst Rev 2015, CD010856–CD010856.
25. Public Health Agency of Canada (2017). The State of Community Water Fluoridation across Canada 2017. Available from: https://www.canada.ca/content/dam/hc-sc/documents/services/publications/healthy-living/community-water-fluoridation-across-canada-2017/community-water-fluoridation-across-canada-2017-eng.pdf. Accessed October 6, 2021.
26. Government of Canada (2018). Community Water Fluoridation in Canada, 2017. Available from: https://www.canada.ca/en/public-health/services/fluoride-water-map-canada.html. Accessed October 6, 2021.
27. Ahovuo-Saloranta, A. et al (2013). Sealants for preventing dental decay in the permanent teeth. Cochrane Database Syst Rev CD001830. doi:10.1002/14651858.CD001830.pub4.
28. Siegal MD, Detty AM (2010). Do school-based dental sealant programs reach higher risk children? J Public Health Dent 70, 181.
29. Hirsch GB, Edelstein BL, Frosh M, Anselmo T (2012). A simulation model for designing effective interventions in early childhood caries. Prev Chronic Dis 9.

SPOTLIGHT ON

SUBSTANCE USE

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Evidence-informed health policies need to be put in place to prevent harm related to substance use among youth. These policies focus on the broader contextual factors that create or exacerbate substance-related issues.[1]

WHY WE NEED TO FOCUS OUR ATTENTION ON SUBSTANCE USE

Young people try substances for a variety of reasons: to relieve social anxiety or physical pain, to give in to peer pressure, to feel good, to have fun, to try new things.[1] This timeframe in a youth's life typically occurs within a family, school, community, and societal settings. These intersect with the broader social determinants of health and established norms that can give rise to risk factors for substance use.[1]

SUBSTANCE USE AMONG NOVA SCOTIAN CHILDREN AND YOUTH

The *Canadian Student Tobacco, Alcohol and Drugs Survey* examines reported tobacco, alcohol, cannabis, and other drug use among samples of students in grades 7 to 12.[2] The most recent survey shows substance use among Nova Scotian youth is rising and, in some cases, are concerningly higher than national levels.[2]

The popularity of vaping has led to increases in nicotine use in Nova Scotia. This is particularly

concerning as there had previously been tremendous gains in tobacco control and declining use of conventional cigarettes.[3]

Alcohol and cannabis use are higher in Nova Scotia than those of peers across Canada, and the misuse of over-the-counter and prescription drugs is also increasing.[2] These data are limited to the sample of youth in a school setting and, therefore, are not representative of the entire youth population (i.e., youth who are not in school). These data also do not provide any demographic indicators to understand who is more vulnerable to harms from substance use.

A closer look at increases in vaping among Nova Scotia youth

While rates of cigarette smoking have remained relatively low among youth (4.5 percent of students in grades 7 to 12 reported being cigarette smokers in 2019), there has been a surge in vaping over the past five years.[2]

Vaping has generally been perceived as less harmful than cigarette smoking, but still comes with considerable risks, in part due to the presence of nicotine found in most vaping fluids. Nicotine is highly addictive and exposure to the developing adolescent brain has shown to cause long-term cognitive and behavioural impairments.[4–7]

Nicotine is one of the main addictive substances in combustible cigarettes, and its regular use is associated with dependence and lung damage.[8] Nicotine is also found in most vaping products. Highly concentrated nicotine vaping fluid produces a buzz or a rush that is described as enjoyable by youth explaining their reasons for vaping.[9]

- In 2014-15, 13.0 percent of Nova Scotian students in grades 10 to 12 and 4.6 percent in grades 7 to 9 reported vaping in the past 30 days.[10] By 2018-19, this figure had almost tripled in both age groups, to 37.1 percent and 12.4 percent, respectively.
- Notably, in Nova Scotia, the rate of females who vaped in the last 30 days increased markedly between 2016-17 and 2018-19, from 17.5 percent to 25.3 percent, effectively closing the gap between males and females in the province.[10] This is also much higher than national averages.
- The *Canadian Student Tobacco, Alcohol and Drugs Survey* also asks Canadian youth about their perceptions of harm from different substances, including vaping products. [10]
- In 2016-17, 38 percent of grade 7 to 9 students in Nova Scotia perceived no or only slight risk of harm from e-cigarette use

on a regular basis; 54.3 percent reported a moderate or great risk of harm from regular use (a significant increase from 2014-15), and 7.7 percent said they did not know (a significant decrease from 2014-15).

- As expected, youth perceive higher harms associated with regular use than with occasional use. The percentage of youth who report perceiving great risk of harm from regular use of e-cigarettes increased significantly between 2016-17 and 2018-19, from 25.5 percent to 41.8 percent, corresponding to a reduction in the percentages of both those who perceive no risk or slight risk. Though the percentage has decreased over time, approximately eight percent of youth report that they do not know the harms associated with regular or occasional use of e-cigarettes.

It is worth noting that 15 percent of Nova Scotian students have only tried vaping and never tried a cigarette, compared to only 8.2 percent of Canadian students.[10] The widespread uptake and reported easy access of vaping also presents significant cause for re-evaluation of legislation regarding vape product marketing and availability.

Alcohol and cannabis: Higher than the Canadian average

Heavy drinking or binge drinking is defined in the *Canadian Student Tobacco, Alcohol and Drugs Survey* as consuming five or more standard drinks on one occasion.[10] High-risk drinking in Nova Scotia was notably higher than the national rate in 2014-2015 and 2016-2017. In 2018-2019, 24.8 percent of students in Nova Scotia reported engaging in high-risk drinking in the previous year (23.4 percent nationally). In 2018-2019, the average age of initiation (age of first drink) among grade 7 to 12 students in Nova Scotia was 13.4 years, unchanged from the 2016-2017 survey.

Heavy drinking is associated with a range of potential acute harms including increased risk of alcohol poisoning, injury, and unsafe sex.[11] Additionally, both cannabis use and heavy drinking have been shown to negatively impact adolescent brain development, with higher frequency and heavier use being associated with increased risk of harm.[12] Alcohol consumption increases among youth who have more access to alcohol.[1] Nova Scotian youth in grades 7 to 12 stated that it was fairly or very easy to access alcohol.[12]

SUBSTANCE USE

In 2018-2019, 23.4 percent of grade 7 to 12 students reported cannabis use in the past 12 months, significantly higher than the national percentage.

Alcohol and cannabis use among children and youth not only affect the individual, but significantly impact communities as well.

- Youth aged 16-24 years have the highest age-specific rate of traffic deaths in Canada.[13] Of particular concern is driving while impaired, which has the potential for serious injury or death for the impaired driver, passengers, and others.
- A significant proportion of young people are at risk for harms related to impaired driving in Nova Scotia: 3.6 percent of students in grades 7 to 9 and 12.9 percent in grades 10 to 12 reported operating a motor vehicle within one hour of consuming alcohol or two hours of cannabis use.[2]
- Furthermore, one in four students in grades 7 to 9, and almost one in two in grades 10 to 12 have been a passenger in a car where the driver was under the influence of alcohol or cannabis.[2]

Over-the-counter and prescription drugs: Misuse on the rise in Nova Scotia

On a population level, relatively few children and youth use unregulated or misuse over-the-counter and prescription substances. Substance use in this area has not increased significantly since 2014-15 in Nova Scotia. However, according to the *Canadian Student Tobacco, Alcohol and Drugs Survey,* misuse of over-the-counter and prescription medications is now on the rise.[2] Among the survey findings:

- In Nova Scotia in 2018-19, 4.8 percent of students in grades 7 to 9 and 14 percent in grades 10 to 12 had used unregulated substances in the past 12 months.
- Synthetic cannabinoids (2.7 percent), solvents (2.1 percent), and hallucinogens (1.2 percent) were the unregulated substances used most by students in grades 7 to 9, while hallucinogens (7.6 percent), synthetic cannabinoids (6.6 percent), and cocaine (4.8 percent) topped the list for those in grades 10 to 12. As well, 10.2 percent of students in grades 7 to 9 and 16.6 percent of students in grades 10 to 12 reported misusing over-the-counter or prescription medication in the past 12 months.

- Dextromethorphan (a cough suppressant), anti-nausea, and sleeping medicine were the top three medication types most misused for both grades 7 to 9 and 10 to 12.

These data indicate trends, behaviour, and risk perceptions among youth to provide insight and to prioritize which substances require strengthened measures to prevent harm. There is a need to implement and maintain evidence-informed population health policies that address access, advertising, and pricing of these substances. It is also imperative to prioritize the mental health and well-being of youth to achieve population harm-reduction objectives.

RISK AND PROTECTIVE FACTORS THAT INFLUENCE SUBSTANCE USE

While the impact on an individual level may vary from substance to substance, the risks and harms associated with substance use produce similar long-term outcomes:

- The early, frequent, and heavy use of alcohol and cannabis by youth is associated with a complex presentation of acute and chronic harms.[14]
- Early substance use is associated with addiction, depression, anxiety, and other mental health diagnoses later in life.
- Adverse childhood experiences (ACEs), sometimes implicated by substance use, can have negative, lasting effects on health, well-being, and opportunities for success. These exposures can disrupt healthy brain development, affect social development, compromise immune systems, and lead to substance use and other unhealthy coping behaviors.[15]

For children, youth, and families to thrive, there must be an appropriate, trauma-informed, culturally safe, and robust social safety net in the province. Multiple reports, evidence, and strategies confirm that ensuring families have access to economic resources, are free from discrimination and violence, and are part of a supportive, inclusive community are key strategies to improve the social determinants of mental health and the creation of healthy conditions for families to thrive.[16,17] Unfortunately, some of Nova Scotia's children and youth, particularly those that have been in the custody of the province, are at a greater risk for harm, in part due to early trauma, being unhoused, or exposed to violence among other ACEs.

To adequately support these children, youth, and families, treatment services addressing substance use must be child and youth centered, trauma informed, and responsive to diverse intersectoral needs.

SUBSTANCE USE

The community where children and youth live, learn, play, and grow has an impact on their behaviour, including substance-use behaviour. International examples with potential for Canadian applications indicate that a whole-of-community approach that focuses on increasing protective factors and reducing risk factors can lead to many benefits for children and youth, including reduced and delayed substance-use behaviour.[1] Protective factors include strong social connectedness to family, school, and community; secure and stable housing; safe and inclusive education; food security; and basic income.[1] Risk factors include a community experiencing poverty, violence, discrimination, or intergenerational trauma.[1] Risk factors also include substances that are highly available, widely marketed, and/or very affordable.[18,19]

Over the past few decades, substances have become increasingly available and promoted in communities and this impacts child and youth substance-use rates. Lack of regulations and/or existing loopholes on advertising and marketing fail to protect children and youth from exposure to otherwise regulated substances like alcohol, cannabis, and vaping products.

The corporate agenda and media (traditional and social) influence also impact children's perceptions of substance use.[20] Young people are the primary target of many corporate advertisements, which suggest that using substances (alcohol, cigarettes, vaping products) will make you more popular, sexy, and successful.

The physical, social, and online environments where children and youth live, play, and grow influence the way they interact with substances. Further attention to the marketing of substances to youth is needed both federally and provincially. In 2017, substance use cost Nova Scotia more than $1.4 billion, which amounts to $1,499 per person.[21] In addition, the long-term impacts of early, frequent, and heavy substance use are experienced across the lifespan.

Investing in healthy public policy will reduce healthcare costs associated with substance use over time.

IMPROVING OUTCOMES: OPPORTUNITIES IN THE NOVA SCOTIAN CONTEXT

A comprehensive approach connected to the broader social determinants of health is needed to address the issue of substance use. Early intervention, education, and treatment are necessary to reduce harm; however, to effectively reduce the number of children and

youth using substances, delay the age of first use, and reduce the harmful consumption of substances, population-based policy and regulatory measures are essential. Healthy public policy can improve physical and social environments as well as change societal and cultural norms to reduce the harm caused from the substance use among children and youth.

Using public policy to influence the environment in which children live is crucial to shaping their relationship with substances. Protective policies that ensure affordable, quality housing, nutritious food, and financial security through a living wage are a few ways to reduce or prevent adverse childhood experiences early.[22]

Creating stability and access to resources within the household is important; so, too, is ensuring that children and youth live in a neighbourhood that is healthy and thriving. This is another preventative approach to substance use early in life.

More specifically, connecting substance-use prevention to municipal land-use planning and regulation is an effective strategy to reduce availability and limit access and promotion of substances to youth and prevent substance use at a community level.[23]

Communities can reduce the negative impact of substance use and improve health outcomes by improving policies, regulations, zoning bylaws, and systems. From a community-programming perspective, more dedicated funds and consistent data collection are crucial to understanding the continued impact on substance use for Nova Scotian children and youth. Equally important: disaggregated data that will allow us to fully understand sub-populations in greatest need of preventative measures. When addressing substance use at the community level, a restorative harm-reduction, health-equity, and anti-stigma approach is needed.

Communities exist within a larger societal context, and healthy public policies that shape that context can have a tremendous ripple-down effect. Addressing the social determinants of health at a population level is imperative and through evidence-informed policy will enhance positive health outcomes for youth. Specifically for substance use, evidence consistently recommends three key elements that will effectively protect public health: (1) restricting access and availability (2) restricting advertising and marketing and (3) implementing pricing models that deter high-risk use. [19,24]

Access, advertising, and pricing can also be addressed through federal or provincial legislation to regulate substances. Cannabis, tobacco, and vaping products have federal acts. Alcohol, however, is not regulated in the same fashion. There is no overarching federal legislation, and Nova Scotia has an outdated provincial liquor control act.[25] Attention to industry marketing and sponsorship within communities needs to closely be monitored and restricted in spaces where children, live, play, and grow.

A government monopoly on the sale of substances is more protective than a privatized model, which can heavily focus on and be driven by profit. Government-run operations can enhance the balance between financial incentives and public health and safety considerations and, thereby, provide more protection for children and youth.[26] Implementing and adhering to a health-impact assessment prior to increasing access will also enhance protection.[27]

THE BOTTOM LINE

A comprehensive approach that includes prevention, harm reduction, education, and treatment provides the greatest opportunity to protect the health of Nova Scotian youth from the harms associated with substance use.

It is important to look to the evidence to effectively reduce consumption of all substances collectively, as the use of tobacco, alcohol, cannabis, and other substances are strongly related.

The environment and conditions in which children and youth live shape the circumstances, behaviours, and opportunities they have. Investing in evidence-informed healthy public policy will enhance the protective factors, reduce risks, and reshape the supportive conditions needed to delay onset of first substance use and reduce harmful consumption of substances for children and youth in Nova Scotia.

SOURCES FOR THIS SECTION

1. The Chief Public Health Officer's Report on the State of Public Health in Canada (2018). Preventing Problematic Substance Use in Youth. Available from: https://www.canada.ca/content/dam/phac-aspc/documents/corporate/publications/chief-public-health-officer-reports-state-public-health-canada/2018-preventing-problematic-substance-use-youth/2018-preventing-problematic-substance-use-youth.pdf. Accessed October 14, 2021.
2. Health Canada; PROPEL Centre for Population Health Impact (2020). 2018-2019 Canadian Student, Tobacco, Alcohol and Drugs Survey. Waterloo, ON: University of Waterloo.
3. Reid JL, et al (2019). *Tobacco Use in Canada: Patterns and Trends, 2019 Edition*.
4. Abreu-Villaça Y, et al (2003). Nicotine is a neurotoxin in the adolescent brain: Critical periods, patterns of exposure, regional selectivity, and dose thresholds for macromolecular alterations. Brain Research, 979(1-2), 114-128.
5. Dwyer JB, Mcquown SC, Leslie FM (2009). The dynamic effects of nicotine on the developing brain. Pharmacology & Therapeutics, 122(2): 125-139.
6. England L, et al (2015). Nicotine and the developing human: a neglected element in the electronic cigarette debate. American Journal of Preventive Medicine, 49: 286-293.
7. Canadian Paediatric Society (2019). Written Submission to the Health Canada Consultation: Potential measures to reduce the impact of vaping products advertising on youth and non-users of tobacco products. Available from: https://www.cps.ca/uploads/advocacy/CPS_Written_Submission.Proposed_measure_to_limit_the_advertising_of_vaping_products_.pdf. Accessed October 20, 2021.
8. Health Canada (2020). Risks of Vaping. Available from: https://www.canada.ca/en/health-canada/services/smoking-tobacco/vaping.html. Accessed October 20, 2021.
9. Al-Hamdani M, Hopkins D, Davidson M (2020). The 2020 Youth and Young Adult Vaping Project. Available from: https://ns.lung.ca/sites/default/files/YYAV_Full_Report_2020_11_03.pdf. Accessed January 20, 2021.
10. Thompson-Haile A, et al (2018). Provincial Patterns and Trends in E-cigarette use from Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS): Nova Scotia. Waterloo, Ontario: Propel Centre for Population Health Impact, University of Waterloo.
11. Chung T, et al (2018). Adolescent Binge Drinking. Alcohol Res Curr Rev, 39(1):5–15.
12. Health Canada (2019.) Summary of results for the Canadian Student Tobacco, Alcohol and Drugs Survey 2018-19. Available from: https://www.canada.ca/en/health-canada/services/canadian-student-tobacco-alcohol-drugs-survey/2018-2019-summary.html. Accessed January 21, 2021.
13. MADD Canada (n.d.). Youth and Impaired Driving. Available from: https://madd.ca/pages/impaired-driving/overview/youth-and-impaired-driving/. Accessed January 21, 2021.
14. Ramadan MM, et al (2020). Frequency of cannabis use and alcohol-associated adverse effects in a representative sample of U.S. adolescents and youth (2002–2014): a cross-sectional study. J Cannabis Res 2, 38.
15. Centers for Disease Control and Prevention (2019). Preventing Adverse Childhood Experiences: Leveraging the Best Available Evidence. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
16. Department of Health Promotion and Protection (2008). Best Practices for Preventing Substance Use Problems in Nova Scotia. Available from: https://novascotia.ca/dhw/addictions/documents/Best-Practices-for-Preventing-Substance-Use-Problems-in-Nova-Scotia.pdf. Accessed October 15, 2021.

17. National Collaborating Centre for the Determinants of Health (2019). Social Determinants, Health Equity and Mental Health: A curated list. Available from: https://nccdh.ca/images/uploads/comments/NCCD-Social-determinants-health-equity-and-mental-health-A-curated-list_EN.pdf. Accessed October 15, 2021.

18. Babor T, et al (2010). Alcohol: No Ordinary Commodity—Research and Public Policy. 2nd Edition, Oxford, UK: Oxford University Press.

19. Anderson P, et al (2009). Impact of alcohol advertising and media exposure on adolescent alcohol use: a systematic review of longitudinal studies. Alcohol and Alcoholism, 44(3), 229-243.

20. American Academy of Pediatrics: Council on Communications and Media (2013). Policy Statement: Children, Adolescents and the Media. Available from: https://pediatrics.aappublications.org/content/pediatrics/132/5/958.full.pdf. Accessed October 14, 2021.

21. Canadian Substance Use Costs and Harms Scientific Working Group (2020). Nova Scotia substance use costs and harms (2015–2017). Available from: https://csuch.ca/publications/CSUCH-Canadian-Substance-Use-Costs-Harms-Nova-Scotia-Infographic-2021-en.pdf. Accessed October 31, 2021.

22. National Center for Injury Prevention and Control, Centers for Disease Control and Prevention (2021). Adverse Childhood Experiences Prevention Strategy. Atlanta, GA. Available from: https://www.cdc.gov/injury/pdfs/priority/ACEs-Strategic-Plan_Final_508.pdf. Accessed October 14, 2021.

23. Chitteden Prevention Network (2020). Prioritizing Health in the Built Environment: A Municipal Planning Look at Reducing Substance Use in Chittenden County. Available from: https://studiesandreports.ccrpcvt.org/wp-content/uploads/2020/10/MunicipalPlanningLookatPreventingSubstanceAbuseinCC_Final.pdf. Accessed October 14, 2021.

24. World Health Organization (2010). Global strategy to reduce the harmful use of alcohol. Available from: https://apps.who.int/iris/rest/bitstreams/52824/retrieve. Accessed October 15, 2021.

25. Province of Nova Scotia (2019). Liquor Control Act. Available from: https://nslegislature.ca/sites/default/files/legc/statutes/liquor%20control.pdf. Accessed October 14, 2021.

26. Canadian Public Health Association (2011). Too High a Cost: A Public Health Approach to Alcohol Policy in Canada. Available from: https://www.cpha.ca/sites/default/files/assets/positions/position-paper-alcohol_e.pdf. Accessed October 14, 2021.

27. Numer M, et al (2019). Community Health Implications of Regulations Variances in Alcohol Retail: An Examination of Access and Policy in Rural and Urban Nova Scotia. International Journal of Health, Wellness & Society,9(4):37-46.

RECOMMENDATIONS AND ACTIONS

MOVING FORWARD

The data compiled for this profile and the input we received from children and youth in Nova Scotia points to the need for improvement in a number of key areas – from oral health to food security to mental health. While actions aimed at single issues are necessary and may seem simpler to implement, systemic change that upholds fundamental child rights will lead to sustainable improvement in the overall well-being of all children and youth in Nova Scotia.

We propose six over-arching recommendations and 12 actions that collectively embody the four principles of the United Nations *Convention on the Rights of the Child*:[3] Those principles are:

1. Non-discrimination
2. Best interests of the child
3. The right to survival and development
4. The views of the child

Two recommendations focus on what we view as the most urgent threats to child and youth well-being in Nova Scotia – 1) poverty and 2) systemic racism and discrimination. Four recommendations focus on actions that would signal a clear prioritization of children and youth well-being and rights in Nova Scotia.

The six recommendations and 12 actions require the prompt attention of provincial leaders and decision-makers across all sectors to give young people in Nova Scotia their one chance to be a child and achieve a positive trajectory into the future.

We must appreciate that there are major gaps in data used to understand child and youth well-being and rights in the province. Information is currently gleaned from multiple surveys, weighted national census data, and Nova Scotia's governmental departments. The patchwork of sources leads to some inconsistencies. Data come from different time points, represent different age ranges, and in many cases, cannot be analyzed to better understand inequities because of missing information.

In some cases, there are very limited or no data available about the well-being of specific groups of children and youth. For important aspects of child and youth well-being, such as leisure, play and participation, data are extremely limited or not available at all.

Legislation, policy, and programming should be evidence-informed, data-driven, and reflective of need. Improving all aspects of child and youth well-being will require increased availability and access to quality data across sectors; these data can provide guidance for action and can help measure progress and outcomes.

1 Listen to children and youth, consider their rights, and focus on their best interests when making decisions

We recommend that the provincial government and municipal governments across Nova Scotia take clear action to realize Article 3 and Article 12 of the United Nations Convention on the Rights of the Child regarding the best interests of the child and a child's right to be heard.[3]

Action 1

Enact legislation or bylaws that require a child-rights impact assessment be submitted when considering new legislation, policy, or relevant child-focused programs, and services.

Action 2

Work with existing youth-led or youth-serving organizations in Nova Scotia to understand how children and youth want to be engaged in decision-making. Consider establishing child and youth panels or advisories within government ministries or departments to provide counsel on decisions that affect young people.

2 Reduce and eventually eliminate poverty experienced by children and youth

We recommend that the provincial government take clear action to realize Articles 6, 24, 26, and 27 of the *United Nations Convention on the Rights of the Child* regarding the right to life, survival, and development; the right to enjoy best possible health; and the right to an adequate standard of living and appropriate social security.[3]

Action 3

Establish a provincial poverty-reduction plan to respond to the crisis of child poverty in Nova Scotia. The plan should include:

- A clear explanation of the policy levers that will be used in the short term to provide immediate relief to children and youth in the direst need. A data-driven assessment should be provided that outlines the anticipated impact of each new action.
- Medium-term and long-term targets and actions that will contribute to achieving the goal of reducing and ultimately eliminating child and family poverty in all its forms in Nova Scotia.

Action 4

Pass legislation to ensure that future governments continue to adhere to a plan for reducing and eventually eliminating poverty in Nova Scotia. Legislation should ensure that:

- Future plans be derived in consultation with important stakeholders, including children, youth, and other individuals with lived experience of poverty.
- Plans be publicly available and regularly reviewed.
- Plans include short-term, medium-term, and long-term targets based on a defined and comprehensive set of poverty measures and data sources and with a recognition of the higher rates of poverty experienced by certain groups due to broader inequities.
- Plans be established within a framework of accountability and transparency. This may include mandated annual reporting on a series of poverty measures, evaluation of the effectiveness of any efforts aimed at achieving set targets, analysis of how the provincial budget supports the plan, and an independent committee of experts appointed to provide external oversight and evaluation.

3

Prioritize the elimination of systemic racism and discrimination

We recommend that the provincial government and municipal governments across Nova Scotia take clear action to realize Article 2 of the *United Nations Convention on the Rights of the Child* regarding the right to be protected from discrimination and to ensure that all child rights are respected regardless of race; colour; sex; language; religion; national, ethnic or social origin; disability; or other status.[3]

Action 5

Provide positions of leadership to individuals from communities that have historically faced systemic racism and discrimination. Develop provincial action plans for eliminating systemic racism and discrimination in direct consultation and collaboration with these leaders and communities.

Action 6

Ensure the rights and actions outlined in international law and previous national and provincial inquiries and consultations are acted on, including:

- Implementing the full breadth of rights outlined in the United Nations *Declaration on the Rights of Indigenous Peoples*.[31]
- Implementing the full breadth of rights outlined in the United Nations *Convention on the Rights of Persons with Disabilities*.[32]
- Implementing Canada's Truth and Reconciliation Commission's calls to action with clear accountability and public reporting on progress.[33]
- Implementing the calls to justice of the National Inquiry into Missing and Murdered Indigenous Women and Girls with clear accountability and public reporting on progress.[34]
- Implementing the recommendations in the Spirit Bear Plan with clear accountability and public reporting on progress made.[35]
- Implementing the key actions outlined in the report from the Nova Scotia Home for Colored Children Restorative Inquiry with clear accountability and public reporting on progress.[36]
- Implement the priorities of groups including the African Nova Scotian Decade for People of African Descent Coalition.[37]

4 Establish an independent body dedicated to the rights of children and youth

We recommend that the provincial government in Nova Scotia take clear action to fully realize Article 4 of the United Nations *Convention on the Rights of the Child* regarding appropriate measures needed to fully implement the breadth of unique children's rights.[3] This includes establishing an independent human rights institution for children. Such an entity can have many functions.

These include receiving and reviewing matters related to individuals or groups of children and youth; advocating, mediating, and resolving disputes on behalf of children and youth that involve their rights; conducting investigations when a process of dispute resolution has not resulted in a satisfactory outcome for a child or youth; making recommendations proactively to government about legislation, policies, and practices that respect the rights of children and youth; preparing reports on matters that relate to the promotion and protection of children's rights; engaging in child and youth outreach and education on their rights; and engaging in public promotion and awareness of the importance of children's rights.

Action 7

Enact legislation to establish an independent body dedicated to children and youth rights. Engagement and consultation with Mi'kmaq communities should be carried out to establish how parallel support for Mi'kmaq children and youth will be provided.

Action 8

Apply internationally recognized best practices in establishing the independent body by ensuring legislation is:

- Grounded in national and international best practice as established by the Paris Principles and the United Nations Committee on the Rights of the Child Comment No. 2.[38,39] These documents provide critical guidance on the independence, mandate, resources, and accessibility to children and youth required to establish an effective independent child rights' institution.
- Mandated to serve all children and youth, not just those in systems of care. Children and youth will interact with systems of care along their life course, including health, education, community services, and justice systems.

5

Develop a strategy to fully enshrine the rights of children and youth and improve their well-being

We recommend that the provincial government and municipal governments across Nova Scotia take clear action to realize all articles of the United Nations *Convention on the Rights of the Child* as a matter of moral and legal obligation.[3] Opportunities for optimal child and youth well-being are implicit in the 54 articles of the convention.

Action 9

Engage children, youth, and the adults who care for them in defining a shared vision of well-being. Define key outcomes that would be seen if a shared vision of well-being were honoured and child rights fully implemented in Nova Scotia.

Action 10

Develop a strategy to fully realize the articles of the United Nations *Convention on the Rights of the Child*, informed by the community's shared vision of well-being. Such a strategy should:

- Be derived in consultation with key stakeholders, including children and youth.
- Be publicly available and regularly reviewed.
- Include a clear explanation of the actions that will be taken and a timeline. A data-driven assessment of the anticipated impact of each of these actions should be provided.
- Be established within a framework of accountability and transparency. This may include mandated annual reporting on a series of measures, evaluation of the effectiveness of any efforts, and the oversight and evaluation of an independent committee of appointed experts.

6

Implement a system to robustly measure and monitor the rights and well-being outcomes of children and youth in Nova Scotia

We recommend that the provincial government and municipal governments across Nova Scotia take clear action to create a system for measuring and monitoring the well-being outcomes of children and youth and ensuring their rights are respected as established by the United Nations *Convention on the Rights of the Child*.[3] Data about child rights and well-being in Nova Scotia is currently gleaned in a patchwork fashion with critical gaps that prevent informed decision-making. The United Nations Committee on the Rights of the Child has repeatedly called for a cross-national collaboration to improve data availability about children and youth in Canada.[3]

Action 11

Enact legislation that entrenches a duty to systematically collect robust data for the purposes of measuring, monitoring, and reporting on progress made to realize child rights and well-being. This legislation should:

- Recognize key child rights and well-being outcomes that will be systematically measured and monitored.
- Support the implementation of modern systems of data collection and linkage.
- Affirm a duty to collect the data needed to monitor rights and assess well-being outcomes across all relevant sectors.
- Affirm a duty to collect data that can be analysed by key factors such as age, race, or ethnocultural group; sexual orientation; gender identity; disability; and family income.
- Give special attention to monitoring the rights and measuring the well-being of children and youth in special situations of vulnerability, such as children in care.
- Affirm a duty to work directly with communities that have faced systemic racism and discrimination to ensure data sovereignty and representation is respected.

6

Action 12

Align efforts to measure and monitor the well-being and enshrine the rights of children in Nova Scotia with federal and international efforts and standards. Such efforts would facilitate national and international comparisons as benchmarks to track provincial progress. Such model efforts include the electronic monitoring tool Global Child and UNICEF's *Canadian Index of Child and Youth Well-being*.[1,40]

NO TIME TO WASTE

Implementation of these six key recommendations and 12 actions are needed right away to improve child and youth well-being in Nova Scotia. Systemic change that prioritizes the rights of children and youth is the only way forward.

Let us commit to ensuring each young person gets their one best chance to be a child.

APPENDIX 1

DATA SOURCES USED IN THIS DATA PROFILE

The following organizations supported this data profile by providing or facilitating access to published and unpublished data sources:

Child Safety Link
Engage Nova Scotia
Feed Nova Scotia
Nourish Nova Scotia
Province of Nova Scotia, Department of Community Services
Province of Nova Scotia, Department of Education and Early Childhood Development
Province of Nova Scotia, Department of Health and Wellness
Nova Scotia Health, Science and System Performance
Nova Scotia Medical Examiner Service
Queen's University/Health Behaviours of School Aged Children Survey in Canada
Reproductive Care Program of Nova Scotia
UNICEF Canada

The following section provides descriptions of the data sources used, where available:

Annual Income Estimates for Census Families and Individuals (T1 Family File)

These data from Statistics Canada cover all Canadians completing a T1 tax return or receiving Federal child benefits, their non-filing spouses, their non-filing children, and filing children who report the same address as their parent. The complete dataset represents 96 percent of the population and is not weighted or sampled. The period of income is the calendar year. The Statistics Canada Postal Code Conversion File is used to convert postal codes to standard geographic areas. Census families are also created using the social insurance number, family name, and postal code.

ATLEE Perinatal Database

The Nova Scotia Atlee Perinatal Database (NSAPD) is administered by the Reproductive Care Program (RCP). The Database contains demographic variables, procedures, interventions, maternal and newborn diagnoses, and morbidity and mortality information for all pregnancies and births occurring in Nova Scotia Hospitals since 1988.

Canadian Chronic Disease Surveillance System

The Canadian Chronic Disease Surveillance System (CCDSS) collects data on all residents who have eligible provincial or territorial health insurance for over 20 chronic diseases and supports health resource planning and health policy and program development. Identification of individuals with chronic conditions and insurance registry records are used and linked to billing claims, hospital records, and prescription drug records. Additional information is further included in the database regarding individual demographics, mortality, and health care service usage. The data sources used include the health insurance registry, hospitalizations database, physician billing claims database, and prescription drug database. These data can provide national estimates and time trends and be stratified by age group, sex, province/territory, time, and disease status.

Canadian Community Health Survey

The Canadian Community Health Survey (CCHS) is a cross-sectional survey that occurs every two years to obtain data providing insights into health status, healthcare utilization, and health determinants. The CCHS can provide reliable estimates at the health region level. The CCHS aims to support health surveillance, provide a data source for small populations and rare characteristics, timely and accessible provision of information, and create a flexible, rapid response survey instrument. The CCHS collects data from those 12 years of age and older across Canada, excluding those living on reserves or Indigenous settlements (in the provinces), full-time members of the Canadian Forces, the institutionalized population, children in foster care, and specific Quebec regions (together estimated at <3 percent of the Canadian population over 12 years of age). The 2015 survey was substantially redesigned from previous iterations to improve sampling through the use of the Canada Child Benefit (CCB) sampling frame and Area frame and update the content. For the CCB frame, the participant's address is used to assign a health region to each child, and then a simple random sample (SRS) of children aged 12 to 17 is selected within each HR. In Nova Scotia, only 4811 total participants were sampled in 2018.

Responding to the survey was voluntary, and the questionnaire collected information directly from the respondents. The collection was facilitated through personal computer responses and telephone interviews. The CCB responses were collected by telephone interview.

Canadian Health Survey on Children and Youth

The Canadian Health Survey on Children and Youth (CHSCY) is a nationally administered survey that examines a broad range of issues related to physical and mental health in children and youth to inform future policies and develop future programming. The four objectives of the survey are to provide: 1) current, consistent, and detailed information, 2) data to support policy and program development or evaluation 3) support to children's health and well-being initiatives, and 4) support to child health surveillance programs. This survey covers children from 1-17 years of age except for those living on First Nations reserves or provincial settlements, children and youth in foster homes, and those that are institutionalized. This survey uses a cross-sectional design using the Canada Child Benefit (CCB) for the sampling frame. Respondents are then stratified into three groups by age: 1-4yo, 5-11yo, 12-17yo. The most recent collection period was 2019 from February to June. Responding to the survey was voluntary and the data collection was obtained directly from the survey respondents using an e-questionnaire with follow-up by telephone if the respondent did not complete the online survey. The total raw sample size for 2019 was 92,170.

Canadian Income Survey

The Canadian Income Survey (CIS) is a cross-sectional survey that is administrated annually and combined with the Labour Force Survey and tax data to provide information on the income and income sources of Canadians as well as individual and household characteristics. Data is collected from January to June on nationwide and includes all Canadians except for those living on reserves or other Indigenous settlements, institutionalized individuals, and households in remote areas with low population density (total <2% of the population). This survey uses a cross-sectional design and is requested from a subsample of Labour Force Survey respondents which uses an area frame and is based on a stratified multi-stage design using probability sampling. Responses to the survey are strictly voluntary and data is collected both from the respondents and administrative files. Data is collected via telephone interview, personal interview, or, in certain cases, online. One household member provides the information of all members within the household. The raw sample size is 56,000 households.

Canadian Index of Child and Youth Well-being

The Canadian Index of Child and Youth Well-being was developed in partnership with children and youth and is guided by an ecological systems approach that identified nine interrelated dimensions and 125 indicators. These nine dimensions include happiness and feeling respected, sense of belonging, feeling secure, ability to participate, freedom to play, feeling protected, freedom to learn, sense of connection to the environment, and feeling healthy. The index highlights potential equity gaps and areas lacking data. The report recognizes that experiences are not equal and provides strong arguments for provinces to collect regional/ provincial data.

Canadian Student Tobacco, Alcohol and Drugs Survey

The Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS) examines the use of student tobacco, alcohol and drugs use and samples students in Grades 7 to 12 (secondary I through V in Quebec). The most recent iteration of the study was administered from October 2018 to June 2019 in all ten Canadian provinces with a total sample of 62,850 students. After applying statistical weighting, the data represents over 2 million Canadian youth. In Nova Scotia, there were 31 schools that were randomly sampled for a total sample size of 4819 students with the Nova Scotia Provincial Government funding additional sampling within the province. It is important to note that the age/grade designations switched from Grade 7-12 to age 15-24 years old as of 2017. The most recent iteration also included information on sleep and bullying. Examining experimentation with tobacco products, alcohol, and drugs in school aged children and youth has been identified as particularly relevant during this critical and high-risk period of development. Through the consistent representation and analysis of these trends, it is possible to examine influencing factors as well as the impacts of health policy and health promotion initiatives.

Canadian Vital Statistics

The Department of Justice Canada is responsible for registering divorce data. Statistics Canada, in collaboration with the provincial and territorial vital statistics registrars, compiles, analyzes and publishes national information obtained from the official records of live births, stillbirths, deaths, marriages, and divorces. The official recording of births, stillbirths, deaths, and marriages is the responsibility of the individual provinces and territories.

Census Profile, 2016

Canada's Census program provides a detailed statistical portrait of Canada and its people by their demographic, social and economic characteristics. The Census takes place every five years. This data profile used data from the 2016 Census which is hosted by Statistics Canada.

Childhood National Immunization Coverage Survey

The childhood National Immunization Coverage Survey (cNICS) is conducted every two years by Statistics Canada on behalf of the Public Health Agency of Canada and has been in operation since 2011. The survey is given to parents and guardians and measures the proportion of children who have received all routine vaccinations by ages 2, 7, 14 or 17 years. Results from this survey help understand how well Canadian children are protected against vaccine preventable diseases, as well as what parents and guardians know and think about vaccines.

Child Safety Link

Child Safety Link (CSL) is the Maritime-wide children's injury prevention program of the IWK Health. Data for injury prevention rates were provided for this data profile.

Clean water and sanitation

Department of Community Services, Government of Nova Scotia

Administrative data related to the mandate of this office was requested for this data profile regarding child and youth family services, income assistance, and child benefit recipients.

Department of Health and Wellness, Government of Nova Scotia

Administrative health data related to the mandate of this office was requested for this data profile regarding immunization coverage, sexually transmitted and blood borne infections, oral health and dental surgeries.

Early Childhood Education Report 2020

The Early Childhood Education report (ECER) is produced by the Atkinson Centre every three years since 2011. The ECER is organized around 5 categories with 21 benchmarks forming a common set of minimum criteria contributing to the delivery of quality programming. Reports focus on trends nationally and within specific provinces and territories.

Early Development Instrument

The Early Development Instrument (EDI) is a Canadian developed research tool that is used internationally to measure the developmental health trends and changes in populations of five-year-old children. This questionnaire is completed by primary teachers for the children in their classes and are completed from February to March once the students and teachers have been able to establish a relationship. The timing aims to allow sufficient time for the teacher to get to know the children enough to be able to answer the questions for each student accurately. The EDI has been administered in 2013, 2015, and 2018 in Nova Scotia. The most recent survey resulted in 6479 questionnaires being completed with 5817 students without special needs being included and 494 with special needs. The questionnaire is composed of 104 questions that inform five critical domains of early childhood development 1) physical health and well-being, 2) social competence 3) emotional maturity 4) language & cognitive development 5) communications skills & general knowledge. A score in the lowest 10th percentile on one of the five domains identifies children that are most vulnerable. The EDI increases awareness of the importance of early years, helps to identify strengths/weaknesses in child development, and supports community initiatives for child development.

Engage Nova Scotia Quality of Life Survey

The Quality of Life (QoL) Survey administered by Engage Nova Scotia examines eight domains of quality of life in Nova Scotia: community vitality, living standards, health, environment, time use, leisure and culture, education, and democratic engagement. From May to June in 2019, 80,000 Nova Scotian households were invited to participate in the QoL survey with 12,827 responding to participate in the questionnaire. The QoL questionnaire contains 230 questions that inform each of the eight domains. The survey was mailed to Nova Scotians with select groups receiving additional outreach to ensure that their voices were represented.

Feed Nova Scotia

Administrative data related to the mandate of Feed Nova Scotia was requested for this data profile regarding program use.

Health Behaviour in School Aged Children Survey

This survey samples a subgroup of the population of students aged 11,13 and 15 from schools and classrooms provincially, nationally, and internationally. Over 40 countries participate in this

survey as part of a collaboration with the World Health Organization. In Canada, data collection and administration are led by Queen's University. The survey sample is randomly selected from schools or classes to be nationally representative. The data collection process is administered during a supervised school period using an anonymized self-completed questionnaire. There are three survey components: mandatory items developed by the international network, optional items with topic specific questions relevant to specific countries and additional items for the Canadian survey supplied by the project sponsors (Public Health Agency of Canada and Joint Consortium for School Health). In Nova Scotia, 21 schools were sampled including a total of 2438 students in Grades 6-10. The questionnaire is standardized to be internationally comparable. The survey aims to examine trends in youth health behaviour, the effectiveness of youth health policy or programming initiatives, provide comparative data for countries with similar youth health issues. The data produced from this survey can provide rich insights into school health, socio-economic determinants of health, bullying, violence and injuries, obesity, physical activity, and holistic models of health. The survey considers both individual and environmental determinants of health in youth and data presented in this data profile are from the 2018-2019 cycle of data collection.

Healthy Beginnings Screening Tool

The Healthy Beginnings Screening Tool is administered to almost all women or families after they have delivered a baby. Participation is voluntary but high. The tool is administered in-person at all Nova Scotia birthing facilities 5 days/week with the Central Zone offering administration 7 days/week. If in-hospital screening was unable to be completed, the screening is completed within 5 business days of discharge from hospital. Due to COVID-19, currently the majority of screenings are performed by phone or virtually except in the Central Zone where public health nurses have returned to the hospital. Additionally, all mothers are eligible to participate in this screening regardless of parity. This screening tool aims to identify families that may face challenges and offer these families home visiting support for up to three years and/or referral and linkage to other health and community resources. The objective of the screening tool is to identify potential risk factors related to optimal child health and development using a standardized approach and then explore identified potential risk factors through the assessment process.

Health Inequalities Data Tool

The Health Inequalities Data Tool is produced through a collaboration of the Public Health Agency of Canada, the Pan-Canadian Public Health Network, Statistics Canada, and the Canadian Institute for Health Information. The tool presents data on indicators of health outcomes and health determinants, stratified by a range of social and economic characteristics meaningful to health equity. It identifies where health inequalities exist across different groups at national and provincial/territorial levels, and the magnitude of inequalities.

Households and the Environment Survey

The Households and the Environment survey is conducted every two years by Statistics Canada. The objective of the survey is to provide context to scientific measures of air and water quality, and greenhouse gas emissions, by gaining a better understanding of household behaviour and practices with respect to the environment. Data from the 2019 survey were used in this data profile.

National Ambulatory Care Reporting System

The National Ambulatory Care Reporting System contains data on hospital- and community-based ambulatory care, including day surgery, outpatient and community-based clinics and emergency department visits. Client visit data is collected at the time of service in participating facilities.

Nourish Nova Scotia

Nourish Nova Scotia is a registered non-profit supporting healthy food environments for children and youth. Nourish supports school healthy eating programs across the province. Data requested for this data profile included student use of the program and nutritional information.

Nova Scotia Educational Assessments

The Province of Nova Scotia administers regular assessments of student learning, including:

- Nova Scotia Assessment: Reading, Writing, and Mathematics in Grade 6
- Nova Scotia Assessment: Literacy and Mathematics in Grade 3
- Nova Scotia Assessment: Reading, Writing, and Mathematics in Grade 8

Data from the 2019 assessments were used in this data profile.

Nova Scotia Student Success Survey

The Nova Scotia Student Success Survey was created for the Nova Scotia Department of Education and Early Childhood Development to gather anonymous information on students' well-being and public-school experience. To develop baseline measurements of student experiences within the provincial public education system both in the classroom and in the greater school environment through exploration into key areas of student life at school such as relationships and learning. The narrative-style survey was intended to 1) assess student perceptions about the culture of their school 2) their engagement with their school and education, 3) their relationships with peers and teachers 4) Identify potential areas for improvement. This survey was administered provincially with the opportunity for all 82,621 Grade 4-12 students to provide participate with 65 percent (54,004) choosing to do so. There were two versions of the survey; one was accessible on assistive technologies (4,602 students submitted responses using the accessibility version), that were offered in both English and French. It is important to note that the LGBTQ2IA+ response was only available for Grades 7-12 and therefore this response group may not be directly comparable to other demographics. Students were also able to indicate 'not sure' in response to the questions and in that case those students were excluded from those percentages. Students were also able to skip any questions they preferred not to respond to.

Nova Scotia Medical Examiner Service

Administrative data related to the mandate of this office was requested for this data profile regarding injury, mortality, homicide, and suicide.

Pan-Canadian Assessment Program

The Pan-Canadian Assessment Program is an initiative of the Council of Ministers of Education, Canada. It comprises national standardized tests of reading, math and science skills administered every three years to Grade 8 students. Data from the 2019 report were included in this data profile.

Pan-Canadian Education Indicators Program

The Pan-Canadian Education Indicators program within Statistics Canada develops and maintains a set of statistics that provide information about education and learning in Canada, alongside international comparators. Data from this program were published in a report called Education Indicators in Canada: An International Perspective, released in December 2020.

ParticipACTION 2020 report card

the ParticipACTION Report Card on Physical Activity for Children and Youth represents a comprehensive synthesis of the literature and related national-level surveys that is compiled every year by an interdisciplinary team of researchers from across Canada. Data from the 2020 report card was used in this data profile.

Uniform Crime Reporting Survey

The Uniform Crime Reporting survey is hosted through Statistics Canada with police-reported crime statistics collected through the Canadian Centre for Justice and Community Safety Statistics in co-operation with the policing community. The survey is designed to measure the incidence of crime in Canadian society and its characteristics. Data collected reflect reported crime that has been substantiated by police. Information collected by the survey includes the number of criminal incidents, the clearance status of those incidents and persons-charged information.

APPENDIX 2

GAPS IN OUR UNDERSTANDING

The foundation of this data profile rests on the availability of data, and we have used data that are reliable and valid to help assess child and youth well-being. All data, however, have limitations, as noted earlier in this report, and it is critical that we acknowledge those limitations and how they impact our analysis and understanding. To improve information available to inform decision making, it is important that we improve upon data quality and fill gaps where information is not currently available.

Statistics Canada's Canadian Health Survey on Children and Youth, launched in 2019, look at the well-being of children and youth from 1 to 17 years in a variety of areas at the national and provincial/territorial levels.[1] The data are being released over time and will be critical for advocates working to improve the status of well-being for young people. Excluded from the survey's coverage, however, are children and youth living on First Nations, those living in foster homes, and young people living in institutions. Decision-makers must be careful to understand who is not represented by any source of information to ensure data-driven legislation, policy, and programming are truly reflective of the needs of all young people.

The following table identifies gaps in our understanding around specific facets of child rights and well-being. These are areas where we were unable to identify enough quality population-level data. This is not an exhaustive list, but it provides guidance on areas where improvement is necessary.

	UNCRC Article Description	Data needs
Article 2 Non-discrimination	The Convention applies to every child whatever their ethnicity, gender, religion, language, abilities, or other status, whatever they think or say, whatever their family background.	• Ensure that data are collected so that they can be assessed by ethno-cultural or racial identity • Ensure that data are collected so that they can be assessed by diverse gender identities and sexual orientations • Ensure that data are collected so that they can be assessed by diverse abilities • Ensure that data are collected so that they can be assessed by socioeconomic status
Article 12 Respect for the views of the child	Every child has the right to express their views, feelings, and wishes in all matters affecting them, and to have their views considered and taken seriously. This right applies at all times, for example, during immigration proceedings, housing decisions, or the child's day-to-day home life circumstances.	• Collect data about whether children and youth feel heard
Article 19 Protection from violence, abuse, and neglect	Governments must do all they can to ensure that children are protected from all forms of violence, abuse, neglect, and mistreatment by their parents and anyone else who looks after them.	• Collect data about the nature of substantiated cases of maltreatment • Collect data about the number of children and youth who are victims of human trafficking

	UNCRC Article Description	Data needs
Article 20 Children unable to live with their family	If a child cannot be looked after by their immediate family, the government must provide special protection and assistance. This includes making sure the child is provided with alternative care that is continuous and respects the child's culture, language, and religion.	• Collect data about the well-being of children and youth in the care of the province, living in alternative care, or living in foster/kinship care (Nova Scotia Department of Community Services, and Mi'kmaw Family and Children's Services) • Collect data about the outcomes of children and youth who transition from provincial child welfare programs and services
Article 22 Refugee children	If a child is seeking refuge or has refugee status, governments must provide them with appropriate protection and assistance to help them enjoy all the rights in the Convention. Governments must help refugee children who are separated from their parents to be reunited with them.	• Collect data about the well-being and outcomes of newcomer families
Article 23 Children living with disability	A child living with disability has the right to live a full life with dignity and, as far as possible, independence and to play an active part in the community. Governments must do all they can to support these children and their families.	• Collect data about the well-being and outcomes of children and youth living with disability

	UNCRC Article Description	Data needs
Article 24 Health and health services	Every child has the right to the best possible health. Governments must provide good quality healthcare, clean water, nutritious food, a clean environment, and education on health and well-being so that children can stay healthy.	• More rigorous and comprehensive population level data about the health status of young children prior to school entry (birth to 5 years of age) • More rigorous and comprehensive population level data about the physical and mental health status of children in middle childhood (6 to 12 years of age) • Collect data on the status of child and youth oral health and access to oral healthcare
Article 27 Adequate standard of living **Article 26** Social security	Every child has the right to a standard of living that is sufficient to meet their physical and social needs and support their development. Governments must help families who cannot afford to provide this. Every child has the right to benefit from social security. Governments must provide social security, including financial support and other benefits, to families in need of assistance.	• Collect data about infant feeding and food security • Collect data about the housing needs of families with children and youth including the number of families and youth experiencing homelessness • Collect data about the quality of food being provided by provincial school breakfast programs • Collect data about child and youth deprivation, depth of poverty, and risk of poverty

	UNCRC Article Description	Data needs
Article 28 Right to education	Every child has the right to an education. Primary education must be free and different forms of secondary education must be available to every child. Discipline in schools must respect children's dignity and their rights.	• Collect data about access to pre-primary education opportunities • Collect data about the developmental status of young children prior to school entry (birth to 5 years of age) • Collect data about developmental status of children in middle childhood (6 to 12 years of age)
Article 29 Goals of education	Education must fully develop every child's personality, talents, and abilities. It must encourage the child's respect for human rights, as well as respect for their parents, their own and other cultures, and the environment.	• Collect data about the post-graduate education and training status of older youth from Nova Scotia
Article 30 Children from minority or Indigenous groups	Every child has the right to learn and practice the language, customs, and religion of their family, whether these are shared by the majority of the people in the country where they live.	• Collect data about the progress made to implement the Truth and Reconciliation Commission calls to action
Article 31 Leisure, play, and culture	Every child has the right to relax, play, and take part in a wide range of cultural and artistic activities.	• Collect data about the quality of and access to leisure and play for children and youth

	UNCRC Article Description	Data needs
Article 37 Inhumane treatment and detention	Children must not be tortured, sentenced to the death penalty, or suffer other cruel or degrading treatment or punishment. Children should be arrested, detained, or imprisoned only as a last resort and for the shortest time possible. They must be treated with respect and care, and be able to keep in contact with their family. Children must not be put in prison with adults.	• Collect data about the well-being of youth in detention
Article 40 Juvenile justice	A child accused or guilty of breaking the law must be treated with dignity and respect. They have the right to legal assistance and a fair trial that takes into account their age. Governments must set a minimum age for children to be tried in a criminal court and manage a justice system that enables children who have been in conflict with the law to reintegrate into society.	• Collect data about the well-being of children who break the law
Article 42 Disseminating and awareness	Governments must actively tell children and adults about the UNCRC so that they know about child rights	• Collect data about how well children and youth understand their unique rights

1. Surveys and statistical programs - Canadian Health Survey on Children and Youth (CHSCY). https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5233.

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