Onkwaná:ta *Our Community*

Ionkwata'karí:te *Our Health*

Produced by Onkwata'karitáhtshera
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About the report:

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Message from Derek Montour, Onkwata'karitáhtshera Chairperson

Wa'tkwanonhwerá:ton!

On behalf of Onkwata'karitáhtshera and its Data Mining Subcommittee, I am immensely pleased to launch Volume 2 of *Onkwaná:ta* Our Community*, Ionkwata'karí:te* Our Health. The aim of this document is to use available data to describe the health and well-being of Kahnawa'kehró:non and of Kahnawà:ke as a community. Doing so gives us a clearer picture of health and social service gaps and needs, and a more detailed understanding of the underlying determinants of community well-being.

This health portrait expands on the ground-breaking Volume 1 work (published in 2018, available at kmhc.ca and kscs.ca), which has been well received and used widely within the community, and has provided an inspiration to many other First Nations communities. Together, these portraits demonstrate that it is possible for an Indigenous community to take leadership over its population health data. The portraits show the importance of the robust ongoing partnerships that have been established within our community and with other Indigenous organizations, notably the First Nations of Québec and Labrador Health and Social Services Commission. The achievement also highlights the critical value of maintaining strong collaboration with regional, provincial and federal agencies and the success of working together to apply First Nation's OCAP® principles to community data. Finally, these portraits would not be possible without the direct participation of hundreds of Kahnawa'kehró:non in responding to the Regional Health Survey and the many people who acted as community surveyors. Onkwata'karitáhtshera acknowledges the incredible commitment Kahnawa'kehró:non have made to each other in accomplishing this.

Onkwata'karitáhtshera is the agency that brings together Kahnawà:ke community organizations and community member input in order to lead the implementation of our Community Health Plan. Leaders and staff from the Kahnawà:ke Fire Brigade and Ambulance Service (KFB), Kateri Memorial Hospital Centre (KMHC), Kahnawà:ke Shakotiia'takehnhas Community Services (KSCS), and the Mohawk Council of Kahnawà:ke (MCK) come together in Onkwata'karitáhtshera for this common purpose.

Through consultation with community members and our service organizations over several years, our seven current health priorities emerged: Diabetes, Cardiovascular Disease, Obesity, Early Childhood and Family Wellness (focus on Learning Disabilities and Developmental Delays), Substance Use and Additions, Mental Wellness, and Cancer. These priorities will be revisited through renewed consultation in 2023 to establish our direction going forward, and the information contained in *Onkwaná:ta* Our Community*, Ionkwata'karí:te* Our Health will be a helpful tool to guide this review, with the aim of improving health for the community of Kahnawà:ke. We also hope our community agencies and grassroots organizations can use these portraits to help support their applications for funding, to help external partners to better understand the community, and to assist in evaluating how well their programs and services are achieving their goals.

Volume 2 of *Onkwaná:ta* Our Community*, Ionkwata'karí:te* Our Health focuses in detail on three distinct areas: Early Childhood and Family Wellness, Injuries and Injury Prevention, and Mental Wellness and Mental Illness. These directly coincide with several of our community's health priorities. Onkwata'karitáhtshera will continue to work with our partners to further analyze the available data in order to produce additional volumes focusing on other health topics, and to provide updates to the two already published volumes when new data becomes available.

It must be emphasized that the information contained within this document belongs to the Kahnawà:ke community and is meant to be used by community organizations and by community members. We would like to encourage you to review the data, use it to ask more questions, and help us to pursue solutions to improve our overall state of health within our community. If you are not from our community, we also encourage you to review the information, but we ask that you contact Onkwata'karitáhtshera to request the use of any of the data contained in any chapters of *Onkwaná:ta* Our Community*, Ionkwata'karí:te* Our Health.

Derek Montour, Onkwata'karitáhtshera Chairperson

Message from Dr. Colleen Fuller, Public Health and Preventive Medicine Physician, Medical Advisor to Onkwata'karitáhtshera

Wa'tkwanonhwerá:ton,

I am delighted to finally be sharing this second volume of *Onkwaná:ta* Our Community*, Ionkwata'karí:te* Our Health with you, and with everyone in Kahnawà:ke. This health portrait could not have been possible without the incredible work and collaboration of many partners and contributors. It is the culmination of years of community effort in advocating for data sovereignty, conducting analyses and validating interpretations in the context of community knowledge. Congratulations to Kahnawa'kehró:non!

Like so many other aspects of our lives, the work to finalize this report was delayed for almost 28 months as, in early 2020, we all turned our focus towards immediate needs in helping the community persevere through the many impacts of the COVID-19 pandemic. Little did we know at the time how long and bumpy the road would be that would see us on through to today. Like seeing the first buds on a tree in spring, it is a welcome sign of making it to the other side of a long journey together that we have been able to return to this project and now get this resource into the hands of the people whom it represents.

It has been somewhat humbling to come back to this work and to metaphorically "dust it off", knowing how close it was to being presented to the community in early 2020. Like looking back at an old photo, the elements of our context that have changed, stand out sharply. It's clear that the intensity of the COVID-19 pandemic affected community members lives in a thousand ways. It influenced childhood education, mental wellness, access to healthcare, community supports/programs and so many other parts of life. Everyone in the community faced tremendous challenges in one shape or another, and there is still healing that needs to be done. I know that in the flurry of so many folks continually shifting roles to meet the daunting needs of the pandemic period, some people's needs went unmet. The time since 2020 has also brought other challenging events, both within and exterior to Kahnawà:ke. To name a few: the #MeToo movement, the tragic death of Joyce Echaquan, and the discovery of hundreds of unmarked gravesites at and around former residential schools in the Tk'emlúps First Nation and Cowessess First Nation communities. Recently, many Kahnawa'kehró:non have gone through the personal journey of submitting and Indian Day School claim in the class action settlement. We have also seen the publication of the final report of *The Public Inquiry Commission on Relations between Indigenous Peoples and Certain Public Services in Québec* (I.e. the "Viens Commission"), wherein 142 recommendations where made; 135 of them are addressed specifically to the Québec government. Through all of this, it has been powerful to see the way that so many people have been able to bring their minds together to focus on community well-being and adapt to unprecedented circumstances. The dedication that essential workers have showed in doing what was needed, the ability of community members to reinvent ways of supporting others and doing things, and the small expressions of kindness that people kept up have been elements I've reflected on with gratitude these last years. It's a remarkable testament to the resilience of Kahnawa'kehró:non that slowly, but surely, the community is recovering and continuing to move forward.

Community health portraits like this one will always have difficulty to be up to date with the pace of notable events and experiences that affect the holistic wellbeing of individuals and of the community. In

part, this is because it is a large and time-consuming undertaking to run surveys with hundreds of people, and to collect, analyze, and interpret these data produced in context of community understanding. The unprecedented events of 2020, 2021 and 2022 extended the lag time for this report even further. While this volume of *Onkwaná:ta* Our Community, *Ionkwata'karí:te* Our Health cannot capture the specifics of the many very significant events and experiences that have occurred since much of the data was collected, we still find it important to present this volume to the community. Doing so creates a community resource that helps to understand the health trends we've seen in the last 20 years. It also helps to see some of the impacts community services have had on the of health its members. As years go on, this baseline portrait will further serve as a comparison point against which to measure our progress in the future.

The time that has passed since 2020 also makes the areas for improvement on the next iteration of *Onkwaná:ta* Our Community*, Ionkwata'karí:te* Our Health clearer. I want to acknowledge specifically the limited ability of this report to adequately represent gender identity diversity. This limitation reflects the data sources that were available. Many advocates have been voicing these concerns for a very long time. Collectively, we have seen discourse and understanding on this topic move forward considerably in the recent years. Even so, many institutions and data collection methods are only beginning to modify existing mechanisms to be able to represent people as they self-identify. We have tried to acknowledge areas of the text where gender assumptions were built into how a lot of the data was collected; there is additional explanation of this in the Methods chapter. It will be our goal to address this issue in future reports, to give constructive feedback to our partners, and to move together towards being more inclusive.

As with the first volume of *Onkwaná:ta* Our Community*, Ionkwata'karí:te* Our Health, presented in 2018, I hope that this health portrait becomes a valued resource for the community, one that can be used to help better understand the community's health and also be used to advocate for new tools and programs to further improve the health and wellness of individuals, families and of the whole community. Though, considering the lengthy delay caused by pandemic response, and some of the health data may demonstrate trends that are now a few years old, it will nevertheless set a benchmark of our progress in recent years and decades, and help us see improvements more clearly as we move forward.

These health portraits have been made by and for the community. We hope that Kahnawa'kehró:non will be enthusiastic to participate in the next iteration of the Regional Health Survey, seeing how this knowledge comes back directly to the community.

We also recognize that numbers, graphs and data tell only part of the story of health and wellness in Kahnawà:ke. In putting the report together, our team heard many community member perspectives, from within Onkwata'karitáhtshera subcommittees, and also from the community more broadly. We consulted frequently with both community members and front-line workers to be able to give appropriate context around the data. Reading this document is only the beginning. We hope you will use it to spark conversations, and inspire new questions that will help us all to better meet the needs of the community as we continue to take steps forward, together.

Dr. Colleen Fuller, Public Health and Preventive Medicine Physician, Medical Advisor to Onkwata'karitáhtshera

Method notes

The methods and data sources for this document are described in detail in the last chapter. Strengths and limitations of each data source are described there.

Throughout this document, we have used some symbols to specify how confident we are in the accuracy of a measured value. Small numbers of people with less common situations can limit the statistical analysis for some health measures. Throughout the report, a single asterisk (*) indicates this is an imprecise estimate and results should be interpreted with caution (Coefficient of Variation (CV) greater than or equal to 16.6 and less than or equal to 33.3) In these cases it would be possible that only a few people answering differently on a survey could have made the value higher or lower.
Occasionally you will see two asterisks (**). In this case, the estimates are so imprecise that the number is almost always suppressed because of unacceptable quality (CV>33.3). Usually this is because if just a couple of people answered a question differently by chance of who was asked, it could change the estimate quite a lot. In the occasional circumstance where the number is given with two asterisks (**), it should be interpreted cautiously, with an understanding it is imprecise and a “best estimate” with limited information.

List of Acronyms and Terms Used in *Onkwaná:ta* Our Community, *Ionkwata'karí:te* Our Health Volume 2

Acronym	Full Name
ADHD/ADD	Attention Deficit Hyperactivity Disorder/Attention Deficit Disorder
AHS	Aboriginal Head Start program
CCHS	Canadian Community Health Survey
CHIRPP	Canadian Hospitals Injury Reporting and Prevention Program
CHU	Community Health Unit (at Kateri Memorial Hospital Centre)
CNESST	*Commission des Normes, de l'Équité, de la Santé et de la Sécurité du Travail*
c.v.	Coefficient of Variation
ELCC	First Nations Early Learning and Child Care Framework
ÉLDEQ	*Étude longitudinale du développement des enfants du Québec*
FASD	Fetal Alcohol Spectrum Disorders
FIPA	*Fichier d'inscription des personnes assurées*
FNIHB	First Nations and Inuit Health Branch (of Indigenous Services Canada)
FNQLHSSC	First Nations of Québec and Labrador Health and Social Services Commission
GDM	Gestational Diabetes Mellitus
GSS	General Social Survey
IEP	Individualized education plan
INAC	Indigenous and Northern Affairs Canada
ISC	Indigenous Services Canada
ISQ	*Institut de la Statistique du Québec*
KMHC	Kateri Memorial Hospital Centre
KSCS	Kahnawà:ke Shakotiia'takéhnhas Community Services
MCH	Montréal Children's Hospital
MCK	Mohawk Council of Kahnawà:ke
MSI	Mohawk Self Insurance
NIHB	Non-Insured Health Benefits program
OCAP®	Ownership, Control, Access and Possession OCAP® is a registered trademark of the First Nations Information Governance Centre (FNIGC). Information and training course can be found at: https://fnigc.ca/ocap-training/
PHAC	Public Health Agency of Canada
RAMQ	*Régie de l'assurance maladie du Québec*
RHS	Regional Health Survey
***SISMACQ* (QICDSS)**	*Système Intégré de Surveillances des Maladies Chroniques du Québec* (Québec Integrated Chronic Disease Surveillance System)
WHO	World Health Organization

Term	Meaning
Child	Used to mean children 0-11 years of age, unless subgroup otherwise specified
Youth	Used to mean those aged 12-17 years of age, unless subgroup otherwise specified
Adult	Used to mean those aged 18 and older, unless subgroup otherwise specified
Elder	Used to mean those aged 65 and older, unless subgroup otherwise specified
Non-agreement community	Refers to First Nations communities in Québec that are not included within the James Bay and Northern Québec Agreement

Chapter 1

Early Childhood & Family Wellness

Early Childhood and Family Wellness: Summary of Key Points

Demographics

- Children between 0-5 years old represent about 9% of the population of Kahnawà:ke
  - In 2014 (the most recent data year) there were approximately 550 children in this age group
- Children between 6-11 years old also represent about 9% of the population of Kahnawà:ke
  - In 2014 there were approximately 554 children between 6-11 years old
- About 2 out of 3 children aged 0-11 years live with both their biological mother and their biological father
  - Almost 1 out of 3 children live with their biological mother, but not with their biological father
- 2 out of 3 children live with at least one sibling
- 1 out of 5 children live with 3 or more adults
- Women from Kahnawà:ke typically become mothers at a younger age than in Québec, and there is a higher rate of teenage pregnancy compared to Québec
  - Between 2008-2012, 16% of newborns had a mother under 20 years old, which is 5 times more than in the province of Québec
- 90% of children aged 0-11 years have some knowledge of the Kanien'kéha (Mohawk) language
  - 84% of children speak primarily English
  - 8% speak a mix of English and Kanien'kéha
  - <5%**[1] speak primarily Kanien'kéha
- About 1 out of 2 children (51%) 0-5 years old attends some type of formal daycare centre, preschool, or before/after school program
- 91% of children 3-5 years old were enrolled in some type of school (AHS, kindergarten, pre-kindergarten, grade 1)
- 100% of children 6-11 years old were enrolled in school

Economic and Educational Status of Parents

- Many parents did not answer survey questions about household income, so we do not have good quality data on average income or range of income of young families, even though we know that economic status is an important underlying social determinant of the development and well-being of children
  - While we understand that income was a sensitive topic for many people who completed the survey, we hope that as people see how the information generated from the RHS is directly stewarded and used by the community, and how their individual anonymity is protected, more people will feel comfortable answering similar questions in the future

[1] Small numbers limit statistical analysis for less common conditions. Please review the methods chapter for further details. Throughout the report, a single asterisk (*) indicates this is an imprecise estimate and results should be interpreted with caution (Coefficient of Variation (CV) greater than or equal to 16.6 and less than or equal to 33.3). Occasionally you will see two asterisks (**). In this case, the estimates are so imprecise that the number is almost always suppressed because of unacceptable quality (CV>33.3). In the occasional circumstance where the number is given with two asterisks (**), it should be interpreted very cautiously, with an understanding it is imprecise.

- Among children 0-5 years old
  - About 3 out of 10 (30%) of their dads had less than a high school level of education and another 4 out of 10 (42%) had high school as their highest level of education
  - About 3 out of 10 (30%) of their moms had high school as their highest level of education, while about another 3 out of 10 (34%) had CEGEP, community college or higher level of education
  - 6 out of 10 (61%) of their moms worked
  - 9 out of 10 (87%) of their dads worked
  - For 54% of kids in this age range, both parents had a job
- For children 6-11 years old
  - A little under 2 out of 10 (18%) of their dads had less than a high school level of education, almost 4 out of 10 (39%) had high school as their highest level of education
  - 2 out of 10 (21%) dads had CEGEP, community college or higher level of education
  - About 3 out of 10 (30%) of their moms had high school as their highest level of education, while about another 3 out of 10 (31%) had CEGEP, community college or higher level of education
  - A slightly higher percentage of moms worked (68%) than for children 0-5 years old
  - A similar percentage of dads worked (89%) compared to 0–5-year-old children
  - For 62% of children in this age range, both parents had a job

Early Childhood Health: Protective factors, Risk factors and Social Determinants of Health

- 100% of women who had ever been pregnant reported having regular prenatal medical care follow-up
- 88% of women who had ever been pregnant reported receiving a perinatal home visit
- 88% of women who had ever been pregnant reported attending prenatal courses
- Folic acid supplements were used during pregnancy by 90% of the mothers of children 0-5 years old
- Iron supplements were used during pregnancy by 81% of mothers of children 0-5 years old
- About 1 in 10 (13%*) children were born to a mom who had diabetes during her pregnancy
- 85% of children's moms reported not smoking at all during their pregnancy
  - Of the 15% who did smoke, about half (8%* of all children's mothers) quit during the pregnancy, and the other half (7%* of all mothers) smoked throughout the pregnancy
- 97% of mothers reported having an alcohol-free pregnancy
- The vast majority of babies (86%) have benefited from breastfeeding at least once, and 43% of them were still breastfed at 12 months
- Nearly all children (98%) were reported to have received all their routine immunizations
  - This protects kids from infections, but also protects the whole community, especially our most vulnerable people, from the spread of diseases

Health Conditions, Illnesses and Healthcare access in Childhood

- Access to health care for children was quite good, with almost 3 out of 4 (72%) children requiring health care in the prior year and almost all of them receiving it
  - The largest barrier to care experienced was when NIHB did not provide coverage for a medication or service. This impacted 12% of children who needed care, which is approximately 85-90 children in that one year
- Allergies are some of the most common conditions experienced and affected a little over 1 in 10 children (13%*)

- Asthma affected a little under 1 in 10 children (9%*)
  - The number and percentage of children receiving puffers typically used for asthma decreased steadily from 2007-2017
- A similar percentage (9%*) had had issues with eczema
- Attention Deficit Disorder/Attention Deficit Hyperactivity Disorder (ADD/ADHD) diagnoses have been getting more common over time but are still somewhat lower in Kahnawà:ke when compared to Québec and the Montérégie region
- The limited data available do not show a significant difference in Autism Spectrum Disorder (ASD) diagnoses for Kahnawà:ke compared to Québec or Montérégie.
  - ASD is increasing over time in both Québec and Montérégie
- Less than 5%** of children had reported a learning disorder, or speech or language difficulty

Introduction to Early Childhood and Family Wellness

Young children and families are at the heart of Kahnawà:ke. Traditional teachings tell us our children are a gift from Shonkwaia'tíson (the Creator) and all Kahnawa'kehró:non have a connection and responsibility to help our children grow healthy and strong. We also have a responsibility to give extra help to those among us who have both special gifts and limitations. Children not only hold a special place in our families; they are paramount to our language and culture passing down through generations and to ensuring our community's future.

It's clear that early childhood experiences are critically important in setting a healthy course for a child's life, and for their physical, emotional, mental and spiritual development. During our children's first five years, their brains are developing more connections and their bodies are growing faster than at any other point in life. This means that the health conditions and social circumstances of each mother during her pregnancy, and the circumstances surrounding each child through their first several years of life, can have impacts on well-being that last well into the adult years. Since our children represent our future, these impacts today (positive or negative) will eventually impact the next generations too.

Quite a few "adult" diseases and health issues (such as anxiety, addiction) can also be viewed, in part, as developmental disorders that have roots early in life. For others (such as diabetes) childhood and even fetal experiences and exposures are linked to elevated risk as an adult.

By ensuring the best circumstances for young children, many health issues, like injuries, infections, asthma attacks, and diabetes can be effectively prevented. In other cases, this early intervention might not completely prevent a health condition but can at least help to delay the onset to much later in life, or to make it less severe than it otherwise might have been.[2] These circumstances of a young child's life are called the "social determinants of health" or "root causes."[3] There are many of these social determinants[4] including: home environment, education access, income, food security (access to nutritious, affordable and culturally appropriate food), experience of colonization and cultural exclusion, access to medical care, level of self-determination, gender identity and associated societal expectations, community infrastructure, environmental stewardship, cultural continuity and much more.

The artistic illustration on the next page (Figure 1.1[5]) gives us a broader sense of the various social determinants of health. As seen in the image, a wide range of conditions may affect a child's ability to become a healthy and productive adult, or on the other hand, that could potentially lead to a child growing up to be in poor health and unable to contribute to their community. All children need basic material conditions for a decent life and are particularly susceptible to the social determinants of health.[4]

[2] Boyce WT. *The lifelong effects of early childhood adversity and toxic stress.* Pediatric dentistry. (2014) 36(2), 102-108
[3] PHAC. *What Makes Canadians Healthy or Unhealthy?* https://www.canada.ca/en/public-health/services/health-promotion/population-health/what-determines-health/what-makes-canadians-healthy-unhealthy.html Accessed January 2020.
[4] Reading CL, & Wien F. *Health inequalities and the social determinants of Aboriginal peoples' health.* (2009) pp. 1-47. Prince George, BC: National Collaborating Centre for Aboriginal Health.
[5] Adapted from First Nations Health Council: http://fnhc.ca/wp-content/uploads/Social-Determinants-Of-Health.jpg Accessed June 6, 2019

Figure 1.1. Artistic representation of the social determinants of health.[6]

To maximize the chances for children to reach their full potential, we must make sure that they and their families are supported in facing obstacles they may encounter, either within their family or at the level of the community in which they live. This means doing our best to eliminate poverty, to address the particular needs of single-parent homes, and to ensure children do not live in poor-quality housing or experience food insecurity. The key to addressing the social determinants of health is a focus on early intervention. For instance, when poverty or material deprivation occurs in the early years (usually defined from pregnancy to 5 years of age), it appears to be more detrimental than later in childhood.[7] This could be explained in part by a disturbance in brain development at this critical stage.[8]

As we move forward, the *First Nations Early Learning and Child Care (ELCC) Framework*[9] may provide some guidance in terms of initiatives reflecting First Nations culture, language, and values. The ELCC Framework supports culturally-

[6] Original drawing by Sam Bradd during Gathering Wisdom VI conference, hosted by the First Nations Health Authority. Adapted from https://149354016.v2.pressablecdn.com/wp-content/uploads/2013/11/GW6-Social-Determinants.jpg

[7] Shonkoff J P, Garner AS,. et al. Committee on Early Childhood, Adoption, and Dependent Care. *The lifelong effects of early childhood adversity and toxic stress.* Pediatrics. (2012) 129(1), e232-e246

[8] Noble KG, Houston SM et al. *Family income, parental education and brain structure in children and adolescents*. Nature neuroscience. (2015) 18(5), 773

[9] *Indigenous Early Learning and Child Care Framework* https://www.canada.ca/en/employment-social-development/programs/indigenous-early-learning.html accessed May 20, 2019

based services that promote children's development in many contexts (e.g.: at home, in a preschool or nursery school, in a home childcare or daycare setting). It features early learning and childcare as an opportunity for teaching language and traditional ways, with the inclusion of Elders to extend quality of services. In addition, it serves as a tool to identify strengths and gaps in services and programs meant for First Nations children and families.

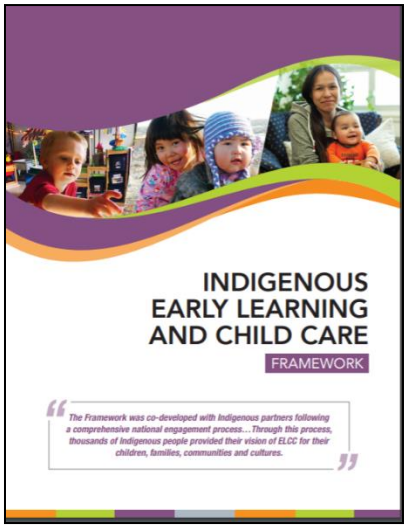
In this chapter you will find many indicators related to child development as well as health and its determinants, for example: family living arrangements, breastfeeding rates, vaccinations, pregnancy health and health behaviours, among others. Most of the indicators presented here are focused on early childhood (0-5 years) and the middle years of childhood (6-11 years). Occasionally the age range is broadened for some specific medical conditions or diagnoses, in accordance with reporting standards at a provincial level, which allows us to make comparisons. We provide suggestions for tangible actions on childhood and family wellness at the end of this chapter in the hopes of achieving strong and nurturing environments for our little ones. You will also be able to find some other health and wellness indicators relevant to this age group in Chapter 2 (Injuries and Injury Prevention) as well as in other volumes of our health portrait (for example, activity levels and nutrition indicators among children are located in Volume 1, Chapter 1; Diabetes and Diabetes Prevention in Kahnawà:ke).

This chapter combines results from the 2015 Regional Health Survey (RHS), as well as some provincial medicare-based data sources, and medication information from the Non-Insured Health Benefits system (NIHB) of Indigenous Services Canada. Please see the methodology chapter at the end of this document for further information on the specific data sources.

Kahnawà:ke had high participation rates in the RHS with over 150 children between 0-11 years old surveyed. The age and biologic sex of the children were considered when recruiting participants to make sure the surveyed children were a balanced representation of all children in Kahnawà:ke. Almost all respondents were the biological parents of the children being surveyed.

In the ELCC Framework, we believe that:

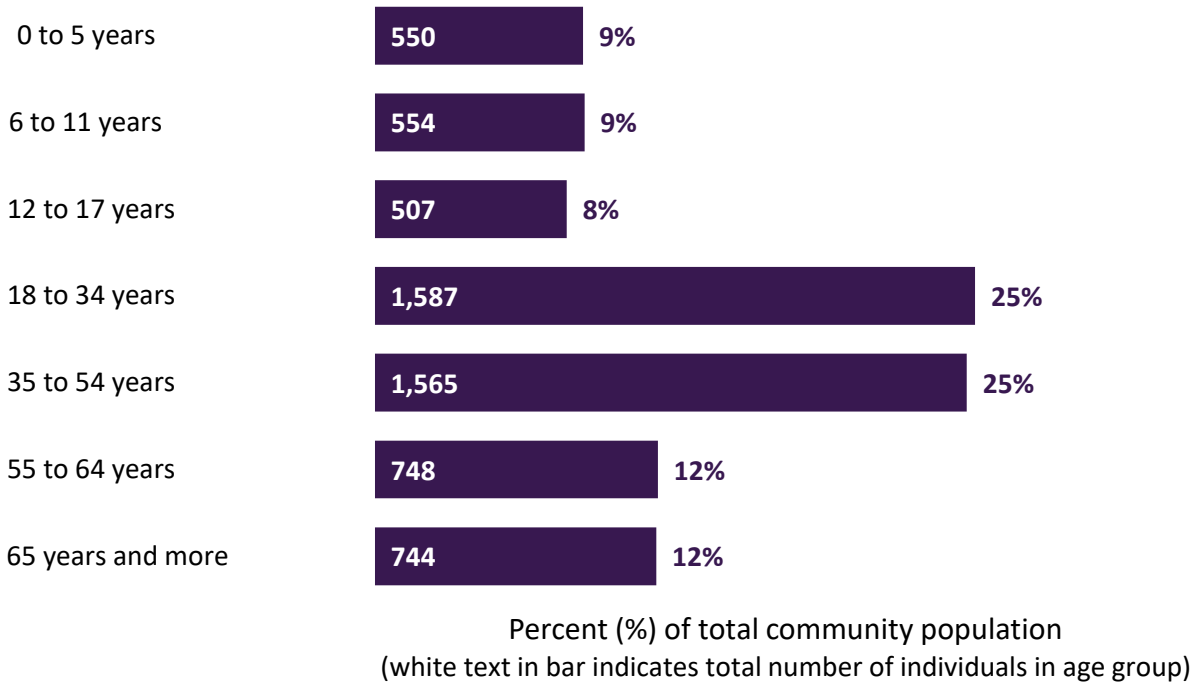
- Children are a gift to us from the Creator
- Parents, families and communities have a sacred and shared responsibility to care for their children
- Children are considered the highest priority of parents, of family and of community
- Children embody the past, live the present and promise the future
- Each child is born with a gift(s) to be realized and nurtured
- First Nations children and families have been, and continue to be, impacted by colonization



Demographics

How many children are there in Kahnawà:ke?

Figure 1.2. Number of people in each age group and percentage of the total population of Kahnawà:ke each age group represents, 2014



Source : Régie de l'assurance maladie du Québec (RAMQ), Fichier d'inscription des personnes assurées (FIPA).
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, décembre 2016.

The graph above (Figure 1.2) shows how many people are in each age group and the percentage of the total population of Kahnawà:ke that each age group represented in 2014. In that year, there were 550 children between the ages of 0-5 years old and 554 children between the ages of 6-11 years old who had a RAMQ (medicare) card associated with a J0L 1B0 P.O. Box (Figure 1.2).

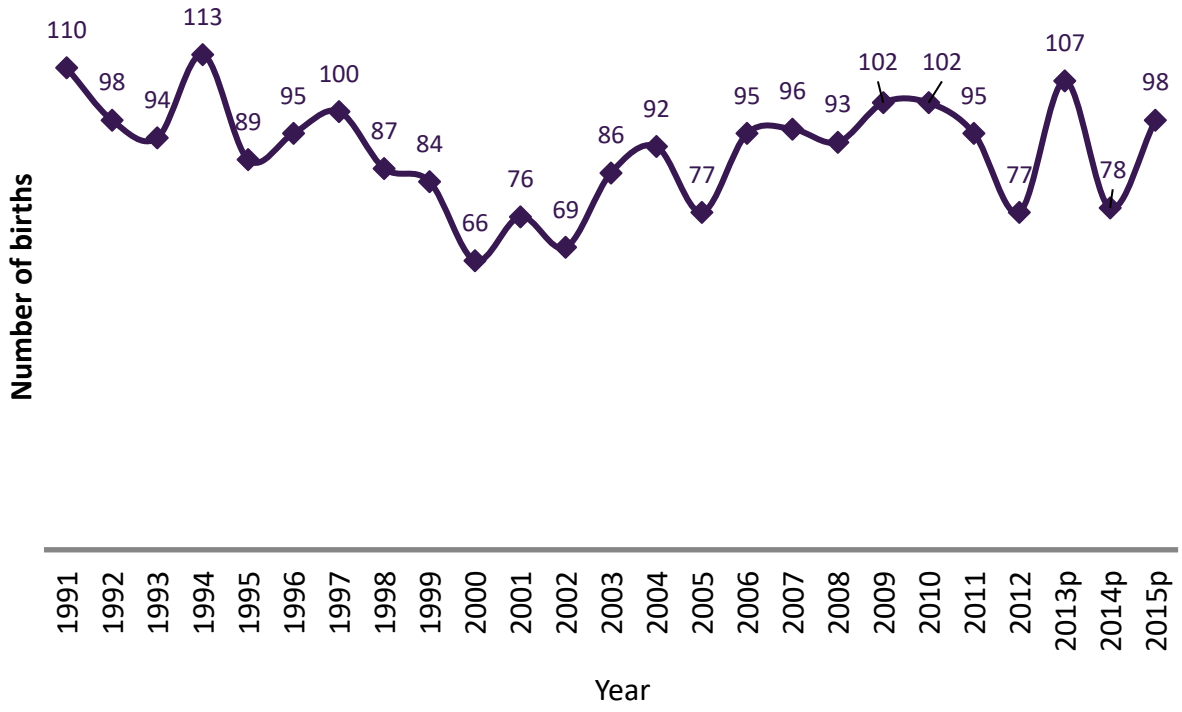
A slightly higher percentage of Kahnawà:ke's total population is made up of children 0-5 years old (9%) compared to Montérégie (6.5%) and Québec (6.4%).[10] While this may be a slight underestimate for some children who are community members but living outside of the community, the number of people with a medicare card is the most accurate number we have for how many children Kahnawà:ke's community agencies are potentially providing services to.

[10] Observatoire des touts petits (2017). *Comment se portent les tout-petits québécois?* Montréal, Québec, Fondation Lucie et André Chagnon. Data source : Institut de la statistique du Québec, Registre des événements démographiques https://tout-petits.org/media/1696/portrait2017_complet_web_fr.pdf

How many children are born each year?

In the 25 years from 1991-2015, the number of births per year in Kahnawà:ke has fluctuated, with the lowest number being 66 in 1999 and highest 113 in 1993. There has been an average of 91 births per year. There is neither an upward or downward trend over this time (Figure 1.3). Having an idea of how many children are born each year can be very helpful for planning services for families.

Figure 1.3. Number of births per year, Kahnawà:ke 1991 to 2015(p)



p: provisional data.
Sources : MSSS, Fichier des naissances.
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, décembre 2016.

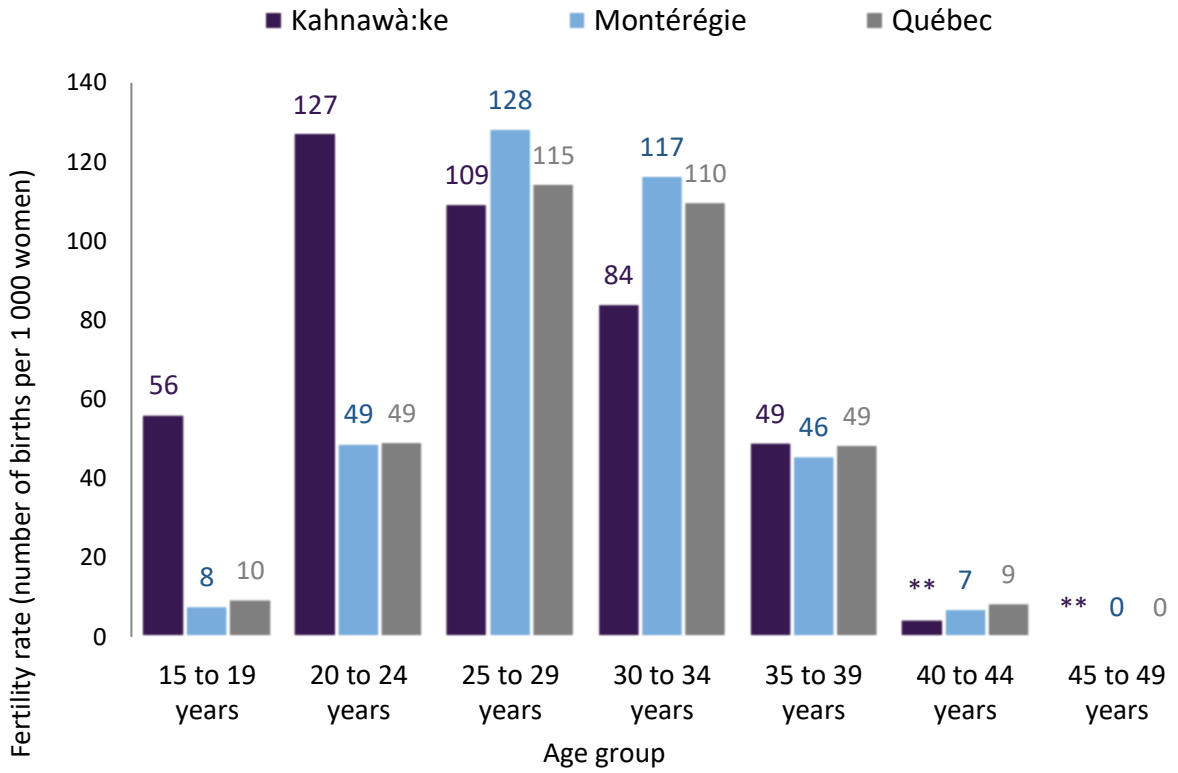
Age and education level of mothers at birth

Women in Kahnawà:ke tend to have their children at much younger ages than the general population of Québec and the Montérégie region. The "fertility rates" (which means: the total number of births per 1000 women in each age group) are shown in Figure 1.4. This use of the word "fertility" at a population level is different than what people usually mean in day-to-day conversations. Because it is at a population level, it does not directly mean the ability of people to have a pregnancy or not, but the number of children born to a whole group of women in certain age categories. The rate for an age group may reflect instead cultural norms and personal choices about when to have children and how many children people want to have.

What stands out in this graph are the very high fertility rates among teenage and young women in Kahnawà:ke. On a *per capita* (or "per person") basis, more than 5 times as many babies are born to women in the 15-19 year old age group in Kahnawà:ke compared to the province and region.

We also see very high fertility rates among women 20-24 years old, about 2.5 times higher than those in both the province and the region. Rates in the age groups 25 to 29 years and 35 to 39 years old are very similar to what is seen in the province and region.

Figure 1.4. Fertility rate by age group, for
Kahnawà:ke, Montérégie and Québec, over the 5 year period of 2008-2012



** Coefficient of variation greater than 33,3 %. The result is not shown.
Sources : MSSS, Fichier des naissances; Régie de l'assurance maladie du Québec (RAMQ), Fichier d'inscription des personnes assurées (FIPA). Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, décembre 2016.

Why does teenage motherhood matter?

Without strong supports, the young age of a child's mother (19 years old or younger) has been associated with certain health and development risks; some are social, and some are biological.[11,12,13,14] These include:

- Less routine prenatal healthcare
- Risky behaviours during pregnancy (e.g.; alcohol and drug use)
- Premature birth of the child
- Low birth weight of the child
- More birth defects
- Higher infant mortality
- Lower or delayed educational achievement by the mother
- Lack of effective parenting skills

However, since many of these risks are highly related to the social circumstances of the young families, they can be lowered if strong support structures are available. These can include helping young parents develop parenting skills, childcare options that allow moms to continue their education or career, and intergenerational supports. We do see many of these supports in place in a robust way in Kahnawà:ke, though it can still be more challenging for people with less extensive family support.

We also see there is good access in the community to family planning supports, such as healthcare advice, and tools like condoms and birth control medications. This gives people more control over deciding when they are ready to start a family, which allows them to consider their personal support networks as part of their decision.

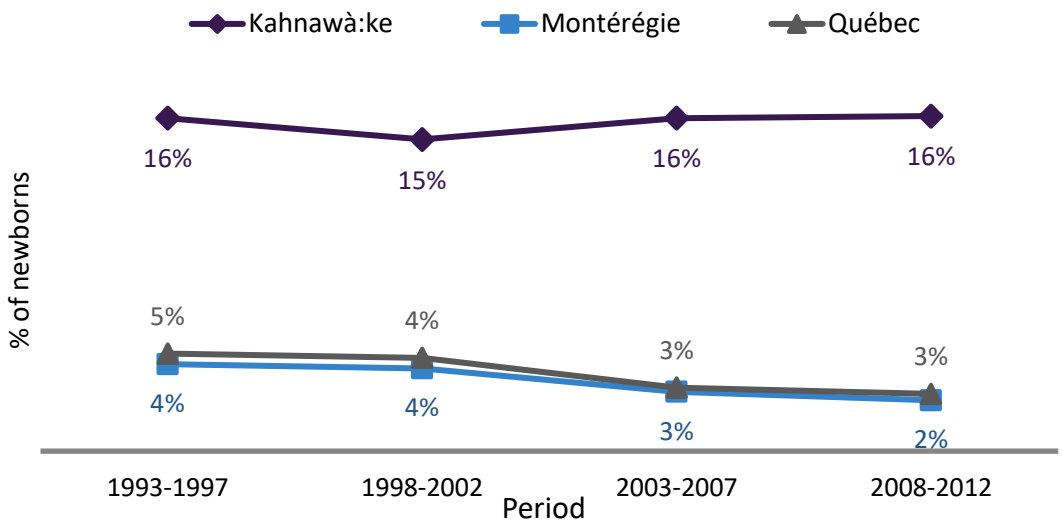
Figure 1.5 shows us similar information to that in Figure 1.4, but it is from a slightly different perspective. Instead of showing how many babies are born to women in each age group, we are looking here at all of the babies born in each time period and asking what percentage of them were born to a mother 19 years or younger. In Figure 1.5, we are also able to look at the trend in this percentage over several time periods. We see:

- From 2008-2012, 16 out of 100 babies (16%) born in Kahnawà:ke were born to teen moms, which is 8 times higher than in the Montérégie region (2 out 100; 2%) and over 5 times higher than rates in the province (3 out of 100; 3%)
    - This means 75 out of 469 Kahnawa'kehró:non babies altogether in that 5-year span
- From 1993 to 2012, there was a steady decline in the percentage of babies born to teenage moms in the general population of Québec and Montérégie. In Kahnawà:ke, the percentage did not change over the same time period.

A high proportion of babies are born to teenage moms in Kahnawà:ke; up to 8 times higher than in the surrounding Montérégie region.

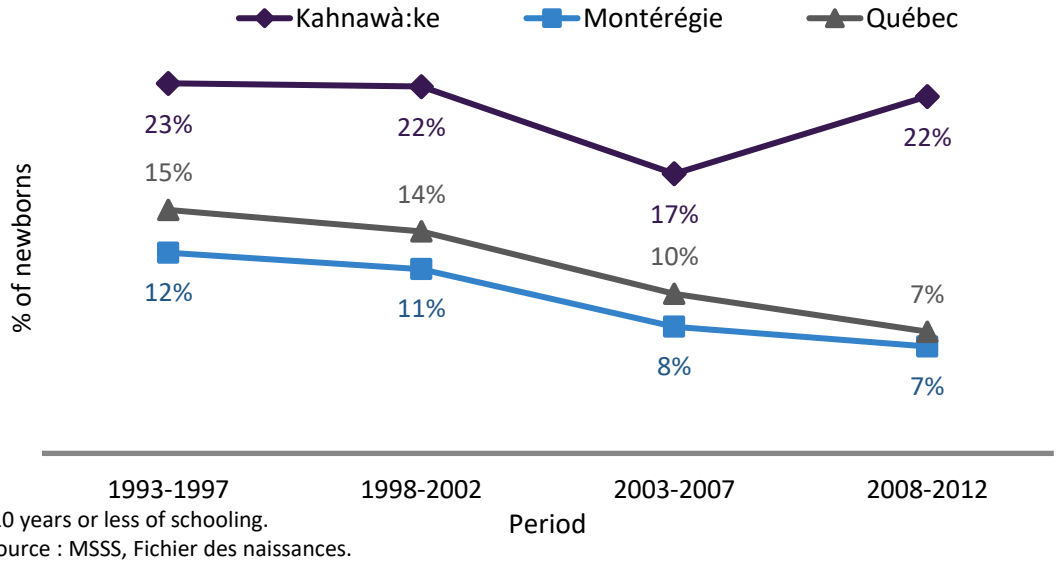
[11] Canadian Institute for Health Information. *Le moment propice : pourquoi l'âge de la mère est déterminant* (2011) https://secure.cihi.ca/free_products/AIB_InDueTime_WhyMaternalAgeMatters_F.pdf (accessed January 2020)
[12] World Health Organization. *Adolescent pregnancy fact sheet.* https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy (accessed May 2019)
[13] Garner et al. *The socio-economic characteristic of First Nations teen mothers.* Int Indigenous Policy J, 4(1), 2013
[14] Kingston, Frontenac and Lennox & Addington Public Health. *Teen Pregnancy.* https://www.kflaph.ca/en/research-and-reports/teen-pregnancy.aspx (accessed January 2020)

Figure 1.5. Percentage of newborns with a mother 19 years of age or younger: Kahnawà:ke, Montérégie and Québec, 1993-1997 to 2008-2012



Source : MSSS, Fichier des naissances.
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, décembre 2016.

Figure 1.6. Percentage of newborns whose mothers have not completed a high school education[1], Kahnawà:ke, Montérégie and Québec, 1993-1997 to 2008-2012



[1]10 years or less of schooling.
Source : MSSS, Fichier des naissances.
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, décembre 2016.

Figure 1.6 shows us the percentages of newborn babies whose mothers had not completed high school (corresponding to 10 years or less of schooling) when the baby was born. Again, we have looked at multiple time periods and compared the data to the percentages in the province and Montérégie region. Over time, we see that the percentages in Kahnawà:ke were consistently higher. While the percentages have been declining in the Montérégie region and in Québec, Kahnawà:ke's rate has remained disproportionately high. In other words, we see a widening gap over time between our community and both the province and region.

In the most recent time period, 3 times as many babies in Kahnawà:ke were born to a mother who had not completed high school as compared to those in the region and province. This means 103 out of 469 babies were born to a mother who had not completed high school between 2008 and 2012.

While the high percentages seen in Figure 1.5 for the age group 19 years or younger are linked to patterns observed for mothers with less than high school education in Figure 1.6. (i.e. if someone gives birth at 16 years old, they will not yet have completed high school), there may also be a disproportionate number of mothers who have not completed high school at older ages.

Many of Kahnawà:ke's newborns are born into families in very different life stages, and with different social and economic circumstances compared to elsewhere.

There is a lot to unpack behind these statistics and many unique stories behind them. It could be helpful to use this information to begin conversations about what this means for Kahnawà:ke and for families in the community. There is a wide diversity of perspectives on when and how to start a family, and a variety of social, cultural and economic reasons behind these trends. Even an individual person might hold multiple perspectives within themselves. We can all agree that all children of the community deserve to get the best possible start in life, regardless of their specific family or social circumstances.

Around the world, high birth rates among teen moms have been associated with many different poor health outcomes for young children. For example, babies born to mothers 19 years and younger are more likely to be born prematurely and to have concerningly low birth weights. Teens are also more likely to engage in risky behaviours (such as alcohol consumption) during pregnancy.[12]

Mostly, these risks and outcomes are linked to the social determinants of health discussed in the introduction to this chapter. For example, it may be much harder for a young family who have limited financial savings, or where the parents had their education interrupted, to afford things like diapers, a crib, rent for a good home, and fresh and nutritious foods. They might also feel stressed from the pressure to get a better job and earn more money or even feel less confident in how to be a parent. These things may affect the parent's overall mental wellbeing and coping, which, in turn, can influence the child's emotional and physical development. These types of situations aren't certainties but have been shown to be more common challenges for young families than for families where the parents have been able to become more established in their education and careers. These types of stories are also commonly heard among some of the care and service providers in Kahnawà:ke who work to support families and children. We also hear of other types of stories where a young parent might have a lot of support from their own parents and family and be able to go back to school and get a good job to provide for their growing family.

Ultimately, the conversations sparked by this information might lead to many questions and many answers; things like:

- Does everyone who wants to choose when or if to have a pregnancy (or not) know about their options to be in control of their bodies? Are they able to, and comfortable to access these options?
- How are we working with educational services in and outside of the community to ensure that people who have started their families young still have educational opportunities if they want them? Are there adequate day and evening child care options for parents pursuing ongoing studies?
- Can we do anything to enhance job opportunities inside and outside of the community for people who have started their families young?
- How are we doing in terms of providing a supportive environment to lessen the stress of situations like young parenthood and learning to care for a newborn (i.e. encouraging day-to-day activities with teen parents that have concurrent childcare or supportive people available)?
- How do local programs and services adapt to the particular needs of young families when providing other health and social supports, particularly considering the resources in the regions around the community may not be well aware of this local reality?

Home & Learning Environments and Family Circumstances of Children

The types of physical and social environments in which children live, learn, and play have significant impacts on their development and health. This includes having access to key material resources and the social and emotional supports they need to flourish.

Every family is different, and children are raised by a variety of caregivers and grown-ups, including moms, dads, step-parents, grandparents, aunties, uncles, siblings, relatives and friends.

Even in diverse family structures, having both biological parents present in a child's life can have a powerful and positive effect, even if it comes in different forms of living arrangements.[15,16] On the other hand, the absence of one parent can be an important challenge for many.[17]

Much can be done to strengthen children's capacity to handle family changes and adjust to their living situations. Parents and children may need extra help from extended family members, support groups and community agencies to develop resiliency, and to connect to the relationships and resources they need to stay on track for well-being. The numbers illustrated here may help to start conversations on what kind of services are available in Kahnawà:ke for parents and families.

The information about family structure presented here is in two age groups: 0-5 years and 6-11 years. Family make-up was similar in both age ranges. This information comes from the Regional Health Survey (RHS).

[15] King V, and Lindstrom R. *Continuity and change in stepfather–stepchild closeness between adolescence and early adulthood.* Journal of Marriage and Family. (2016) 78.3: 730-743

[16] Kalmijn M. *Adult children's relationships with married parents, divorced parents, and stepparents: Biology, marriage, or residence?*. Journal of Marriage and Family (2013) 75.5: 1181-1193

[17] Härkönen, J et al. *Family dynamics and child outcomes: An overview of research and open questions.* European Journal of Population (2017) 33(2), 163-184.

Although the 150 children surveyed is a good number to understand some more common characteristics and health issues, it's important to note that some less common family structures (such as adoptive families) may not be represented among the 150 participating children. This doesn't mean that these families don't exist in Kahnawà:ke.

Who do children live with?

Among children 0-5 years old

- 2 out of 3 (66%) children live with both of their biological parents (see Figure 1.7)
    - This compares to 78.6% of children this age in the Montérégie region and 77.8% in Québec (2011)[18]
- Almost 1 out of 3 (31%) live with their mother but not with their father
- A small percentage (3%*) live with their father but not their mother
- Overall, 97% live with their mother
    - 66% live with both parents and 31% with their mother but not their father
- Overall, 69% live with their father
    - 66% live with both parents and 3% with their father but not their mother
- About 2 out of 3 (65%) live with at least one sibling
- 15% live with just 1 adult
    - This could look like a single parent or caregiver household, with no other adults living in the household (partners, older siblings or other relatives)
- 2 out of 3 children (65%) live with 2 adults
- 1 out of 5 (20%) live with 3 or more adults
    - This indicates that some young children may also be living with a grandparent, adult older sibling or extended family in addition to one or both parents, while others may be living in shared custody arrangements where one or both biological parents may have another partner

Among children 6-11 years old

- Almost 2 out of 3 (63%) children live with both of their biological parents (Figure 1.8)
- Almost 1 out of 3 (29%) live with their mother but not with their father
- Almost 1 out of 10 (7%) live with their father but not their mother
    - This is more than twice the percentage that we found among 0-5-year-old children
- Overall, 91% live with their mother
    - 63% live with both parents and 29% with their mother but not their father
- Overall, 70% live with their father
    - 63% live with both parents and 7% with their father but not their mother
- A little under 2 out of 3 (59%) live with at least one sibling
- 1 out of 5 (19%) live with just 1 adult
- Almost 2 out of 3 (60%) live with 2 adults
- 1 out of 5 (21%) live with 3 or more adults

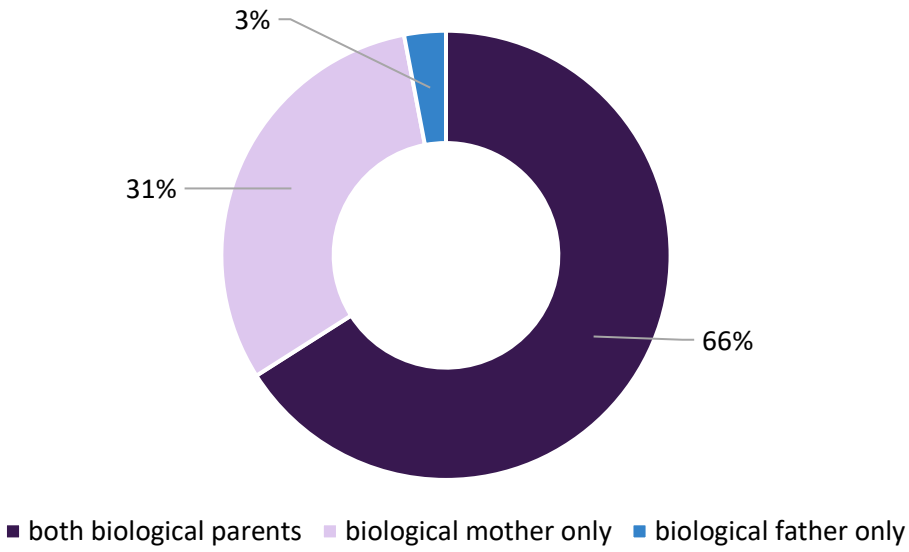
Among adults surveyed

Adults were also asked who they lived with on the RHS. Figure 1.9 shows the percentage of adults in different age groups who said they live with at least one child

- 35% of adults (all ages) said they live with at least one child
- The percentage was highest among those aged 35 to 44 years, where 7 out of 10 (70%) said they live with at least one child
- Even among those 65 and older, a sizable percentage (12%*) said they live with at least one child

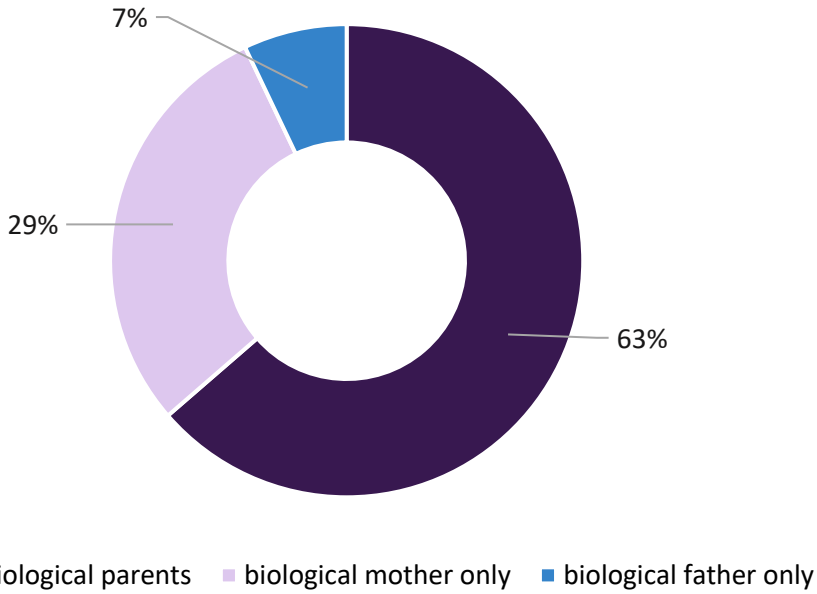
[18] Observatoire des touts petits (2017). *Comment se portent les tout-petits québécois?* Montréal, Québec, Fondation Lucie et André Chagnon. https://tout-petits.org/media/1696/portrait2017_complete_web_fr.pdf

Figure 1.7. Percentage of children 0-5 years old living with their biological mother, father, or both, Kahnawà:ke



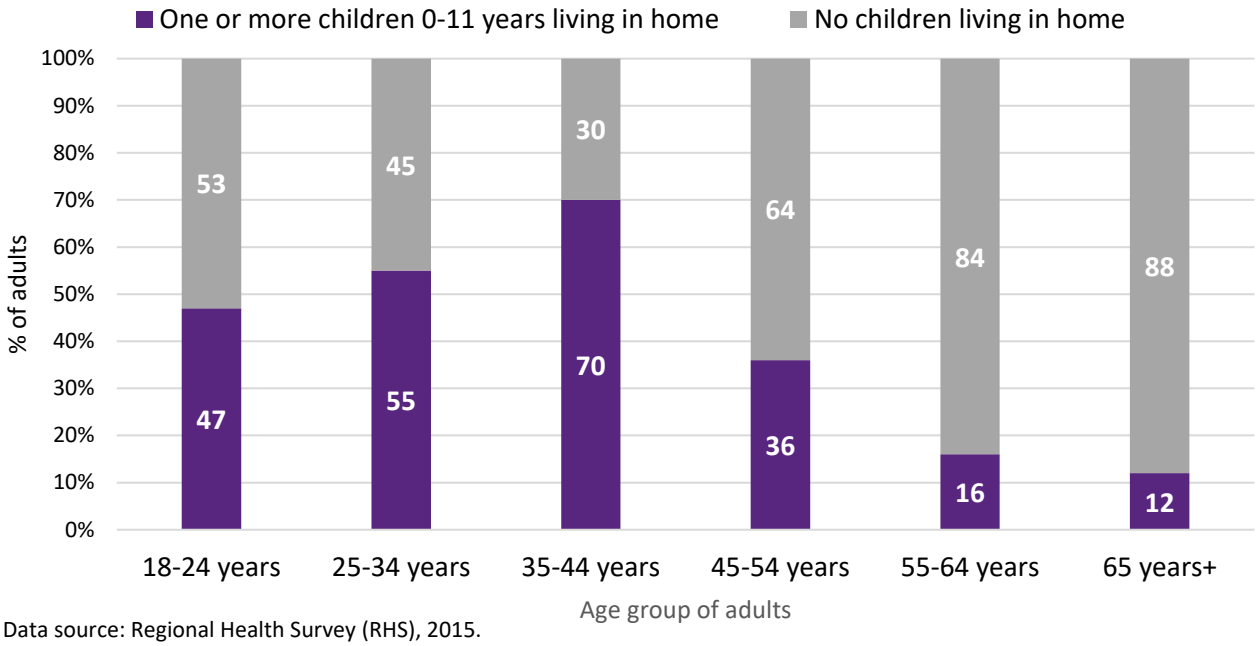
Data source: Regional Health Survey (RHS), 2015.

Figure 1.8. Percentage of children 6-11 years living with their biological mother, father or both, Kahnawà:ke



Data source: Regional Health Survey (RHS), 2015.

Figure 1.9. Percentage of adult respondents in Kahnawà:ke saying at least one child lives regularly in their household, by age group



Data source: Regional Health Survey (RHS), 2015.

Daycare, early childhood programs, preschool, school and learning environments

It is said that it takes a village to raise a child. In addition to spending time with their parents and their siblings, young children can greatly benefit from having interactions with many other people: grand-parents, neighbours, friends and educators.

In daycare centres, for instance, specialized educators can help stimulate kids with respect to their language development and their various physical abilities. Playing can also be a way to explore how to resolve conflicts. Traditions, celebrations and rituals as part of children's activities can create a sense of community belonging and security. The nature of the care received during the pre-schooling years can influence the ability to do well in school and contribute to achieving kids' best potential.

Care arrangements for young children

Looking at information from the RHS (2015), we found that there were many variations of childcare arrangements for children 0-5 years old:

- A little over 1 out of 3 children (37%) are cared for primarily at home by their parent(s)
- About 1 out of 2 children (51%) attend some type of formal daycare centre, preschool, or before/after school program as their main childcare arrangement
- About 1 out of 10 children (or 12%) attend a type of non-centre-based care, i.e. they are cared for either in someone else's home or in the child's home by a relative and /or non-family member(s)
- Children who attend any type of childcare setting outside of their own home with their parents (formal or informal), spend an

average of 24 hours per week in these types of alternate care, although there is a large range from 2-40 hours per week

Step by Step attendance (local information)

- Step by Step is the largest early childhood education and care centre in Kahnawà:ke and provides services to around 180 children and their families each year[19]

Head Start (RHS 2015)

- 58% of children 0-11 years old had ever attended an "Aboriginal Head Start" (AHS) program, with similar numbers for 0-5 and 6-11 year-olds
- Of those who had ever attended an AHS program, 75% were enrolled for 2 or more years

School and Daycare attendance (RHS 2015)

- 91% of children 3-5 years old were enrolled in some type of school (AHS, kindergarten, pre-kindergarten, Grade 1)
- 100% of children 6-11 years old were enrolled in school
- Fewer than 5 children (6-11 years old) had repeated a grade, and fewer than 5 children had skipped a grade

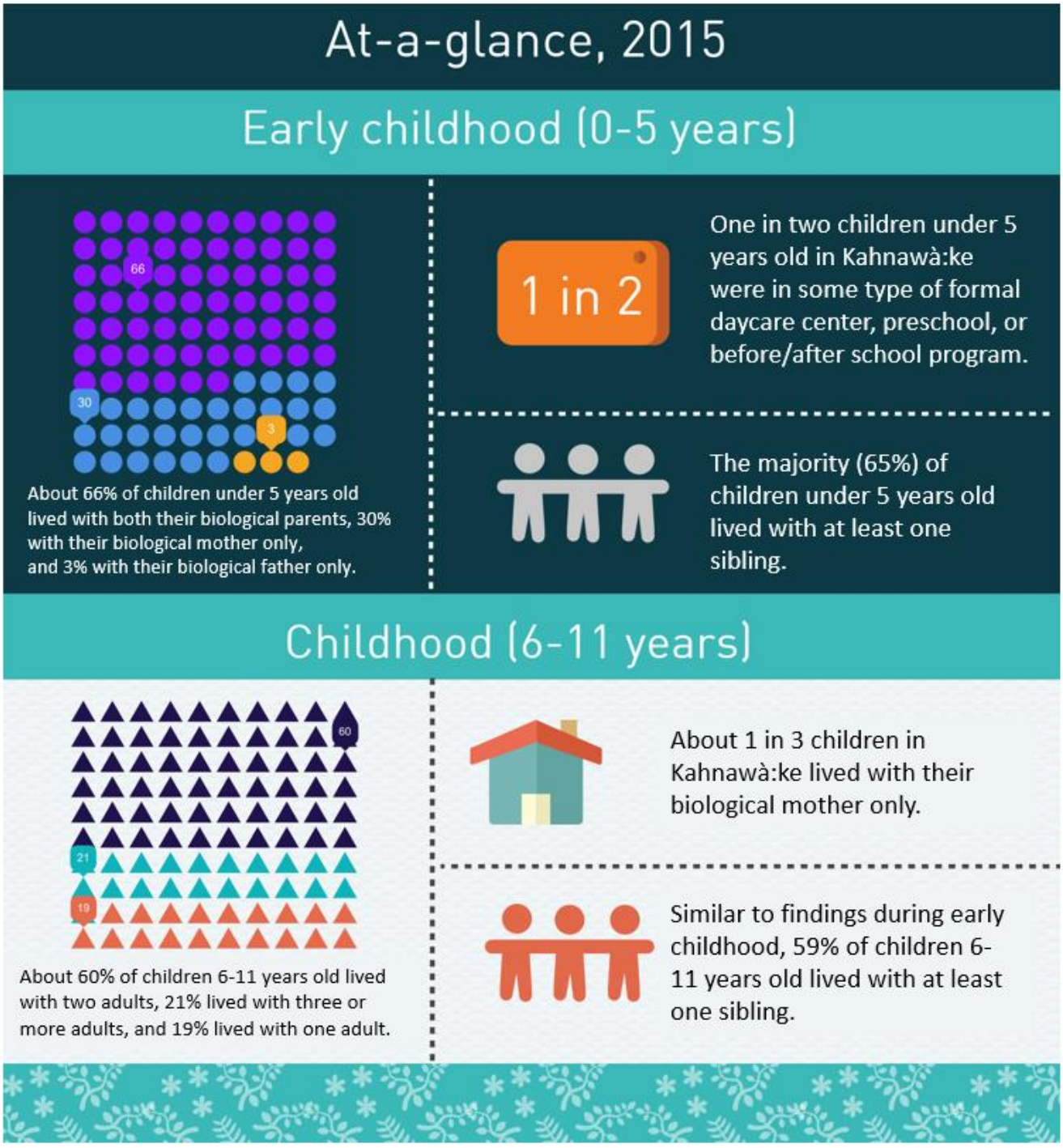
Reading (RHS 2015)

- 50% of children 0-11 years old either read for fun or were read to every day
- 85% of children did so at least a few times per week

Socializing and emotions (RHS 2015)

- 94% of children 0-11 years old had gotten along ("quite well" or "very well") with the rest of their family in the last 6 months
- The parents of 17% of children 0-11 years old felt their child had more behavioural or emotional difficulties than other children in the last 6 months

[19] personal communication, Natalie Beauvais, director of Step by Step, 2019



Source: RHS, 2015

Parents' economic and educational context

What does household income, parents' educations and parents' employment have to do with young children?

Being able to financially provide for the various needs of families is an important contributor to overall wellness. Families need to be able to afford basic material goods such as clothing, food and housing but also to access recreational, cultural and educational activities and services that are key to physical, social, emotional and intellectual development. Parents' education level and employment status can also play an important part in helping them create and take advantage of opportunities for their children, further contributing to their well-being and development. Early childhood care and service providers have also told us that they feel it is important to understand this better because of the impact it can have on their work in helping children and families.

Income

On the RHS, parents were asked about total household income in order to gain better insight of children's economic context but more than half (58%) of parents either chose not to respond to this question or said they do not know. This means we cannot include a description here of how many children live in high, or low, income situations mainly because we are lacking crucial information. This leaves us with only anecdotes about how household income difficulties may affect the well-being of children in Kahnawà:ke and limits the ability of community agencies to advocate and act on this issue.

While we understand that income was a sensitive topic for many people who completed the survey, we hope that as people see how the information generated from the RHS is directly governed and used by the community, and how their individual anonymity is protected, that more people will feel comfortable answering similar questions in the future.

For reference, in the Montérégie region, 9.5% of children 0-5 years old lived in a "low revenue" household in 2015, which was a decrease from 13.3% in 2004.[20]

Parent education level & employment

Despite the limitation regarding household income, the RHS did provide information on parents' employment and education. Results show that, in 2015, 1 out of 2 children (0-5 years) had both parents employed and that nearly 1 out of 3 moms had attained post-secondary degrees (CEGEP or university). Detailed findings, regarding parents' education according to the child's age group is in Fig. 10:

[20] Observatoire des touts petits (2017). *Comment se portent les tout-petits québécois?* Montréal, Québec, Fondation Lucie et André Chagnon. https://tout-petits.org/media/1696/portrait2017_complete_web_fr.pdf

Education levels reached by parents of children 0-5 years old

Figure 1.10 shows the highest level of education reached by parents of children 0-5 years old. We see that moms (light green bars) generally had higher levels of education than dads (light blue bars).

- 34% of moms, (but very few dads) had a community college or CEGEP diploma, or higher
- 26% of moms and 21% of dads had some post-secondary education or trade school certificate
- A high school diploma (or equivalent) was the highest level of education for 30%* of moms and for 42% of dads
- 30%* of dads did not have a high school diploma

If we look at the highest level of education of *either* parent:

- 37% of children 0-5 years had at least one parent who had CEGEP or higher
- 31% of children in this age group had at least one parent who had done some post-secondary or trade school

Employment status for parents of children 0-5 years old

- 61% of moms worked at a paid job
  - This is lower than the 73.8% in the province and 78.1% in the Montérégie[21]
- 87% of fathers worked at a paid job
  - This is similar to 88.8% in the province but a little lower than 91.6% in the Montérégie
- For 54% of children, both parents worked at a paid job

Education levels reached by parents of children 6-11 years old

Figure 1.10 also shows the highest level of education reached by parents of children 6-11 years old. We see that high levels of education (CEGEP or higher) were more common among moms (dark green bars) than dads (dark blue bars).

- 31% of moms and 21%* of dads had a community college or CEGEP diploma, or higher
- 26% of moms and 22% of dads had some post-secondary education or trade school certificate
- A high school diploma (or equivalent) was the highest level of education for 30% of moms and for 39 % of dads
- 13%* of moms and 18%* of dads did not have a high school diploma

If we look at the highest level of education of *either* parent:

- 39% of children in this age group had at least one parent who had CEGEP or higher
- 31% of children this age had at least one parent who had done some post-secondary study or trade school

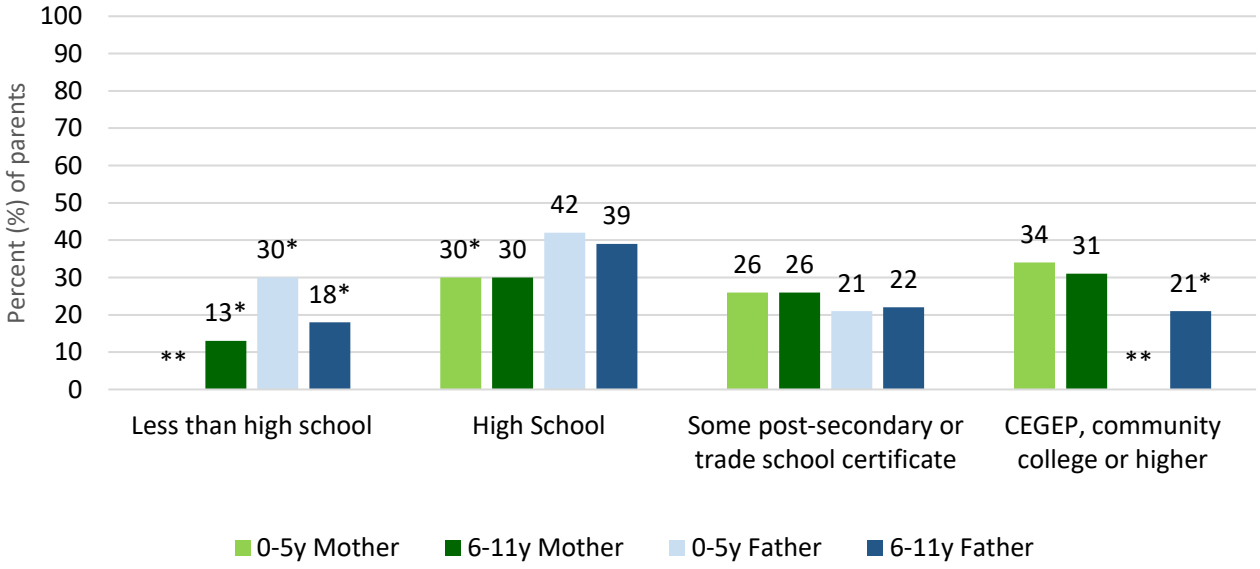
Compared with dads of younger children, more dads of 6-11-year-olds had completed CEGEP or higher, while for moms this percentage is about the same.

Employment status for parents of children 6-11 years old

- 68% of moms worked at a paid job
- 89% of fathers worked at a paid job
- For 62% of children, both parents worked at a paid job (higher than among parents of 0-5 year-olds)

[21] Observatorie des tous-petits. *Taux d'emploi des parents dans les familes avec au moins un enfant de 0-5 ans*. Data source : Statistics Canada Census 2016. https://tout-petits.org/donnees/environnement-familial/caracteristiques-sociodemographiques/occupation-d-un-emploi/taux_emploi_parents/ (accessed January 2020)

Figure 1.10. Education level of mothers and fathers, according to age group of child



Data source: Regional Health Survey (RHS), 2015.

What does this mean?

Ultimately, both education and employment are linked to a household's financial wellbeing. As noted above, a sizeable percentage of parents' educational level may be considered somewhat limited, particularly as may be required for many well-paying job opportunities. At a community level, this can affect household income for many young families. In addition to affecting these key social determinants of health for a family, parental education is also about the intergenerational value of learning. Well-educated parents are likely to pass on the value of education and the importance of life-long learning experiences and activities to the next generation.[22]

Removing barriers to good-quality formal education opportunities for those who want it, is no simple task and requires a holistic approach to meet the various needs. For some, it may mean access to financial, child-care or transportation supports that allow them to pursue education while raising their children. For others, it may mean ensuring they have access to contraception options that allow them to plan when they want to begin their family. The cultural safety (or lack of) in some formal educational institutions may also play an important role. To find ways of better promoting education opportunities, we may need to outreach and ask people and families with children about their preferences in terms of service availability, and identify solutions that are more suitable to their day-to-day realities. It is possible that service needs and preferences differ among parents of young children (0-5 years) and those of older children (6-11 years).

With regards to employment, we saw that in 2015, the majority of parents of young children were working, although women did so at a slightly lower rate than in the province and the Montérégie region. Employment provides income and social benefits (e.g. disability

[22] Korhonen, M. *Literacy and Health: The Importance of Higher-level Literacy Skills A Discussion Paper for Inuit Communities*. (2006). National Aboriginal Health Organization

insurance) that allow families to meet their needs and promote participation in society, an important component in community wellness. The information provided here did not look into job security and working conditions nor whether jobs were full- or part-time. As a result, we provided a partial picture of employment for the time being, but, hopefully, as we move forward with the RHS and other First Nations-led surveys, we will be able to better capture access to employment data and the other dimensions of decent work and find out how families are faring.

Using Kanien'kéha, our traditional language, with our children

Culture and language are very important social determinants of health for First Nations people, and a key to the identity of the community and to many individuals. There is a desire by many First Nations youth to learn and speak their First Nations languages, making it important for communities to work with their youth to provide opportunities, not only for the acquisition of the language, but to speak it with others on a regular basis so that they can become, and stay, fluent. Language is an important aspect of cultural and collective identity that will impact children and youth throughout life.[23]

All over the community, we see Kahnawa'kehró:non have recognized the importance of revitalizing and using Kanien'kéha wherever possible, and integrating traditional ways and Kanien'kéha culture into day to day life and services. Initiatives like the Iakwahwatsiratátie Language Nest, Kanien'kéha Ratiwennahní:rats Adult Language Immersion Program, and on-site classes and events for staff at MCK, KSCS, KMHC are among some of the many ways that community members have been either keeping the language strong in their lives, or bringing it back for others. Young children are also able to have opportunities to practice their language through many community events, clubs, summer camps, and in the formal curriculum of our elementary schools and in some daycare settings.

Speaking, understanding, reading and writing Kanien'kéha (RHS 2015)

On the 2015 Regional Health Survey, respondents were asked about their children's use of Kanien'kéha.

- 90% of children have some knowledge of the Kanien'kéha language
  - What "some knowledge of" means is of course subjective and can be very different at different ages. These numbers include children 0-11 years old; a 1-year-old may have "some knowledge" by simply recognizing a word and showing this by pointing. In the early years, children are rapidly building their overall speech and motor skills, which are key for speaking and writing in all languages.

- Among children 0-11, the main language used by most children was English
  - 84% of children speak primarily English
  - 8% speak a mix of English and Kanien'kéha
  - <5%** speak primarily Kanien'kéha

- Most children (63%) have at least a basic ability to understand Kanien'kéha
  - 6%* have fluent understanding

[23] First Nations Information Governance Centre (FNIGC) *National Report of the First Nations Regional Health Survey Phase 3: Volume Two*, (Ottawa: 2018).

- 20% of children have an intermediate understanding
- 37% have a basic understanding
- 27% understand only a few words

- More than half of the children (57%) have at least a basic ability to speak Kanien'kéha
  - 5%* have fluent speech
  - 15% of children have an intermediate speech level
  - 37% have basic speech
  - 29% speak only a few words

- Almost half of children (43%) can read Kanien'kéha at a basic level or higher
  - <5%** can read fluently
  - 17% of children have an intermediate reading ability
  - 25% have a basic reading ability
  - 37% can read only a few words
  - 16% cannot read at all in Kanien'kéha

- About one-third of children 0-11 years old have the ability to write in Kanien'kéha
  - <5%** can write fluently
  - 14%* of children have an intermediate writing ability
  - 26% have basic writing ability
  - 41% can write only a few words
  - 15%* cannot write at all in Kanien'kéha

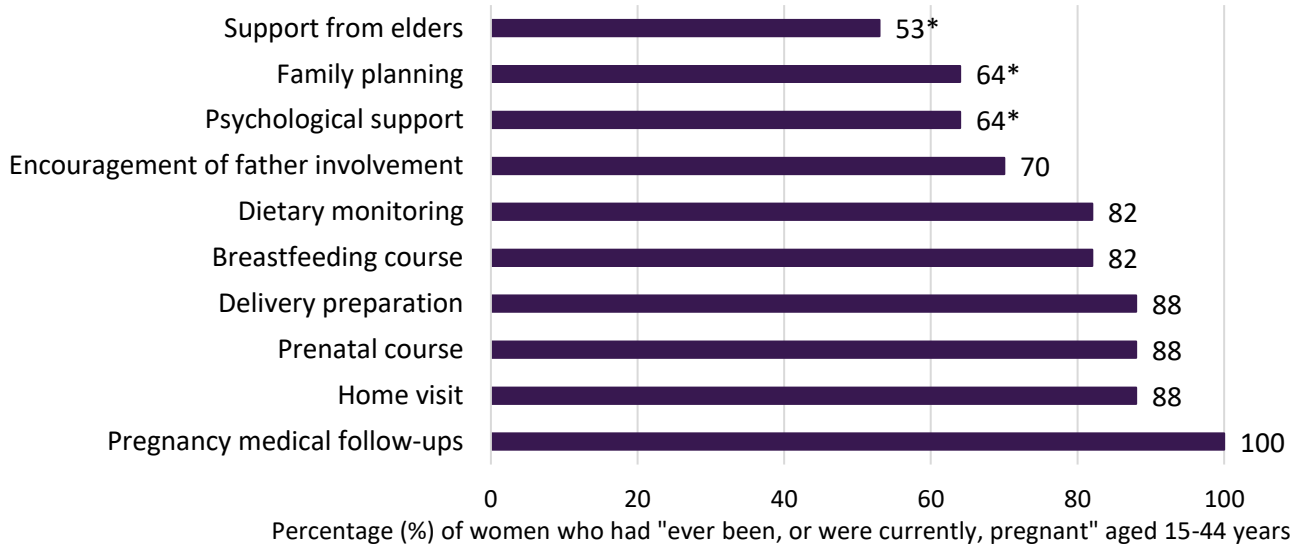
Healthy Pregnancies & Healthy Kids

What can we do to promote a healthy pregnancy and keep young children healthy?

From conception to delivery, the womb is a developing baby's sole environment. How a fetus is growing can be affected in positive or negative ways by factors like the mom's overall health, experience of medical conditions (like diabetes or infections), her eating habits, avoidance of (or use of) cigarettes, drugs and alcohol, her level of stress, living environment and more. These factors can influence whether the babies carried to the full term or born prematurely and can affect the birth weight of a baby.[24] They can also be associated with later development of motor, speech, cognitive and social skills and school performance.[25] Ensuring the best conditions while pregnant creates health benefits for mothers and for their offspring in ways that extend from infancy all the way through to adulthood. Since it goes without saying that parents who are expecting, want the best for their baby, encouraging and supporting healthy behaviors (as well as reduction of risky behaviors) during this life stage is likely to preserve the cycle of mother-child wellness for years to come.

In this section, we describe how often some of these protective or harmful factors occurred during pregnancies, according to self-reporting on the Regional Health Survey, and in exploring some NIHB data on folic acid and iron supplement use.

Figure 1.11. Percentage of women 15-44 years old who reported having access to services during, or after pregnancy



Data source: Regional Health Survey (RHS), 2015.

[24] The American College of Obstetricians and Gynecologists. *Tobacco, Alcohol, Drugs, and Pregnancy*. https://www.acog.org/Patients/FAQs/Tobacco-Alcohol-Drugs-and-Pregnancy (accessed October 2018)

[25] Bishop, D. et al. *Pregnant Women and Substance use.* Jacobs Institute of Women`s Health, George Washington University. 2017. https://publichealth.gwu.edu/sites/default/files/downloads/JIWH/Pregnant_Women_and_Substance_Use_updated.pdf (accessed October 18th 2018)

Factors that protect developing babies during pregnancy

Access to perinatal programs, care and supports

Figure 1.11[26] shows the percentage of women between 15-44 who had ever been pregnant who said they had access to the listed supports and services during their pregnancy. We see that women have high access to support in many areas. Support from elders, family planning, psychological support and encouragement of involvement of the baby's father were less common, but still available to more than half of the women who answered.

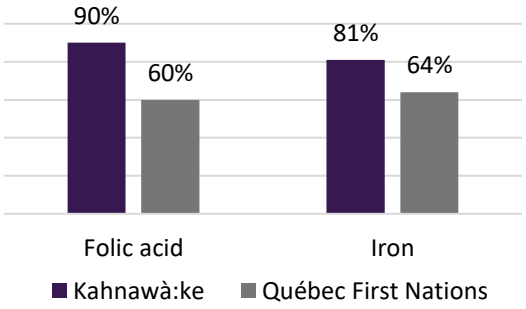
Folic acid and iron supplementation

Folic acid is a vitamin that is especially important to help a baby's nervous system develop early on during pregnancy.[27] It is recommended by doctors that all women who are even planning to become pregnant take it as a supplement. This is to prevent certain defects in how the nervous system is formed (e.g. *spina bifida*) as well as to reduce the chance of the baby being born too early, and improving birth weight.

Based on the RHS (2015), and shown in Figure 1.12:

- The vast majority of women in Kahnawà:ke had taken folic acid supplementation during pregnancy (90% of mothers for children 0-5 years old)
    - This was higher than the 60% reported for all First Nations in Québec
- 81% of young children's mothers took iron supplements during pregnancy

Figure 1.12. Percentage of children 0-5 years old whose mothers took folic acid or iron supplements during pregnancy



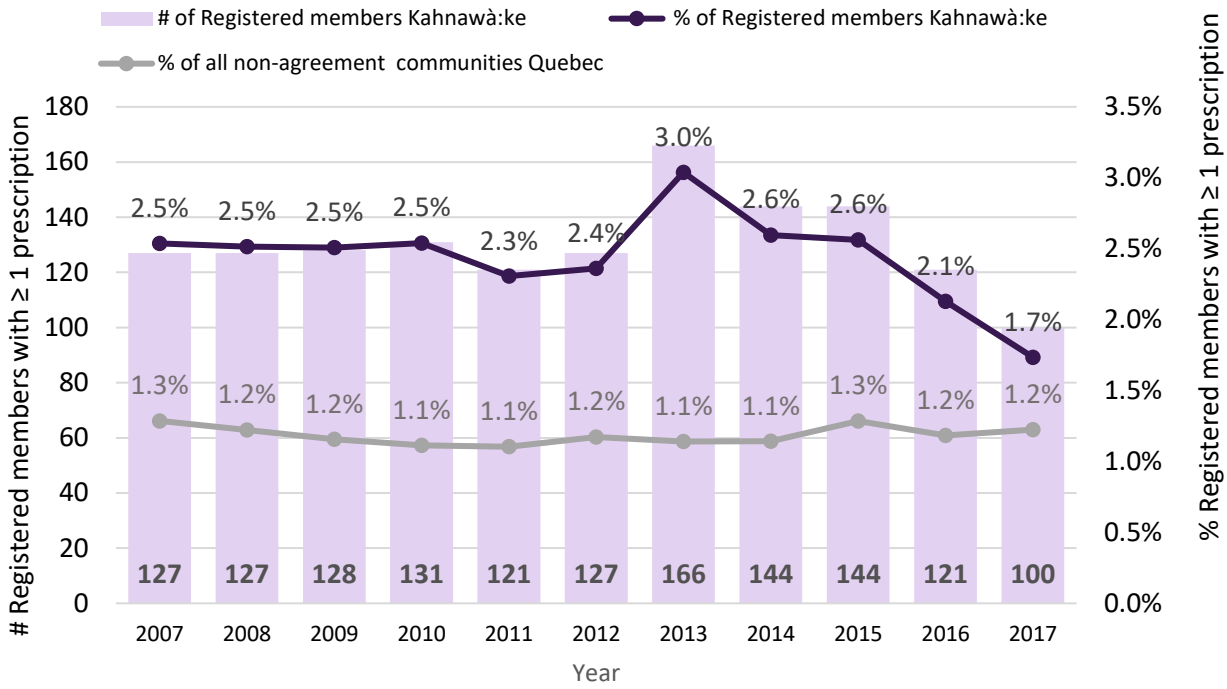
Data source: Regional Health Survey (RHS), 2015.

Looking at prescription claims via NIHB (see Figure 1.13), we see that from 2007 to 2017, between 100-166 women per year claimed a prenatal multivitamin. This number of women is somewhat higher than the number of births per year, seen earlier in Figure 1.3 (average 91 births per year). This makes sense, as many women take these vitamins while preparing for a possible pregnancy (which is the ideal time to start taking folic acid), and well after they deliver their babies. We also see that the percentage of women this age claiming these supplements is consistently higher in Kahnawà:ke compared to other First Nations in Québec. This result matches what was seen in the survey results. Better access to prenatal healthcare, including access to pharmacies and efforts at health promotion messaging and higher awareness of the importance of folic acid and multivitamins, are all potential underlying factors to explain this difference.

[26] Because of some difficulties with the roll-out of the Québec regional component of the RHS, these questions on access to care were only asked to about 60% of women who had ever been pregnant, so in Kahnawà:ke they are based on a response rate of about 70 individuals. The potential for some bias to be introduced here should be considered when reviewing this data and also when comparing it to future iterations of the RHS.

[27] Lassi ZS et al. *Folic acid supplementation during pregnancy for maternal health and pregnancy outcomes*. Cochrane Database of Systematic Reviews. (2013) Mar 28, 3.

Figure 1.13. Number and percentage of women (12-50 years old) claiming a prenatal multivitamin per year, Kahnawà:ke and Québec First Nations



Data source: Non-Insured Health Benefits (NIHB), 2007-2017

Factors that are harmful during pregnancy

Some factors can be harmful to a baby during pregnancy, including tobacco smoke from cigarettes and cigars, alcohol consumption and gestational diabetes. However, individuals can make choices that help protect against these harmful exposures. The RHS 2015 asked respondents with children about these exposures and protective behaviours, shown in Figure 1.14.

Tobacco smoke (cigarettes, cigars, etc.)

Exposure of a growing fetus to commercial tobacco smoke has been associated with babies having low weights. This is true both regarding smoking during pregnancy or second-hand exposure from other people smoking. Low birth weight is significant because this increases the risk of poor health for the newborn baby. This is discussed in more detail a little further along in this chapter.

Direct exposure

For children 0-11 years of age, the 2015 survey in Kahnawà:ke reported:

- 85% of children's mothers did not smoke at all during their pregnancy
  - Among children 0-5 years only, this number was 93%, which suggests improvements are being made over time
  - This difference may be due to decreased overall smoking rates and increased awareness of the effects of smoke exposure on developing babies
- For those moms who did smoke, 7%* of moms smoked throughout their entire pregnancy, while 8%* of moms did, but quit at some point during the pregnancy

Direct and second-hand exposure

- For 77% of children, their mothers did not smoke at all during their pregnancy, and also there was no second-hand exposure from anyone else in the household smoking while they were pregnant

- This is an encouraging finding but we need to think of ways to improve this home environment for all mothers
- For 7% of children, even though the mother did not smoke during the pregnancy herself, someone else in the home smoked while the mother was pregnant, implying the non-smoking mother was exposed to second-hand smoke

The 2015 survey did not ask about e-cigarette use or other forms of tobacco use. This has been suggested to be included in the next version of the survey. In some research, there are indications that e-cigarette exposure in pregnancy may also be a growing concern,[28] but currently we do not have any community data on e-cigarette use. Given the potential for negative effects, it is strongly advisable not to use e-cigarettes during pregnancy.

Alcohol consumption

Drinking alcohol during pregnancy can lead to *fetal alcohol syndrome disorders* (FASD). Children affected by FASD often have physical defects (including brain development issues), lasting behavioral problems (for example, aggression), and intellectual delays or deficits.

Among RHS 2015 respondents for children 0-11 years old, almost all (97%) said the child's mother had not consumed alcohol at all during pregnancy.

This is wonderful news and demonstrates how parents are caring for their children even during their earliest days.

Gestational diabetes

Gestational *diabetes mellitus* (GDM) is another potential risk to a growing fetus, which is why women take a specific sugar test at least once during their pregnancy. When someone is found to have GDM, they can often keep their sugar controlled by being very careful about their diet, while others will need to take insulin injections throughout the pregnancy. If gestational diabetes is not well controlled, babies are exposed to high sugar levels throughout many weeks of their development. This can lead to very high weight at delivery, which is associated with delivery complications like the need for a C-section. In the long term, if someone's mother had poorly controlled blood sugar during pregnancy, it increases the risk of becoming an obese adult and eventually developing diabetes themselves.[29]

In Kahanwà:ke:

- A little over 1 out of 8 children (13%*) 0-5 years old were born to a mother diagnosed with gestational diabetes duringpregnancy
  - This compares to 22% for all surveyed First Nations in Québec[30] and 8% for the general population of Québec[31]

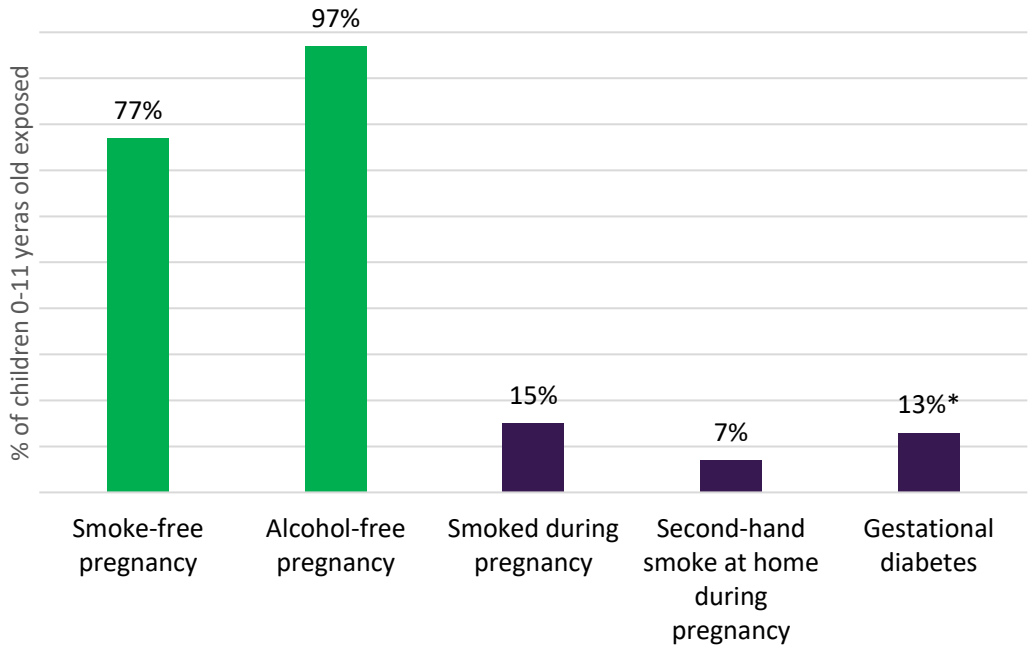
[28] Baeza-Loya, S et al. (2014). *Perceptions about e-cigarette safety may lead to e-smoking during pregnancy*. Bulletin of the Menninger Clinic. (2014). 78(3), 243-252.

[29] Johnsson IW, et al. *A high birth weight is associated with increased risk of type 2 diabetes and obesity.* Pediatric obesity. (2015) Apr;10(2):77-83.

[30] FNQLHSSC. *Quebec First Nations Regional Health Survey – 2015: Maternal and child health*. (2018) Wendake: FNQLHSSC. http://www.cssspnql.com/docs/default-source/ers-phase-3/sante_maternelle_ers_phase-3_eng.pdf?sfvrsn=2

[31] Institut national de santé publique du Québec. *Évolution du diabète gestationnel au Québec de 1989 à 2012, Rapport de surveillance.* (2017) https://www.inspq.qc.ca/sites/default/files/publications/2275_evol_diabete_gestationnel.pdf

Figure 1.14. Percentage of children 0-11 years exposed to certain protective factors and risk factors during pregnancy, Kahnawà:ke



Data source: Regional Health Survey (RHS), 2015.

Birth Weight

Low birth weight and preterm birth

Insufficient birth weight or "Low Birth Weight" (LBW) is defined as the weight of an infant at birth of less than 2,500 grams (5.5 pounds) irrespective of how far along in the pregnancy the child is born (i.e. the gestational age of the infant).[32] There is also a concept of "insufficient birth weight for gestational age", which refers to a child that has a birth weight lower than the 10th percentile for children born at that stage in pregnancy (i.e. the expected weight for a child born preterm is considered). "Preterm" or "premature" birth refers to a baby born before the 37th week of the pregnancy. Both preterm birth and low birth weight are associated with a number of illnesses in a baby, including infections, heart conditions, and even diabetes later on in life.[33,34] They are also associated with higher chance of infant mortality. LBW is linked to whether a mother smokes during pregnancy,[35] as well as her nutritional status and health conditions she might have during pregnancy (like pre-eclampsia).

When looking into insufficient birth weight for gestational age and preterm birth in Kahnawà:ke, we found some encouraging findings (see Figure 1.15 and 1.16):

- Over a 20 year-period, the proportion of births in Kahnawà:ke where the babies had insufficient birth weight for their gestational age has remained lower than rates seen in the Montérégie and Québec population
- In 2008-2012, the proportion of insufficient birth weight for gestational age was twice as low as rates in the general population, although these results should be interpreted with caution due to the small numbers of observations in the data which leaves them prone to fluctuation over time
- We also found lower rates of preterm birth in recent years compared to the regional and provincial figures
    - Premature birth rates in Kahnawà:ke showed a sharp drop between 2003-2007 and 2008-2012 (from 6.1% to 3.8%)
    - The preterm percentage of births for the Montérégie region and for Québec as a whole was 7.3% and 7.2%, respectively during this period

High birth weight or "Large for Gestational Age"

On the other end of the spectrum, children can be born at very high weights. When the baby's weight exceeds 4,500 grams (9 pounds, 11 ounces) this is termed "large for gestational age." This has also been shown to be a risk factor for infant mortality, complications during and following delivery, and lead to lifelong risk for developing obesity, diabetes and related metabolic disorders as the child gets older. [29,36]

Figure 1.17 shows the proportion of babies large for their age at birth in Kahnawà:ke compared to the Montérégie region and the province of Québec. It is somewhat higher in Kahnawà:ke through all of the time periods.

[32] WHO. *Low Birth Weight Policy Brief.* https://www.who.int/nutrition/topics/globaltargets_lowbirthweight_policybrief.pdf (accessed October 2019)

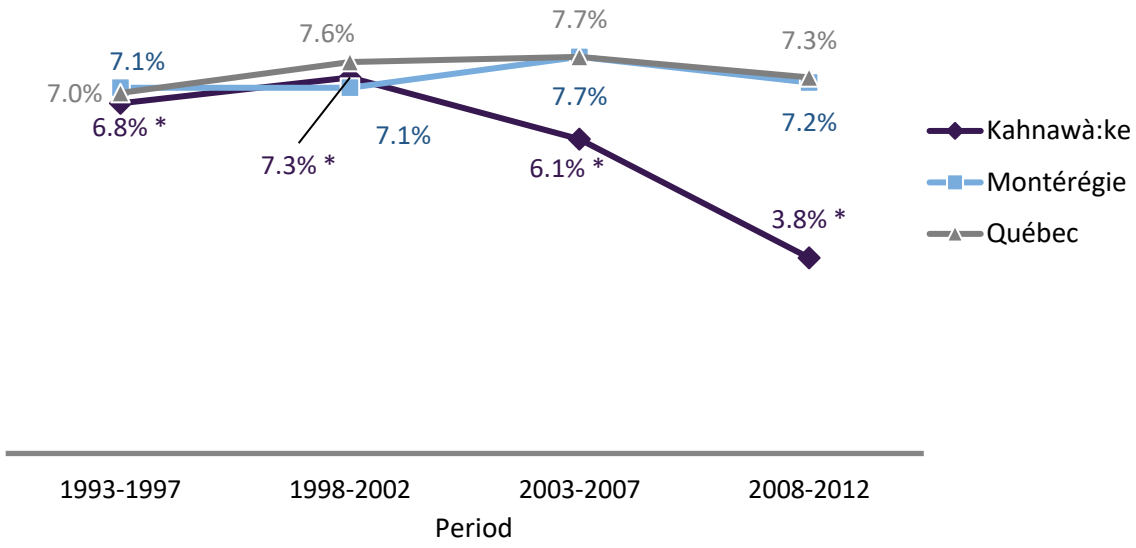
[33] Risnes KR, et al. *Birthweight and mortality in adulthood: a systematic review and meta-analysis*. Int J Epidemiol. (2011);40:647–61. doi:10.1093/ije/dyq267

[34] Larroque B, et al. *School difficulties in 20-yearolds who were born small for gestational age at term in a regional cohort study*. Pediatrics. (2001).108:111–15.

[35] Kramer MS. *Facteurs déterminants de l'insuffisance pondérale à la naissance : évaluation méthodologique et méta-analyse.* (1987) Bulletin de l'OMS, 65(5), 663–737.

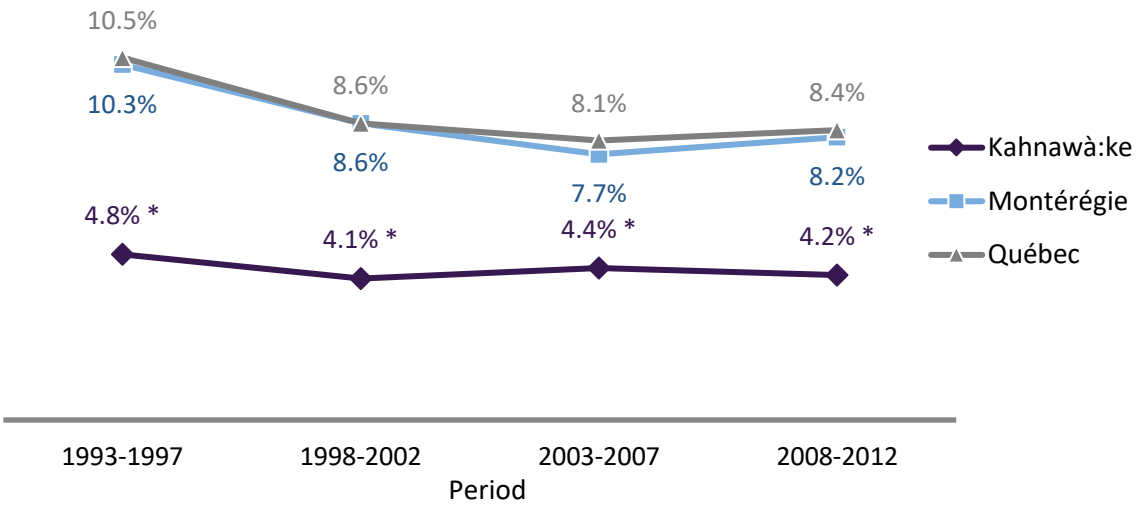
[36] Poston L. M*aternal obesity, gestational weight gain and diet as determinants of offspring long term health.* Best practice & research Clinical endocrinology & metabolism. (2012) Oct 1;26(5):627-39.

Figure 1.15. Proportion of premature newborns, Kahnawà:ke, Montérégie and Québec, 1993-1997 to 2008-2012



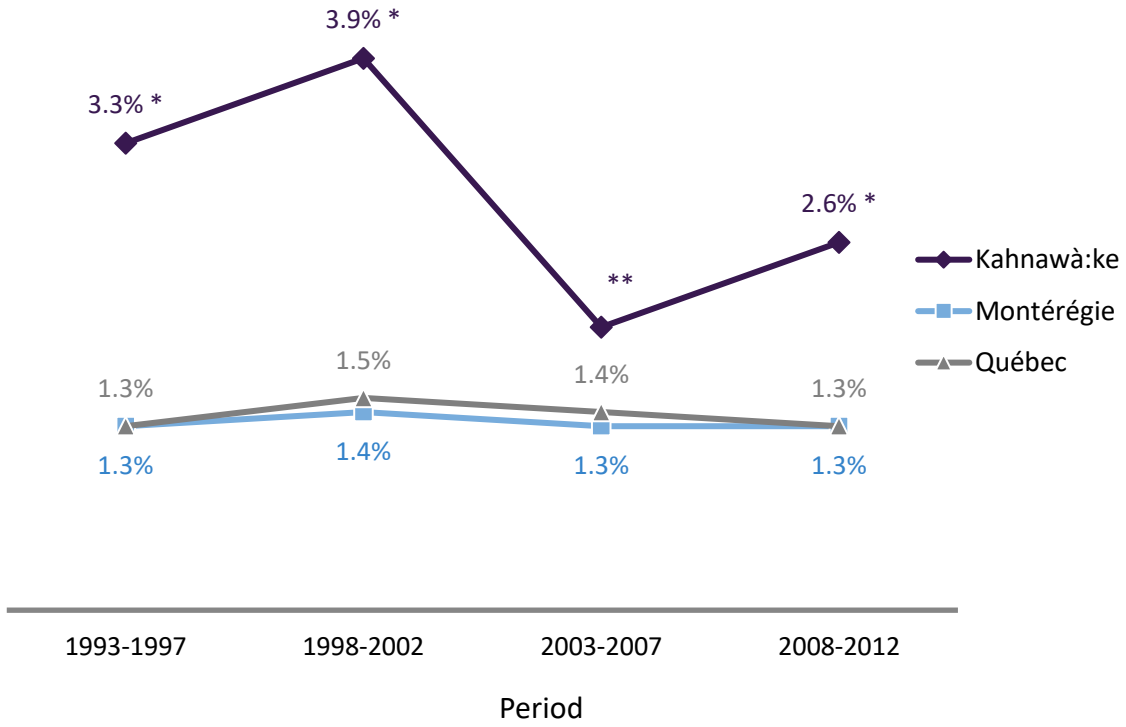
* Coefficient of variation greater than 16,7 % and lower or equal to 33,3 %. The result must be interpreted with care.
Source : MSSS, Fichier des naissances.
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, décembre 2016.

Figure 1.16. Proportion of newborns of insufficient birth weight for their gestational age, Kahnawà:ke, Montérégie and Québec, 1993-1997 to 2008-2012



* Coefficient of variation greater than 16,7 % and lower or equal to 33,3 %. The result must be interpreted with care.
Source : MSSS, Fichier des naissances.
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, décembre 2016.

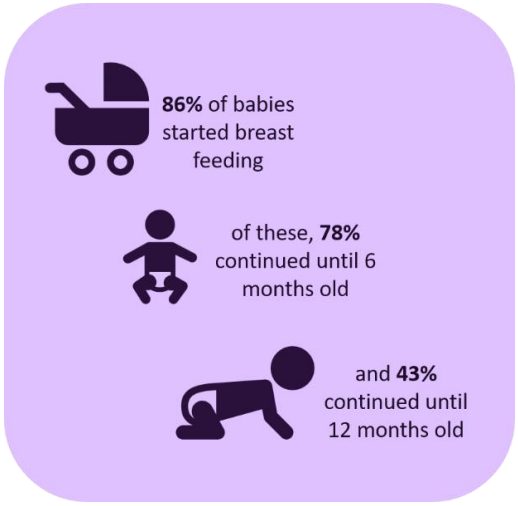
Figure 1.17. Proportion of newborns of large weight (>4 500 g), Kahnawà:ke, Montérégie and Québec, 1993-1997 to 2008-2012



* Coefficient of variation greater than 16,7 % and lower or equal to 33,3 %. The result must be interpreted with care.
** Coefficient of variation greater than 33,3 %. The result is not shown.
Source : MSSS, Fichier des naissances. Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, décembre 2016.

Breastfeeding

Exclusive breastfeeding until at least 6 months is the ideal nutrition source for newborns and is, as such, highly recommended. According to the WHO (World Health Organization), women are further encouraged to breastfeed until the child is at least 2 years old, (even after introducing solid food).[37] We also know that a baby gets benefits from *any* amount of breastfeeding a mother can provide, even when it is for shorter time periods, or as a small portion of a baby's overall diet. There are short-term and long-term advantages to breastfeeding, both for the child and their mother[38] (see box to the right). Through the 2015 RHS, we found that breastfeeding rates were very high for Kahnawà:ke among children currently 0-5 years old (see Figure 1.18).[39]



- More than 8 out of 10 surveyed children (86%) at least began breast-feeding
  - This compares to 54% in other First Nations communities in Québec[30] and 89% among the general population of Québec (2013-2014)[40]
  - Kahnawà:ke's RHS figures are consistent with the breastfeeding initiation rate of 85% (2015) measured for children cared for by the KMHC Community Health Unit (CHU) for their well-child check-ups (a.k.a. the "Baby clinic")[41]
- 78% of children 0-5 years who began life breastfeeding continued to do so up to 6 months of age (meaning 71% of all children)
  - This compares to 26% among all First Nations in Québec (2015) and 54% among the general population of Québec[40]
- 43% of children 0-5 years who began breastfeeding continued up to 12 months of age (this means 37% of all children)
- The average length of breastfeeding for children 0-5 years in Kahnawà:ke was 12.4 months

BREASTFEEDING ADVANTAGES

- **Naturally adapts to evolving nutrient needs of the baby**
- **Always available, sterile, and at the right temperature**
- **Economical and ecological**
- **Provides some health protection by sharing antibodies with baby (e.g., decreases risk of ear infection)**

[37] WHO. *Breastfeeding* http://www.who.int/topics/breastfeeding/en/ (accessed January 2020)

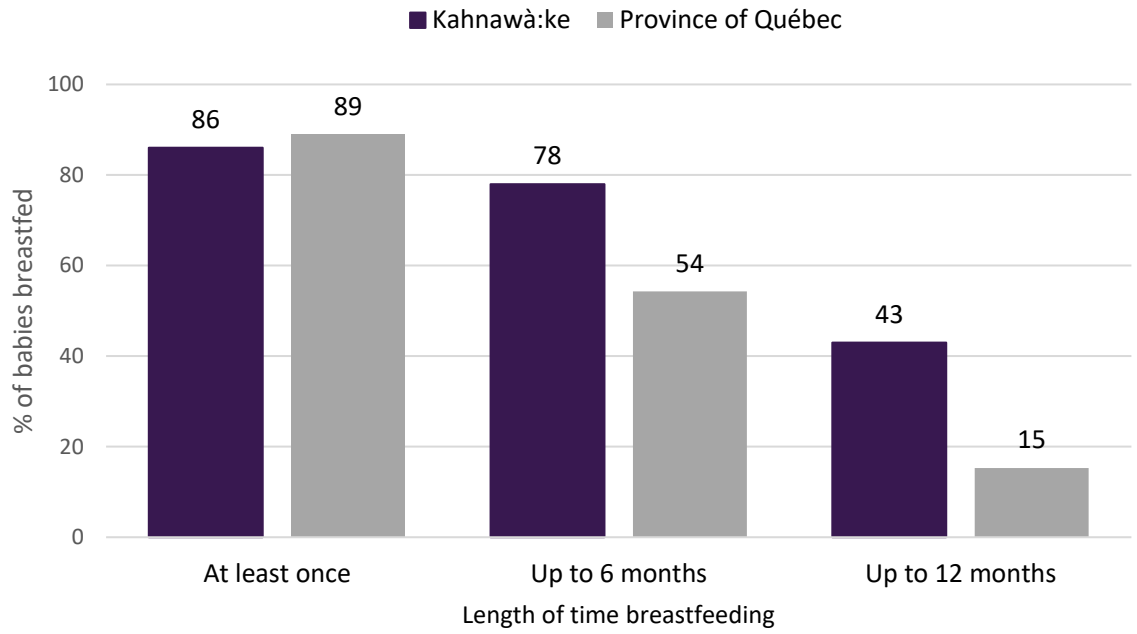
[38] Ste. Justine Hospital. *Les bienfaits de l'allaitement Le lait maternel : tout ce qu'il faut pour votre bébé.* https://promotionsante.chusj.org/fr/conseils-et-prevention/Pour-une-grossesse-en-sante/Les-bienfaits-de-l-allaitement-(1) (accessed January 2020)

[39] Observatoire des tout-petits (2017). *Comment se portent les tout-petits québécois ? Portrait 2017.* Montréal, Québec, Fondation Lucie et André Chagnon. Data source CCHS 2013-2014

[40] Observatoire des tout-petits (2017). *Comment se portent les tout-petits québécois ? Portrait 2017.* Montréal, Québec, Fondation Lucie et André Chagnon. Data source CCHS 2013-2014

[41] These numbers noted in medical chart follow-up via well-child clinic at KMHC. https://www.kmhc.ca/annualreports/annual%20report%202015%202016.pdf

Figure 1.18. Percentage of babies breastfed, according to length of time of breastfeeding, Kahnawà:ke (RHS 2015), Québec (CCHS 2013-2014)



Data sources: Regional Health Survey (RHS), 2015; Canadian Community Health Survey (CCHS), 2013-14.

In Kahnawà:ke, a large majority (86%) of babies have the chance to benefit from breastfeeding. This is terrific and speaks to strong awareness of the benefits among community members. It can also be attributed to supportive social environments to help mothers make this choice and the programming of many social and clinical services working together. For example:

- *Iontstaronhtha* - Breastfeeding Promotion Program with breastfeeding support worker & group at KMHC
- Community nurse home visits for newborns and their moms & dads
- Parenting groups and prenatal classes
- Connection to specialized breastfeeding clinics for additional support (e.g. at the Jewish General Hospital)
- Adherence to the accreditation standards of the "Baby-Friendly Initiative"[42] for hospitals and clinics. Anna Laberge Hospital, where many women from Kahnawà:ke deliver, has this accreditation, and KMHC also follows most of the standards to ensure breastfeeding is highly supported by staff

These high rates of breastfeeding may also be linked to the sharing of the traditional ways and wisdom from elders, *tóta*, and great-aunts about breastfeeding.

While we should be quite proud of how well Kahnawà:ke is doing in this area, we should still recognize that there may be some people for whom other types of support or outreach are needed. Moving forward, we might want to explore reasons why some mothers stopped breastfeeding before the six-month and the 12-month marks, and support them overcoming every-day-life challenges that may impact their ability to continue. For some women, when to

[42] WHO. *Baby-friendly Hospital Initiative* https://www.who.int/nutrition/bfhi/en/

stop may be an informed choice, while sometimes it is simply because a woman is not able to produce enough breast milk to be the primary nutrition source for the baby. For other moms there can be social barriers that interfere with their ability to do so. Such challenges could include things like feeling uncomfortable to breastfeed in public spaces, difficulty to connect with supportive elders and family members about breastfeeding, or the lack of interest of their partners in supporting the mother's feeding choices. Employment and working conditions can also be significant factors affecting length of breastfeeding. For instance, lack of protected and compensated parental leave at some jobs may prevent some mothers from breastfeeding as long as they would like.

Protecting Children from Infections and Vaccine-Preventable Diseases

Receiving vaccines that protect children and families from bacterial and viral infections is one of the most effective types of prevention that medicine has to offer. They save lives on a daily basis and have dramatically reduced non-fatal but severe complications of significant infections (e.g. hearing loss, heart valve abnormalities, limb deformities, etc.). Routine vaccines given in early childhood (under 5) include protection against:

- Tetanus ("Lock-jaw")
- Polio
- Diphtheria
- Pertussis ("Whooping cough")
- Measles
- Varicella ("Chickenpox")
- Mumps
- Rubella ("German measles")
- Two types of bacterial meningitis (*haemophilus influenza B* and *meningococcus C;* these are infections of the meninges, a protective lining of tissue around the brain)
- Pneumonia
- Rotavirus (a virus causing severe diarrhea)
- Hepatitis B (a virus causing liver inflammation)[43]

These vaccines strongly protect the individual child who receives them (in many cases for the rest of their lives), in most cases preventing them from ever getting these illnesses, and also making the illness much less severe if they do get it anyway.

Routine vaccines for these illnesses also provide benefits to the whole community, a phenomenon called "community immunity" or sometimes "herd immunity" (Figure 1.19). By preventing each child from getting a disease, it also means there are fewer people who are contagious and able to pass it on to someone else. The higher the percentage of the community who are vaccinated against these diseases, the better the protection is for everyone. This has been highlighted recently in Québec and internationally during measles outbreaks that were linked to specific groups with insufficient rates of vaccination. Since the COVID-19 pandemic, this is a concept that has had much more public media attention than it has in the recent past.

This "community immunity" makes these vaccines even more effective as it lowers the chance to get exposed to outbreaks. This protection is especially important for those who are healthy but who cannot yet receive vaccines themselves (i.e. infants who are too young) and also for people who have conditions affecting their immune system (i.e. people undergoing chemotherapy to treat cancer, or who received an organ transplant). The idea here is to provide a protective "ring" of immunized individuals around the most vulnerable to prevent the contagious infection from spreading to them. Simply put, it takes a community to provide the highest degree of immunity and to suppress or even eradicate these infections.

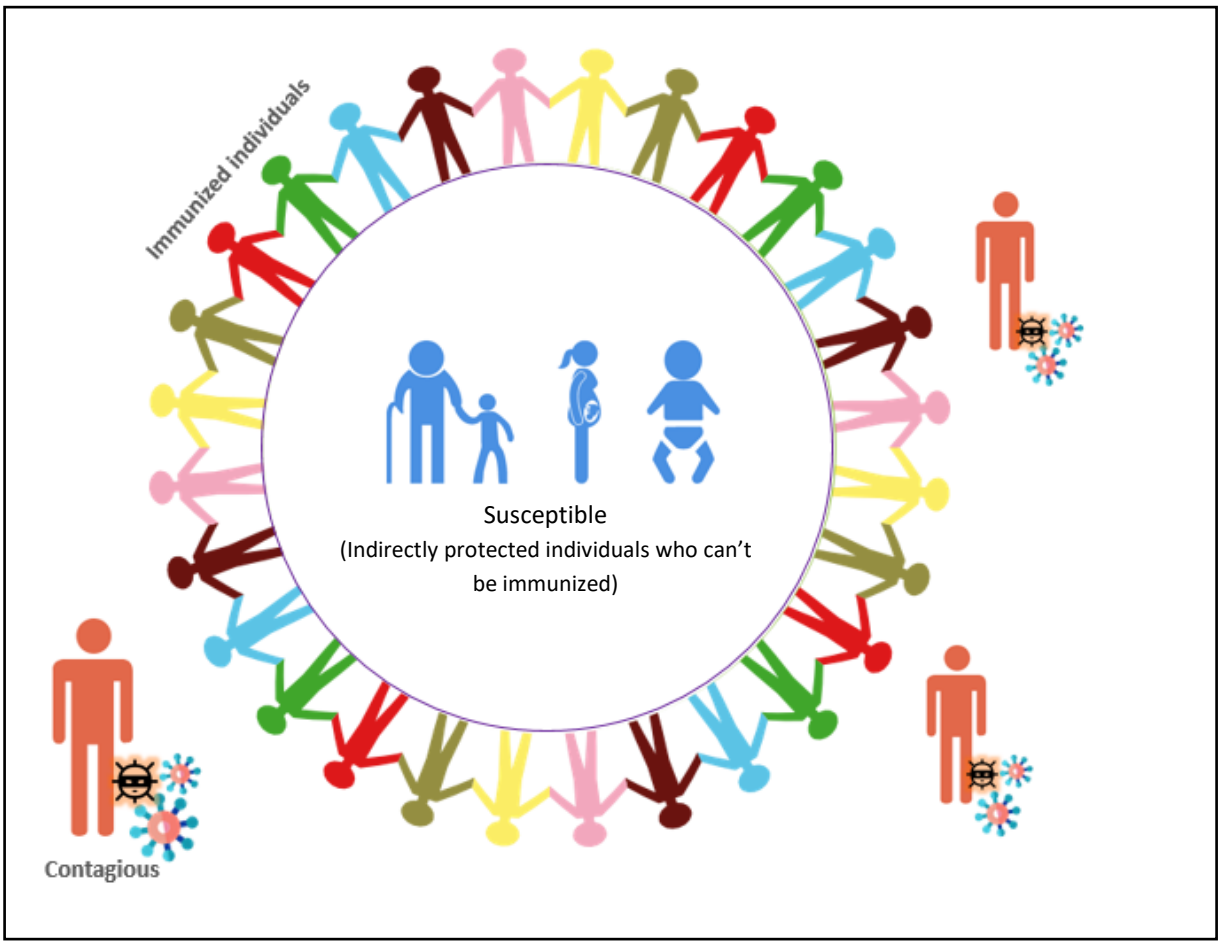
Almost all (98%) young children (0-5 years) from Kahnawà:ke were reported by their parents to have received the routine guideline-recommended vaccines listed above, as appropriate to their age (RHS 2015).

Unfortunately, the RHS survey data does not let us look into more specifics about exactly which doses were received or whether there were any delays in vaccination, so this is only a partial picture of vaccination coverage in our community. For example, we don't have full data

[43] The Hepatitis B vaccine is also given in grade 4 and will be until the first group of kids who have received it as an infant get to be that age themselves. Although it was found fairly recently to be as or more effective to give as a young child, kids who were already past this age still needed to have a program to catch up.

on the percentage of children who received the routine vaccines within 1 month of the age they are meant to receive it. It might be possible to get more detailed information through reviewing KMHC charts, but this process takes quite a bit of time and has not yet been done. In any case, we should remain aware of the importance of keeping our kids and community healthy and protected from these potentially severe infections. To do so, we should continue to strive for full coverage of recommended vaccines for children, youth and adults. This includes providing information and reminders to parents, ensuring access to the clinic is straightforward, and having systems for healthcare providers that let them easily identify if someone still needs a particular vaccine.

Figure 1.19. Concept of "Community immunity", sometimes also called "herd immunity"



Health Conditions and Healthcare Access in Childhood

Health conditions affecting children, youth and adults can have a lot of differences, with different risks at different ages. There are at least three broad categorizations used for health problems: infectious diseases, unintended injuries (among the most frequent health issues during childhood) and chronic conditions. The information we have on injuries is presented in Chapter 2 of this volume, and infections will be addressed in a future volume of *Onkwaná:ta* Our Community*, Ionkwata'karí:te* Our Health. In this section we will focus on the information we have on chronic health conditions, including behavioural issues, and access to care.

While many health issues encountered in childhood are short-lived and the child has a full recovery, others can be severe and have long-term consequences. As an example, an illness causing a lengthy hospital stay or regular hospital visits at a young age could have lasting repercussions on development, as the child could be removed from their nurturing environment for significant time periods, and potentially affecting ongoing education. It is also known that having certain health problems at an early age can lead to worse problems as an adult. For example, developing obesity as a child increases the risk of developing diabetes as an adult. The good news is that many childhood diseases can be prevented.

Subjective rating of health (2015 RHS)

Happily, in Kahnawà:ke, 91% of children (0-5 years old) were reported to be in "excellent" or "very good" health by their parent respondent, while 9%** rated their children's health as "good".

Access and barriers to healthcare (2015 RHS)

- Almost 3 out of 4 (72%) children 0-11 years old were reported to have needed some type of health care the prior year
    - Almost all of them were reported to have gotten all of the care they needed
    - The percentage needing care was very similar for both 0-5 year-old and 6-11 year-old age ranges

Among those who needed care within the last year

- 12%* of children were reported to have had difficulty accessing care because it was not covered by NIHB
    - This represents about 85-90 children
- 8%* of children had difficulty accessing care because of a long waiting list in the last year
- 7%* of kids had difficulty accessing care because a doctor or nurse was not available

Almost no parent respondents reported difficulty for their children to access health care because of challenges arranging or affording transportation, direct costs of care, childcare costs, or lack of adequate health care.

Routine use of medicines

- Around 1 in 3 children (33%) take vitamins, most of whom take them daily or at least more than once per week
- Approximately 1 in 5 kids (17%) take traditional medicines, most of whom take them at least once per year, or more often

It is reassuring to see that many potential barriers to care that can be important in other contexts do not seem to be a challenge in getting care for young children in Kahnawà:ke. We suspect this is in part linked with the high priority our local health and social service providers put on ensuring small children are connected with the care they need, including the very extensive

efforts made by KMHC's CHU to work as a team, ensure close follow-up for very young children and the involvement of nurses and doctors in school settings. Other factors likely include the community's proximity to additional health care resources, such as the Montreal Children's Hospital, and the presence of Dr. Saylor as a consultant pediatrician at KMHC.

Even so, the difficulty in accessing NIHB coverage by some stands out as a significant issue. With the introduction of Jordan's Principle in 2007 and sweeping changes to its implementation in 2016, we hope to see this barrier decrease over time.

Jordan's Principle is an important mechanism to help First Nations children access timely and equitable health services, including mental health support, when these are not covered or accessible through the provincial health care system or NIHB. Between July 2016 and October 2019, the federal government approved more than 483,000 services, products or supports to First Nations children through this principle. More information on this can be found in the Areas for Action section of this chapter.

Common health concerns among children

Asthma

After allergies, asthma is the most common childhood chronic condition in Québec.[44] Asthma is most commonly triggered by exposure to inhaled irritants, especially exposure to second-hand smoke (i.e.; from cigarettes, cigars) in the home, car or other spaces. Even being exposed to residual smoke on furniture and clothes can have an impact on some kids. Other irritants that can cause asthma to flare up include dust, pollens, pet dander, smoke from wood burning, air pollution from vehicle emissions, and molds. On the other hand, breastfeeding appears to offer some protection, even at a later age, but children should ideally not be exposed to the above-mentioned air pollutants.[45]

Climate change has also already been shown to be an important contributor to asthma and allergy symptoms, as it is leading to increased production of certain plant pollens and it reduces air quality.[46]

According to the RHS responses:

- 9% of children (0-11 years old) from Kahnawà:ke had been told that they had a diagnosis of asthma
  - This was similar among children in all First Nations in Québec (10%)
- A slightly higher number (10%) of children in Kahnawà:ke had been prescribed a puffer (the usual treatment for asthma)
  - This could be explained by the fact that during a short respiratory infection episode, a doctor could prescribe temporary puffers without giving an official asthma diagnosis. This can

[44] Riberdy H et al. *La santé physique et mentale des enfants:une étude des prévalences cumulatives.* Data source: ÉLDEQ ISQ: (2013) vol 6 : 4. http://www.stat.gouv.qc.ca/statistiques/sante/enfants-ados/alimentation/sante-enfants-prevalences.pdf

[45] Turgeon, J. Équipe Naître et grandir. *L'asthme*. (2014) https://naitreetgrandir.com/fr/mauxenfants/indexmaladiesa_z/fiche.aspx?doc=naitre-grandir-sante-enfant-crise-asthme (accessed October 2018)

[46] Environmental Health Perspectives and the National Institute of Environmental Health Sciences *A Human Health Perspective On Climate Change.* https://www.cdc.gov/climatechange/pubs/hhcc_final_508.pdf (accessed December 2019)

happen especially in children under the age of 5 as the test required to confirm the diagnosis requires a level of coordination that most don't have at this age
- Among the children who used a puffer, less than half (44%) were reported to use a puffer medication at least once per month, while a little over half (56%) used them less than monthly

Figure 1.20 shows us the number and the percentage of children 0-5 years old who were dispensed a *beta-adrenergic agonist* puffer each year from 2007-2017 using NIHB claims. These are puffers that are commonly used to treat asthma, for example, *salbutamol*, which is also called "ventolin". From 2007-2017, we can see that both the total number and percentage of children who received a puffer decreased. A similar trend is seen when we also look at older children (0-18 years of age, see Figure 1.21)

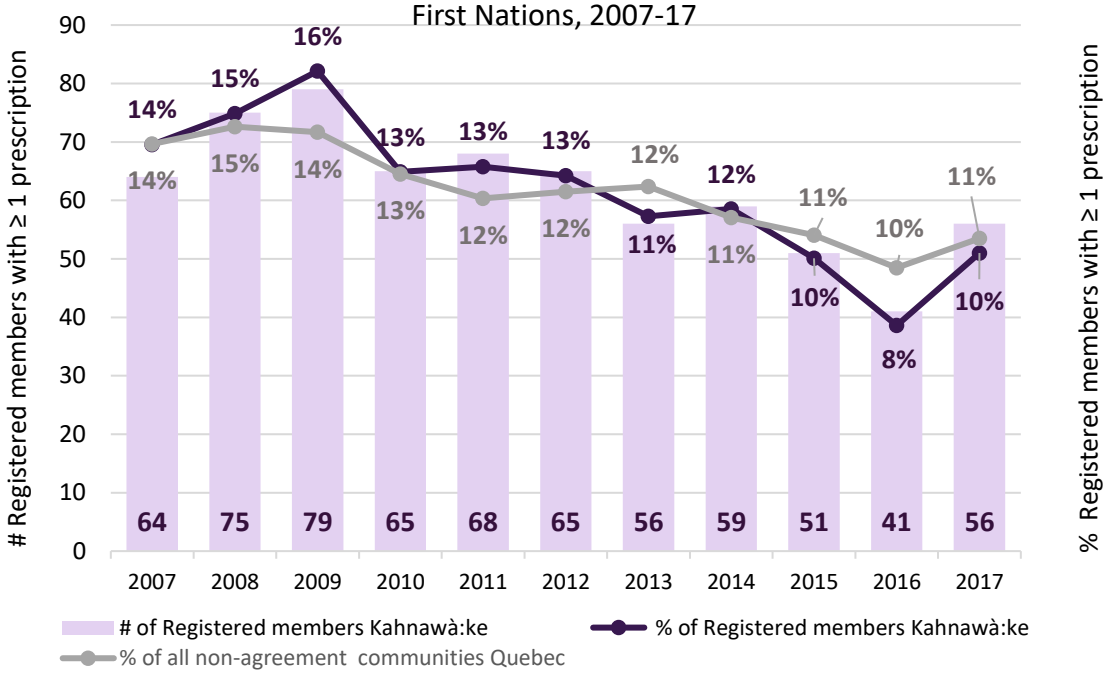
We know that being exposed to second-hand smoke is one of the most common risk factors for asthma symptoms,[47] and also that many Kahnawa'kehró:non have successfully quit smoking over recent years.[48] It is quite possible that the decline in the number of children being dispensed asthma puffers is related to less second-hand smoke exposure in their environments, which is a wonderful health outcome for the community. However, looking at Figure 1.22, we see there is still a significant percentage of children who are exposed regularly to second-hand smoke, and notably in the car.

We should also keep in mind that although lower second-hand smoke exposure is a likely factor behind this trend, there could also be other contributing reasons, like reduction of mold exposure or changes in medical practices to rely less on puffers. We should also keep in mind that going forward, climate change is likely to cause asthma to be more common and potentially more severe. We should strongly consider what we can do to prevent this and work to implement those changes.

[47] Health Canada. *Dangers of second-hand smoke.* (2015) https://www.canada.ca/en/health-canada/services/smoking-tobacco/avoid-second-hand-smoke/second-hand-smoke/dangers-second-hand-smoke.html (accessed January 2020)

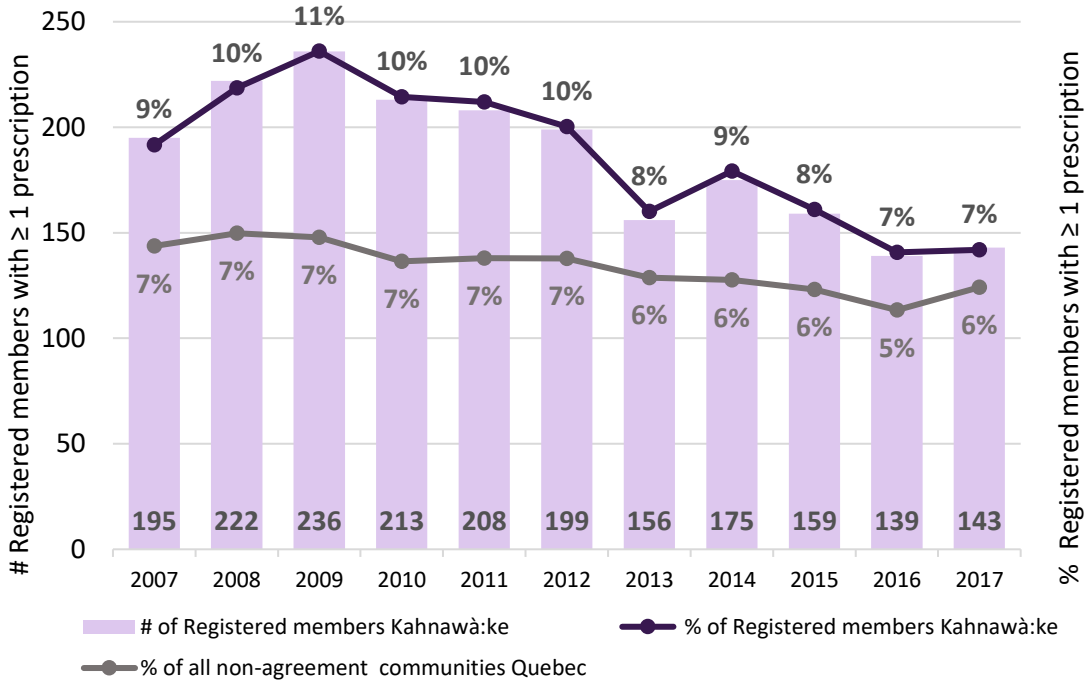
[48] Onkwata'karitáhtshera, Onkwaná:ta Our Community, Onkwata'karí:te Our Health, Volume 1, Chapter 3. (Kahnawà:ke, Quebec, 2018). May 2018. http://www.kscs.ca/sites/default/files/article/attachment/kahnawake_health_portrait_volume1_small.pdf

Figure 1.20. Number and percentage of children (0-5 years old) dispensed a beta adrenergic agonist puffer, Kahnawà:ke and Québec First Nations, 2007-17



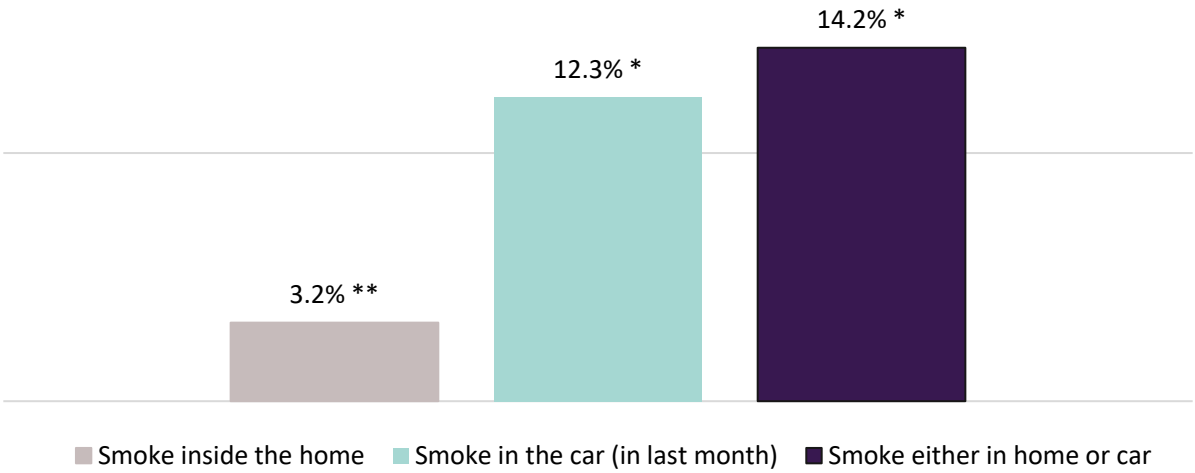
Data Source: Non-Insured Health Benefits (NIHB) claims, 2007-2017.

Figure 1.21. Number and percentage of children (0-18 years old) dispensed a beta adrenergic agonist puffer, Kahnawà:ke and Québec First Nations, 2007-17



Data Source: Non-Insured Health Benefits (NIHB) claims, 2007-2017.

Figure 1.22. Percentage of children (0-11 years old) having regular exposure to second-hand smoke in Kahnawà:ke, by location



Data source: Regional Health Survey (RHS), 2015.
Survey asked: 1) "*In the past month, was the child regularly exposed to second-hand smoke in a private vehicle*" and 2) "*Does anyone smoke inside the child's home, every day or almost every day"* and did not specify a time period.

Second-hand smoke exposure

It is important to remember that unlike smokers causing harm to their own bodies, children are not given a choice about whether they want to be exposed to second-hand smoke or not, and the health problems (like asthma or ear infections) they may develop are largely preventable. Even though smoking rates in Kahnawà:ke have declined with many Kahnawa'kehró:non quitting, some children are still being exposed regularly to second-hand smoke.

According to the RHS (2015):

- About 1 out of 7 children 0-11 years old (14.2%) in Kahnawà:ke are exposed to second-hand smoke on a regular basis either at home or in the car (Figure 1.22)
    - Children aged 0-11 years in Kahnawà:ke have a higher exposure to second-hand smoke in the home as compared to Canadian children (3.2%** in Kahnawà:ke versus 1.8% in Canada)
- Almost 1 out of 5 children in Kahnawà:ke (19%) that are regularly exposed to second-hand smoke have a diagnosis of asthma

Of note, the Tobacco Control Act of Québec prohibits smoking in vehicles when children and youth under 16 years of age are present.[49]

Other common physical health concerns

- Allergies affected a little over 1 in 10 children (13%*)
- A similar number (9%*) had had issues with eczema

[49] Légis Québec. *Tobacco Control Act.L-6.2.* Updated Dec 2019. http://legisquebec.gouv.qc.ca/en/showdoc/cs/L-6.2 (accessed January 2020)

Learning & behaviour concerns

In recent years, staff at Step by Step Child and Family Centre estimate that approximately 1 out of 3 Step by Step attendees (this is approximately 60* children) at any given time will have an individualized education plan (IEP) in place, although there is variation over time.[50]

Individualized education plans can be put into place for many reasons, from concerns about general developmental delays, specific medical diagnoses that affect physical or cognitive abilities, or difficulties with self-regulation of emotions and behaviours experienced by the child and their family. Step by Step staff have noted that challenges with emotional and behavioural self-regulation is the most common reason for the development of an IEP. Sometimes these challenges in the learning environment may be related to a diagnosable medical condition (like Attention Deficit/Hyperactivity Disorder [ADD/ADHD] or Autism Spectrum Disorder [ASD]), but in many instances it is not.

Step by Step staff also note that there are many year-to-year fluctuations in focused grant funding, staffing, research projects, and ongoing adaptation of practices, as well as in the cohort of children themselves. These can have important effects on the ability to offer specialized services. Because of this, it is not possible to present more concrete numbers or trends around the number of children receiving or needing specialized education services. According to the 2015 RHS, for all First Nations of Québec:

- 5% of children had a speech or language disorder
- 3%* had a learning disorder[51]

Attention Deficit Hyperactivity Disorder/Attention Deficit Disorder (ADHD/ADD)

Attention Deficit Hyperactivity Disorder (ADHD) is a condition where a person has a lot of difficulty paying attention or focusing, is very hyperactive (constantly moving or fidgeting, grabbing things), and can be very impulsive (interrupting, grabbing things, spending money). Sometimes people will also use the term "Attention Deficit Disorder (ADD)" to indicate the same overall health condition, but a person may not have so many of the physical hyperactivity features. For brevity, we will use the term ADHD to refer to both here. While most people, and especially children, can have some of these characteristics at least some of the time, for a person with ADHD these symptoms are almost always present, no matter the situation they are in (or how much sugar they may have eaten). Most importantly, for these people, their symptoms are severe enough to significantly impact their relationships and their ability to perform in school or at other activities. To make this diagnosis, the symptoms also have to be out of the range of normal for a child's developmental stage (i.e. we would not expect a 3-year-old to be able to focus on instructions as well as an 8-year-old).

ADHD is typically diagnosed in school-aged children and is more common among boys than girls.[52] The causes of ADHD are not well-known, but both genetic factors and social environment are thought to be important. Children with ADHD also have higher rates of mental health

[50] personal communication, Natalie Beauvais, director of Step by Step, 2019.

[51] FNQLHSSC.*Québec First Nations Regional Health Survey – 2015: Health Status and Chronic Health Conditions* (2018). Wendake: Québec

[52] Danielson ML et al. *Prevalence of parent-reported ADHD diagnosis and associated treatment among U.S. children and adolescents, 2016*. Journal of Clinical Child and Adolescent Psychology.(2018) 47:2, 199-212

conditions, including anxiety, depression and behavioural conduct disorders.[53,54]

ADHD can be treated both with behavioural interventions (i.e. school modifications, skills training for children and for their parents, therapy sessions, physical activity and sleep schedules) and medications when needed.

How common is ADHD in Kahnawà:ke?

From the Québec Integrated Chronic Disease Surveillance System, we can see that from 2001-2015 ADHD/ADD diagnoses have been going up in Kahnawà:ke, Montérégie and Québec, but they are still comparatively lower in Kahnawà:ke (Figure 1.23). As the graph indicates, these numbers are for those aged 1-24 years only.

- About 50 people between the ages of 1-24 years old in Kahnawà:ke had a diagnosis of ADHD made by a physician in the 2014-2015 financial year
    - This means about 2 out of 100 (2%) of the people in this age range
    - Comparatively, about 4 out of 100 (4%) of the Québec and Montérégie populations in this age range had this diagnosis in 2014-2015

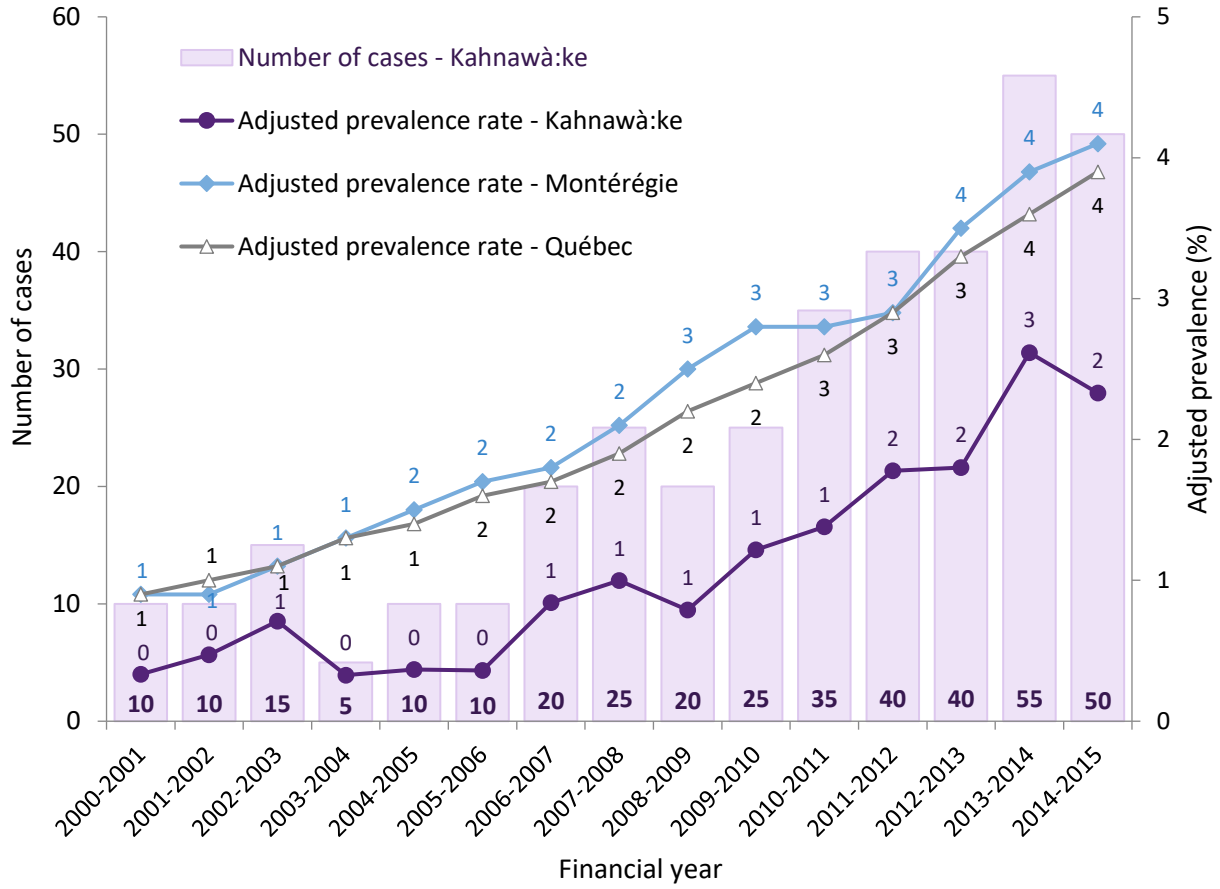
It should be noted that the numbers in Figure 1.23 for all three places are likely lower than the true number of people affected by ADHD. This is because the statistics are collected only for people who saw a medical doctor covered by Québec's medicare system for this diagnosis at least once in a year. They do not include people who were seen in private clinics or diagnosed only by a psychologist (as sometimes happens through schools). It also means that if a child or teen received a diagnosis of ADHD from a KMHC doctor in 2009, but did well with behaviour interventions and school adaptations and so did not come back to see a doctor in 2010 or 2011, they would not be counted in the 2010 or 2011 years on this graph, which is why the number sometimes goes down a bit from one year to the next.

We hear from our health professionals at KMHC that it can sometimes be difficult to access specialized evaluation for behavioural difficulties, in English, within the public healthcare system. If there is a real difference in access for Kahnawa'kehró:non compared to other children in the region, it could be a possible reason for the somewhat lower rates in Kahnawà:ke.

[53] Yang, L., et al. *Comorbidity of attention deficit hyperactivity disorder in different age group*. Beijing Da Xue Xue Bao. (2007) 39(3), 229-232.

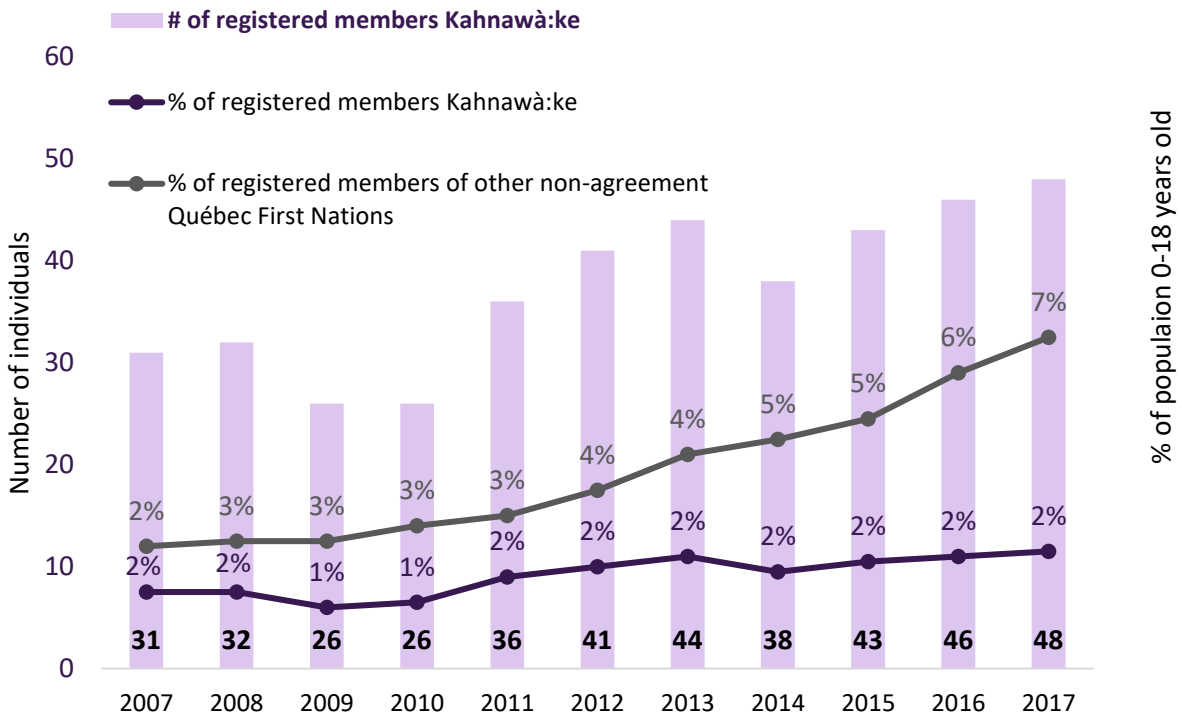
[54] Centers for Disease Control and Prevention. *Attention-Deficit / Hyperactivity Disorder (ADHD) - Data & Statistics* (2016). http://www.cdc.gov/ncbddd/adhd/data.html

Figure 1.23. Number of cases and age-adjusted ADHD & ADD prevalence in Kahnawà:ke, Montérégie and Québec, individuals aged 1-24 years



Data source : INSPQ, Système intégré de surveillance des maladies chroniques du Québec (SISMACQ).
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, février 2017.

Figure 1.24. Number and percentage of registered members 0-18 years old with at least one prescription reimbursed by NIHB for an ADHD medication, Kahnawà:ke and Quebec First Nations, 2007-2017



Data Source: Non-Insured Health Benefits (NIHB) claims, 2007-2017

Claims for ADHD medications (NIHB)

In Figure 1.24, we can see the number and percentage of children and youth (0-18 years old) per year who received at least one prescription from a pharmacy for a medication that is typically used as a treatment for ADHD.

For Kahnawà:ke, the percentage of children and youth taking these medications has stayed fairly stable over time, going up by only a small amount. In contrast, the percentage has trended upwards more sharply for the other First Nations in Québec, increasing from 2% to 6 % between 2007-2017. If we look at the total number of children and youth in Kahnawà:ke taking one of these medications in any given year, we see they are generally close to the numbers seen for prevalent diagnoses from provincial health administrative data (Figure 1.23), which are between 40-50 individuals in recent years.

Although the results in Figure 1.23 (diagnoses) and Figure 1.24 (medication claims) are drawn from different databases, it is reassuring to see that figures for the community from both sources of information are concordant for Kahnawà:ke, that is to say, they show us a very similar picture despite looking from a different angle. This is interesting from a data validation and quality point of view (i.e. it confirms that the data from this source is accurate and useful), and it has implications for other First Nations communities who may be trying to follow our example in accessing and interpreting their own heath data.

Autism Spectrum Disorder

Autism Spectrum Disorder (ASD)[55] is a neurodevelopmental condition characterized by having deficits in social skills, having challenges with language and non-verbal communication skills, and difficulty with social interactions. Restricted and repetitive behaviors, interests or activities are other common features of the disorder. It is a complex life-long condition that can involve significant emotional and financial challenges due to medical expenditures, special education needs or loss of parental productivity.

ASD is considerably more common in boys than in girls, with an estimated four times as many boys diagnosed.[56] The age of diagnosis can vary, as can the severity of the symptoms that a person experiences. In Canada, ASD is diagnosed by age 6 for about half of the individuals affected, by age 8 for almost three out of four (75%) individuals affected, and by age 12 for 9 out of 10 (90%) affected children. The number of new diagnoses per year (incidence) has also been increasing, as has the overall prevalence.[56] This is a trend seen across North America and worldwide.[57,58] The increases over time are likely in part related to increased awareness of the diagnosis, changes in the diagnostic criteria, as well as the accessibility of evaluation and care services. There are also likely other reasons that are not yet well studied or understood.[56] There has been a lot of focus to develop further research projects to help understand this condition.

Figure 1.25 shows clearly that the prevalence of people diagnosed with (ASD) has been increasing in Québec and Montérégie, although it is still a relatively uncommon condition. We also see Montérégie rates are somewhat higher than Québec. In 2014-2015 there were 111 cases per 10,000 people under the age of 24 in Québec and 145 per 10,000 in the Montérégie.

Because the population of Kahnawà:ke is much smaller than Québec and Montérégie, the number of diagnoses of ASD in Kahnawà:ke is not statistically reliable and so cannot be shown with a precise line on the graph. Even so, the limited data available do not show a great difference compared to Québec or Montérégie. Extrapolating from the regional and provincial rates, we would estimate that somewhere close to 20-30 community members under the age of 24 are currently affected by ASD.

When looking into other First Nations data sources like the RHS (2015), the proportion of children 0-11 years who were identified with ASD in Kahnawà:ke was 1.3%** (please note that since this is an uncommon condition and only 150 children were surveyed, this number is not statistically reliable). In all surveyed First Nations in Québec, the percent of children affected was 1%*.[51] Despite the limited data available on ASD for Kahnawà:ke, it is at least reassuring to see that the numbers found are not much larger than in our surrounding regions.

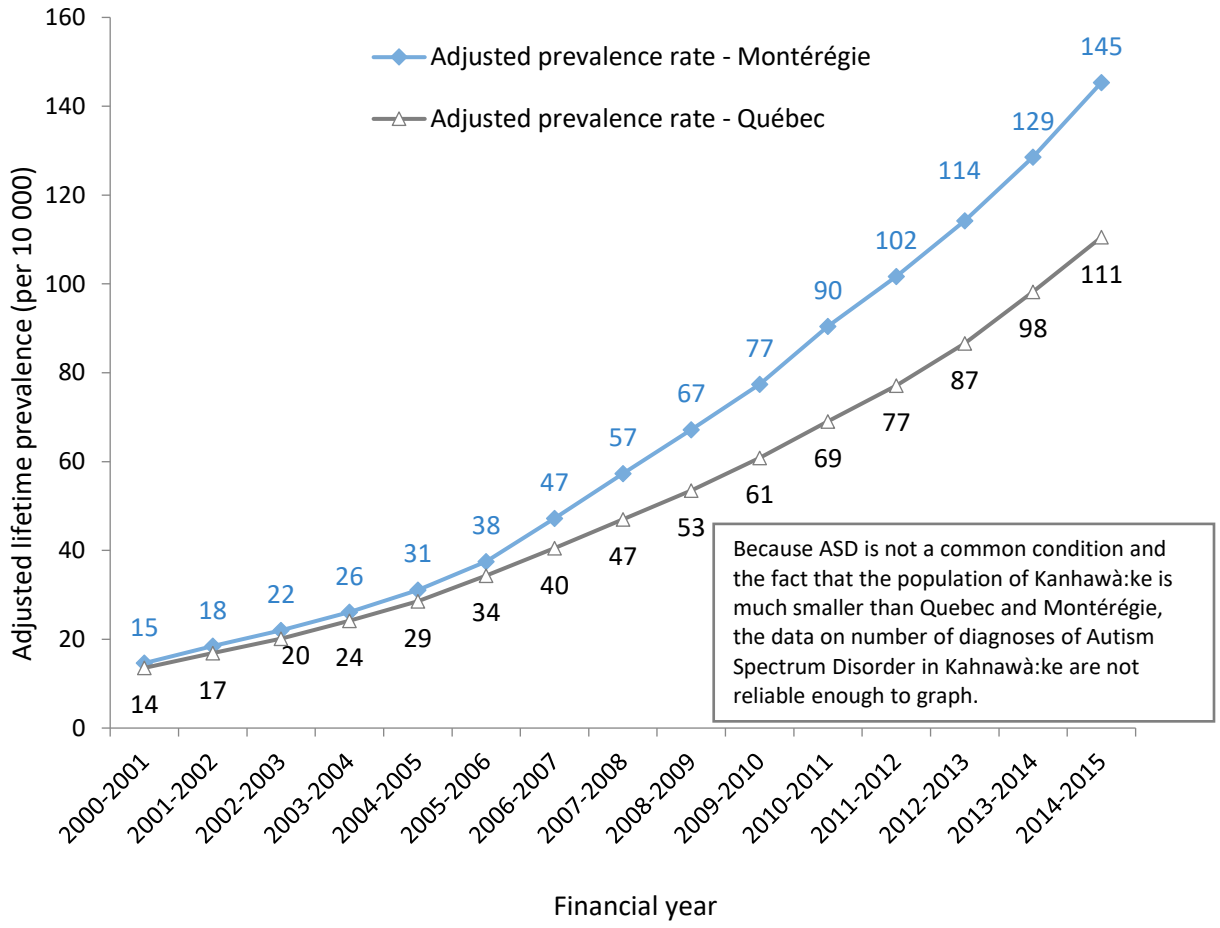
Even though the statistics show that the total number of people living with ASD in Kahnawà:ke is small, the upwards trends for Québec, Montérégie, and Canada suggest that

[55] American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders: DSM-5 (5th ed.)*. Arlington, VA: American Psychiatric Association.
[56] Ofner et al. *Autsim Spectrum Disorder Among Children and Youth in Canada 2018. A Report of the National Autisim Spectrum Disorder Surveillance System*. PHAC (2018). https://www.canada.ca/content/dam/phac-aspc/documents/services/publications/diseases-conditions/autism-spectrum-disorder-children-youth-canada-2018/autism-spectrum-disorder-children-youth-canada-2018.pdf

[57] Baio J et al. *Prevalence of Autism Spectrum Disorder Among Children Aged 8 Years — Autism and Developmental Disabilities Monitoring Network, 11 Sites, United States, 2014*. MMWR Surveill Summ (2018);67(No. SS-6):1–23. DOI: http://dx.doi.org/10.15585/mmwr.ss6706a1
[58] Elsabbagh M et al. *Global Prevalence of Autism and Other Pervasive Developmental Disorders.* Autism Res. (2012); 5(3): 160–179. https://doi.org/10.1002/aur.239

Kahnawà:ke can also expect these numbers to increase in time. We can put efforts into ensuring our health and social services agencies can offer robust support to the children, youth and adults with ASD in reaching their full potential. We can also aim to improve the quality of life for the families of these individuals by ensuring they can access the services and support needed. As discussed earlier in this section, Jordan's Principle is an important tool in getting some of these supports in place for children. Continuing to work on reducing stigma and discomfort around ASD and other mental health issues is also an important goal.

Figure 1.25. Autism spectrum disorder (ASD) - lifetime prevalence
Population 1 to 24 years, Montérégie and Québec, 2000-2001 to 2014-2015



Source : INSPQ, Système intégré de surveillance des maladies chroniques du Québec (SISMACQ).
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, février 2017.

Areas for Action on Early Childhood and Family Wellness

Early Childhood and Family Wellness has been a Community Health Plan priority for many years. This portrait highlights many areas where Kahnawa'kehró:non are doing very well in this domain. Some of these areas include breastfeeding rates, access to prenatal care, and immunization rates. These areas demonstrate the strong impact concerted community action can have on these important determinants of health, and how creating health priorities can be linked to long-lasting community wellness.

In other areas, we see some indications of ongoing challenges to the community, such as high numbers of babies born to teenage mothers and new concerns, like the upward-trending rates of ADHD and ASD which are likely to continue in coming years.

We hope this portrait will help our community agencies and services to better understand the work they do, so they can adapt existing programs, develop new ones and apply for funding to meet community needs. We also encourage individuals and grassroots organizations to use this information in their efforts to improve health and social outcomes in Kahnawà:ke.

Here we suggest several areas for action going forward, many of which are already underway.

Home & Learning Environments and Family Circumstances of Children

- Support young parents in continuing to seek ongoing higher education
- Promote and develop employment opportunities that allow young parents to gain skills to apply to substantive careers
- Help young women and couples to plan their families by ensuring contraceptive choices and family planning options are accessible to those who wish to use them
- Work, in concert with families towards greater parental involvement in early learning
- Foster positive parenting through parental support and education
- Promote active involvement of fathers and male caregivers:
    - Fathers and male caregivers need to be valued, encouraged, supported and educated in their roles as vital contributors to child rearing and family life. This could be supported by specific father/male-care-giver involvement programs (e.g. father-child recreation activities), outreach, and recruiting men as community volunteers for family events and activities
- Help community members better understand the rationale for asking about income as a health determinant on future iterations of the Regional Health Survey, and how this aggregate information about the social determinants of health is helpful to community organizations

Healthy Pregnancies & Healthy Children

- Continue to ensure good care for gestational diabetes, with accessible nutritionist advice and medical management for GDM
- Continue to tackle the underlying determinants of diabetes (including GDM) to prevent it as much as possible
    - This includes continuing and enhancing community-wide initiatives aimed at promoting healthy eating habits and physical activity levels
        - These initiatives take many forms, from cooking classes, gardening and food preserving workshops, early education in schools, and having a diverse offer of affordable physical activity events, classes, workplace and school-based physical activity, as well as the community having accessible buildings and outdoor spaces for these activities
        - We should consider in particular how effective these initiatives are at reaching women who may be at risk of developing gestational diabetes
    - Ensure food security
        - The most important consideration in ensuring food security is ensuring economic well-being,[59] noting that research shows that interventions such as budgeting skills or community gardens do not have as meaningful an impact in the face of ongoing financial difficulty[60]
    - Other potential avenues for interventions can be found in *Onkwaná:ta* Our Community, *Ionkwata'karí:te* Our Health (Vol 1.), Chapter 1 focusing on diabetes and diabetes prevention
- Reduce the impacts of smoking on developing babies and children through:
    - Additional campaigns, policies and incentives to promote smoke-free pregnancies and reduce second-hand smoke exposure for children
    - Additional enforcement of existing regulations meant to protect children against second-hand smoke exposure, such as legislation that prohibits smoking in cars if children under 16 years old are present
    - Continuing to support community outreach around smoking cessation initiatives through a variety of means
- Maintain high accessibility for prenatal and perinatal care (health-care follow-ups, prenatal classes, home visits), and further enhance elements that have not been as accessible or as supported (psychological support, family planning, support from Elders)
- Maintain strong breast-feeding supports through:
    - Community awareness
    - Adherence to the baby-friendly initiative accreditation criteria at community agencies
    - The breastfeeding support group and breastfeeding support worker position at KMHC. It's worth noting here the very powerful influence of passionate, motivated and engaged people as champions in these positions/groups, and the importance of not losing this enthusiasm over time
    - Supportive policies, school and work accommodations
- Enhance culturally relevant care and support to mothers with trained doulas (labour supporters) and midwives so that mothers can voice their maternal experiences and concerns

[59] Huisken A, Orr S, Tarasuk V. *Adults' food skills and use of gardens are not associated with household food insecurity in Canada.* Can J Public Health. (2016): 107(6):e526–e32

[60] Proof Food Insecurity Policy Research. *Household Food Insecurity in Canada*. https://proof.utoronto.ca/food-insecurity/ (accessed January 2020)

Health Conditions in Childhood

- Continue to reduce second-hand smoke exposure as a risk-factor for asthma in children, through strategies detailed above
- As a community, consider actions that can be taken to reduce our contribution to climate change, which is linked to asthma and allergies for children through its effect on increasing pollens and poorer air quality[61,62]
    - This may involve roles for many agencies and sectors as well as grassroots activities
- Continue to ensure access to healthcare for children who need it by:
    - Ensuring access to care for non-preventable issues, such as developmental delays, ADHD, and Autism Spectrum Disorder
    - Continuing to build and enhance existing relationships with external health care and social service partners, and by maintaining ongoing training and competency for staff at health, educational and social agencies within Kahnawà:ke
    - Ensuring community members and service staff are aware of how to access needed services for children that are not readily accessible through NIHB or provincial health care through the implementation of Jordan's Principle
        - These can include items such as mobility aids, wheelchair ramps, services from Elders, assessments and screenings, medical supplies and equipment, mental health services, social worker services, land-based activities aimed at mental health, respite care (individual or group), specialized programs based on cultural beliefs and practices, personal support worker, school supplies, tutoring services, teaching assistants, psycho-educational assessments, assistive technology and electronics

In Kahnawà:ke, Onkwata'karitáhtshera has a staff liaison (see next page) to help navigate the application process for funding through Jordan's Principle.

Other resources include:
1-855-JP-CHILD (a 24hr line),
https://www.canada.ca/en/indigenous-services-canada/services/jordans-principle.html

Accessing Jordan's Principle
A Resource for First Nations Parents, Caregivers, Families and Communities
https://www.afn.ca/uploads/Social_Development/Jordan%27s%20Principle%20Handbook%202019_en.pdf

- Continue to monitor rates of childhood illnesses and health conditions by participating in future iterations of the Regional Health Survey, and by continuing to collaborate with the Direction of Public Health of the Montérégie, the Canadian Hospitals Injury Prevention and Reporting Program and FNIHB of Indigenous Services Canada in order to create updates to this health portrait

[61] Portier CJ et al. *A Human Health Perspective on Climate Change. A Report Outlining the Research Needs on the Human Health Effects of Climate Change.* Environmental Health Perspectives and The National Institute of Environmental Health Sciences. https://www.cdc.gov/climatechange/pubs/hhcc_final_508.pdf (accessed January 2020)

[62] PHAC. *Climate change, air contaminants, and your health*. https://www.canada.ca/en/public-health/services/health-promotion/environmental-public-health-climate-change/climate-change-public-health-factsheets-air.html (accessed December 2019)

ONKWATA'KARITÁHTSHERA
Kahnawake's One Health & Social Services Agency

JORDAN'S PRINCIPLE

ENSURING KAHNAWA'KEHRÓ:NON CHILDREN HAVE ACCESS TO THE SERVICES THEY NEED

Is a Kahnawa'kehró:non child you know getting the services they need?

Jordan's Principle supports substantive equality for Kahnawa'kehró:non children when accessing government services, such as:

- Education
- Medical equipment
- Mental health
- Speech therapy

...and more

Kahnawa'kehró:non children living on and off reserve are eligible.

Onkwata'karitáhtshera currently has a Health Liaison available to assist families in navigating through the application process to ensure equality for our children and access to the services they need.

Kahnawa'kehró:non families are encouraged to contact Onkwata'karitáhtshera if they have questions or new information concerning any submitted or denied request under Jordan's Principle since 2007.

For more information on Jordan's Principle call 450-632-6880 ext. 30216 to speak with Andrea Brisebois, Health Programs Liaison for Jordan's Principle and Non-Insured Health Benefits, email at: andreab@kscskahnawake.ca

Chapter 2

Injuries & Injury Prevention

Injuries and Injury Prevention: Summary of Key Points

Injuries and Treatment

- Injuries are common in Kahnawà:ke: 1 in 5 people surveyed (20%) had had an injury in the prior year
  - This proportion was highest among youth. More than 1 in 3 (35%) of 12-17 year-olds reported at least one injury in the prior year
  - It was lowest among children, with 11% of children (0-11 years old) having an injury in the last year
- Approximately 3 out of 4 (76%) self-reported injuries were to an upper or lower limb (arms or legs), while 1 out of 4 (24%) to a central body part such as the head, torso or abdomen
- Broken bones, major strains, sprains, and minor injuries such as scrapes, bruises and cuts were the most common types of injuries reported by people of all ages
- Injury statistics from the Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP) at the Montreal Children's Hospital emergency department showed rates of injuries among those under 18 years of age have been declining over time, going down by 25% from the year 2000 to the year 2014
- Falling was the most commonly reported cause of injuries, accounting for a little over 1 in 3 injuries (36% of all injuries)
  - Other common reasons were accidental contact with another person or animal, overexertion, and physical contact in sports
- 85% of injured people said they sought some type of medical treatment, most commonly at a walk-in clinic or an emergency room

Injury Prevention Behaviour

- About 2 in 10 people (19%), of all ages, said they sometimes travel by all-terrain vehicle (ATV)
  - This was highest among youth (12-17 years old) where almost 4 in 10 people (37%) said they ride ATVs
  - Helmet use while riding an ATV varied by age
    - For children 0-11 years old, 2 out of 3 (66%) ATV riders were reported to/said they always wear a helmet
    - For youth 12-17 years old, 1 out of 3 (29%) ATV riders said they always wear a helmet
    - For adults 18 and over, 1 out of 3 (28%*) ATV riders said they always wear a helmet
- About 1 in 10 (11%) people said they sometimes travel by snowmobile
  - More than 8 out of 10 (85%) of them said they always wear a helmet
- About 1 in 10 (11%) people said they sometimes travel by boat or canoe
  - Of these, about 4 in 10 (42%) said they always wear a lifejacket
  - Another 2 in 10 (23%) said they wear a lifejacket most of the time

Injury Prevention – Safe Homes in Case of Emergencies

- 93% of adults said they have a working smoke detector in their homes
- 63% of adults said they have a fire extinguisher in their home
- 48% of adults said they have a carbon monoxide detector in their home
- 86% of adults said they have a working telephone in their home

Introduction to Injuries and Injury Prevention Chapter

Injuries can come in many forms – from things like the simple bruises we've all faced after a hard bump on the kitchen cupboards, to more serious injuries like broken bones from slipping on ice, or muscle tears from overdoing it at our favourite sport. Some injuries can be much more severe and long-lasting in their effects – like severe burns from a chemical product spill at work or home, life-threatening internal injuries from a motor vehicle collision, or loss of vision from an eye injury (Figure 2.1). There are also fatal injuries – tragic events like drowning, where we lose a person from the community. As many Kahnawa'kehró:non will know first-hand, losing someone to a sudden unexpected death causes immense grief and has life-long impacts on family, friends and community members.

All injuries can have important effects on the community's wellbeing and that of its individual members. Even less severe injuries, like pulled back muscles, ankle sprains and concussions can mean days or even weeks off work, school, or sports. These can have ripple effects that set entire organizations behind in major community projects or affect a family's income and ability to pay bills. For athletes, it could mean not being able to compete when it matters most.

Canada-wide, injuries cost the economy about $26 billion each year. They also lead to over 3 million emergency room visits and many more doctors' appointments in clinics.[63] In 2016, more than 17,000 Canadians died from injuries.[64]

While most people will have an injury at some point in their life, **it is key to remember that a very large proportion of injuries, whether mild or life-threatening, are preventable**.

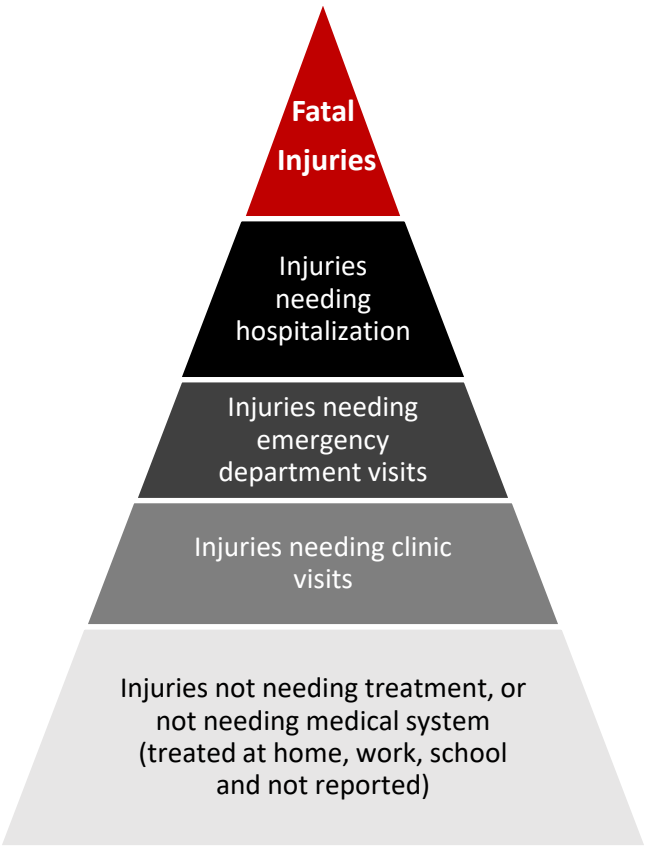


Figure 2.1. Injury pyramid, image adapted from World Health Organization[65]

[63] Parachute. *The Cost of Injury in Canada.* (2015) Parachute: Toronto, ON. https://parachute.ca/wp-content/uploads/2019/06/Cost_of_Injury-2015.pdf

[64] Statistics Canada. *Table 102-0540 - Deaths, by cause, Chapter XX: External causes of morbidity and mortality (V01 to Y89), age group and sex, Canada, annual (number), CANSIM (database)*. https://www.canada.ca/en/public-health/services/injury-prevention/facts-on-injury.html (accessed: January 2020)

[65] World Health Organization (WHO). *Injuries and violence: the facts*.(2010) Geneva. https://www.who.int/violence_injury_prevention/key_facts/VIP_key_fact_5.pdf

Figure 2.2. Safety, everybody's business, a visual representation of our shared responsibilities to prevent injuries.

Keeping People Safe

Although people commonly use the word "accident" when talking about the cause of a fatal or non-fatal injury, there are really a lot of factors leading up to an injury that are under our control as individuals and as a community. Changing these factors so we can prevent future injuries, is everybody's work (Figure 2.2).

Sometimes the best prevention comes from individuals wearing protective equipment, like a life-jacket when they are paddling in Recreation Bay. Other times it is more effective to design and maintain our spaces in smart ways to make sure the physical environment around us is safer - like building fences around our pools so toddlers cannot wander over and fall in. To truly ensure we can avoid as many injuries to community members as possible, we need to use multiple strategies that work on different angles of the problem and combine to give better protection overall. They can include:

- Building safe and accessible physical environments
- Designing products, equipment and tools, to minimize safety risks
- Enforcing safety policies and regulations appropriately
- Creating awareness and supporting safe individual choices and behaviours

These strategies can be combined together. For example, injuries from car crashes can be reduced by having well-maintained roads (built

environment), cars with special equipment like airbags (product design), enforcing laws to stop speeding (policy and regulation) and by wearing seat-belts (policy and individual behavior).

By "built environment" we mean the design and layouts of our infrastructure and communities – in other words, our human-made and designed environment.[66] Our built environment includes our neighbourhoods, homes, workplaces, schools, commercial and services buildings, sidewalks and bike paths, roads and transit systems, green spaces including parks and playgrounds, and even our community food systems. A healthy built environment is one that is accessible for all to use and promotes healthy habits, connecting with others, safety, and to the land and nature. The built environment plays an important role in promoting safety and preventing injuries.

[66] Ottawa Public Health. *Health and the Built Environment.* https://www.ottawapublichealth.ca/en/public-health-topics/health-and-the-built-environment-.aspx#What-makes-a-healthy-built-environment

How common are injuries in Kahnawà:ke?

Self-reported injuries in the last year

1 in 5 people (20%) who participated in the Regional Health Survey (2015) said they had an injury in the year before the survey

This means an estimated 1600 injured Kahnawa'kehró:non over the course of one year. This is a little higher than reported in other First Nations of Québec (16% of people, RHS 2015)[67]

It is important to note that this is only over the course of a single year. If we consider the entire lifespan of all individuals, we can see how it is very likely for any person to be affected directly by one or more injuries, or indirectly by an injury to someone else they are connected to.

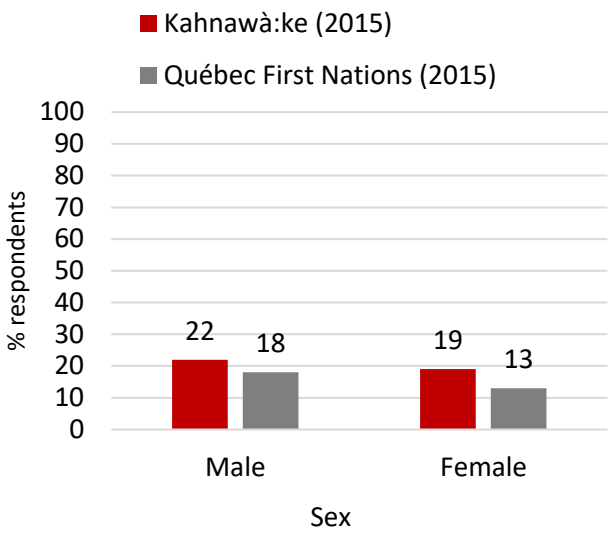
- The most commonly reported injuries were:
  - Major sprains or strains (31%)
  - Broken bones (26%*)
  - Scrapes, bruises, cuts, and other minor injuries (10%*)
- Less commonly reported injuries included: burns, dislocations, concussions, injury to internal organs, dental injury, repetitive strain and eye injury
- 76% of injuries were to an extremity (arms, hands, legs or feet) whereas 24% were to a central body part (head, torso, abdomen)
- Falling was the most common single cause of injuries, accounting for 36% of all injuries
  - This is similar to what was found in other First Nations in Québec (37% of injuries from falls)
  - Other common reasons were accidental contact with another person or animal, overexertion, and physical contact in sports
- Injuries occurred during many different activities, but the three most common things people were doing when they got hurt were:
  - Sports (28%*)
  - Walking (16%*)
  - Riding a bike (15%*)
- Almost all of those injured (96%) said that substances (including alcohol, marijuana and other substances) did not play a role in causing the injury
- 85% of injured people (i.e. an estimated 1360 people) said they sought some type of medical treatment for the injury
  - About half of all people injured (approximately 800 people) went to an emergency room
  - 25% of injured people (about 410 people) went to a walk-in clinic at least once
  - 20% saw a physiotherapist (about 315 people)
  - 39% sought treatment in 2 or more places (about 625 people)

[67] First Nations of Québec and Labrador Health and Social Services Commission (FNQLHSSC). *Québec First Nations Regional Health Survey – 2015: Unintentional injuries* (2018). Wendake:http://cssspnql.com/docs/default-source/ers-phase-3/traumatismes_ers_phase-3_eng.pdf?sfvrsn=2

Who is most likely to be injured?

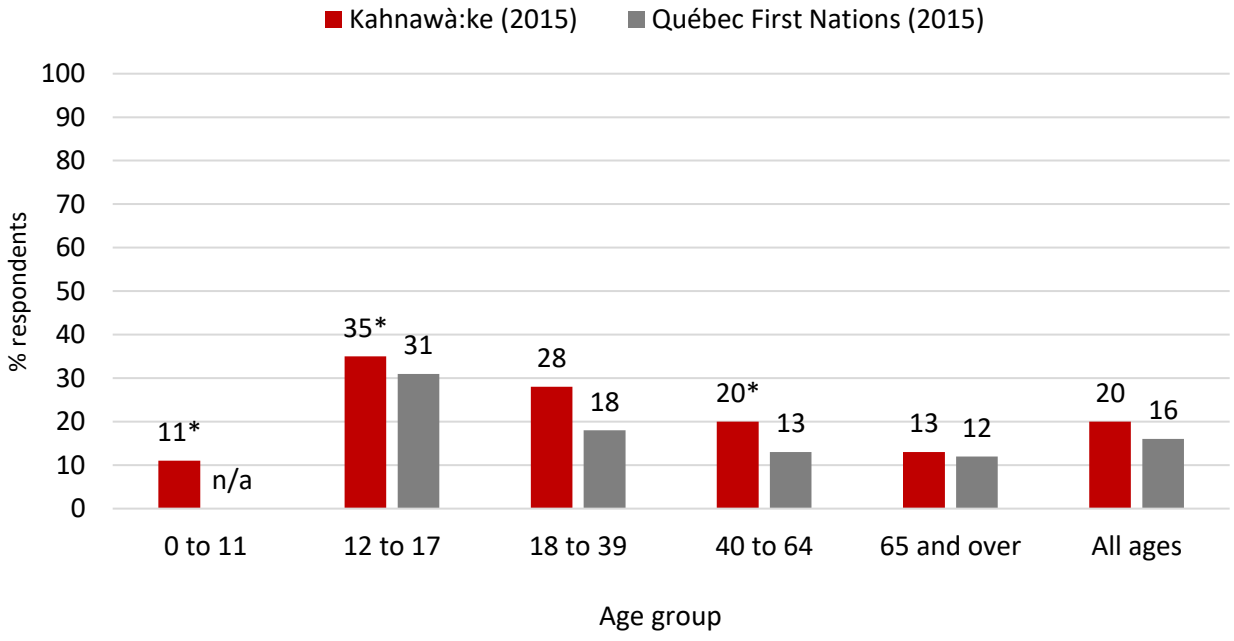
- Males were slightly more likely to report an injury than females (Figure 2.3)
- A higher percentage of surveyed youth (12-17 years old) reported an injury compared to other ages (Figure 2.4). This is in keeping with what is seen in other First Nations in Québec[67]
- Children under 11 years old and Elders over 65 reported the lowest rates of injury

Figure 2.3. Percentage of people (all ages) injured in the last year, by sex (RHS 2015)



Source: Regional Health Survey (RHS), 2015

Figure 2.4. Percentage of people injured in the last year, by age (RHS 2015)



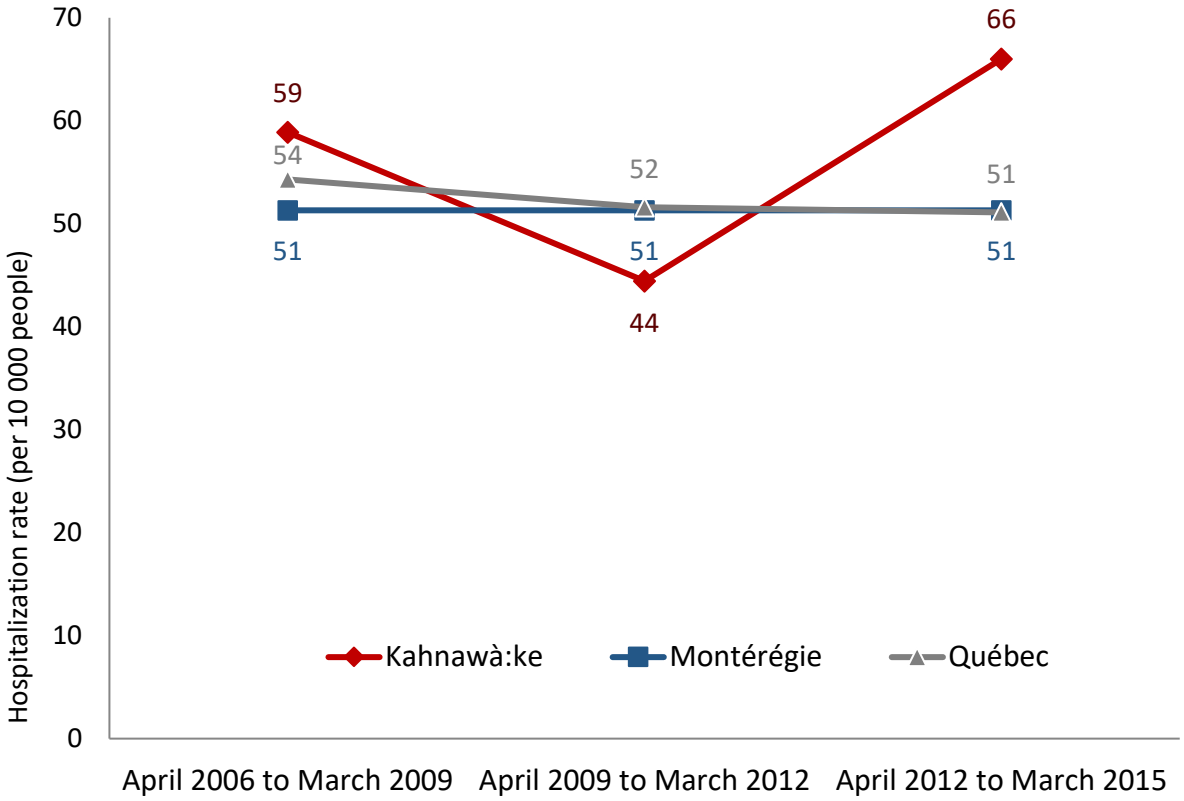
Source: Regional Health Survey (RHS), 2015. *Note that the 0-11 age group combined percentage of people injured was not available for Quebec First Nations, which is why this is represented with "n/a"*

Hospitalizations Due to Injury

From 2006-2015, Kahnawà:ke's rate of acute care hospitalization due to injuries (per 10,000 people) was similar to the rate for people in the Montérégie region and in the province of Québec (Figure 2.5). This does not include people who were seen in an emergency room only and sent home from there, and it only includes hospitalizations that occurred in the province of Québec.

Although there is some fluctuation from period to period for Kahnawà:ke, compared to the rates for Montérégie and Québec, this is related to random differences from period to period that stand out more on the graph due to the relatively small population size of the community. There is no statistically significant difference in the rate of hospitalization for injury from the Montérégie region or the province in any of the three-year periods.

Figure 2.5. Hospitalization rate for injury (all ages), Kahnawà:ke, Montérégie and Québec, 2006-2009 to 2012-2015



Sources : MSSS, MED-ÉCHO; Régie de l'assurance maladie du Québec (RAMQ), Fichier d'inscription des personnes assurées (FIPA). Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, janvier 2017. The figure is age-adjusted.

Emergency Department Visits for Injury at the Montreal Children's Hospital

The Montreal Children's Hospital (MCH) is a designated site of the Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP), which means it closely tracks the number of emergency department (ED) visits that are due to any kind of injury. By partnering with CHIRPP, Onkwata'karitáhtshera has been able to access summary data for Kahnawa'kehró:non (0-17 years old) who have presented to the Montreal Children's Hospital emergency department for an injury.

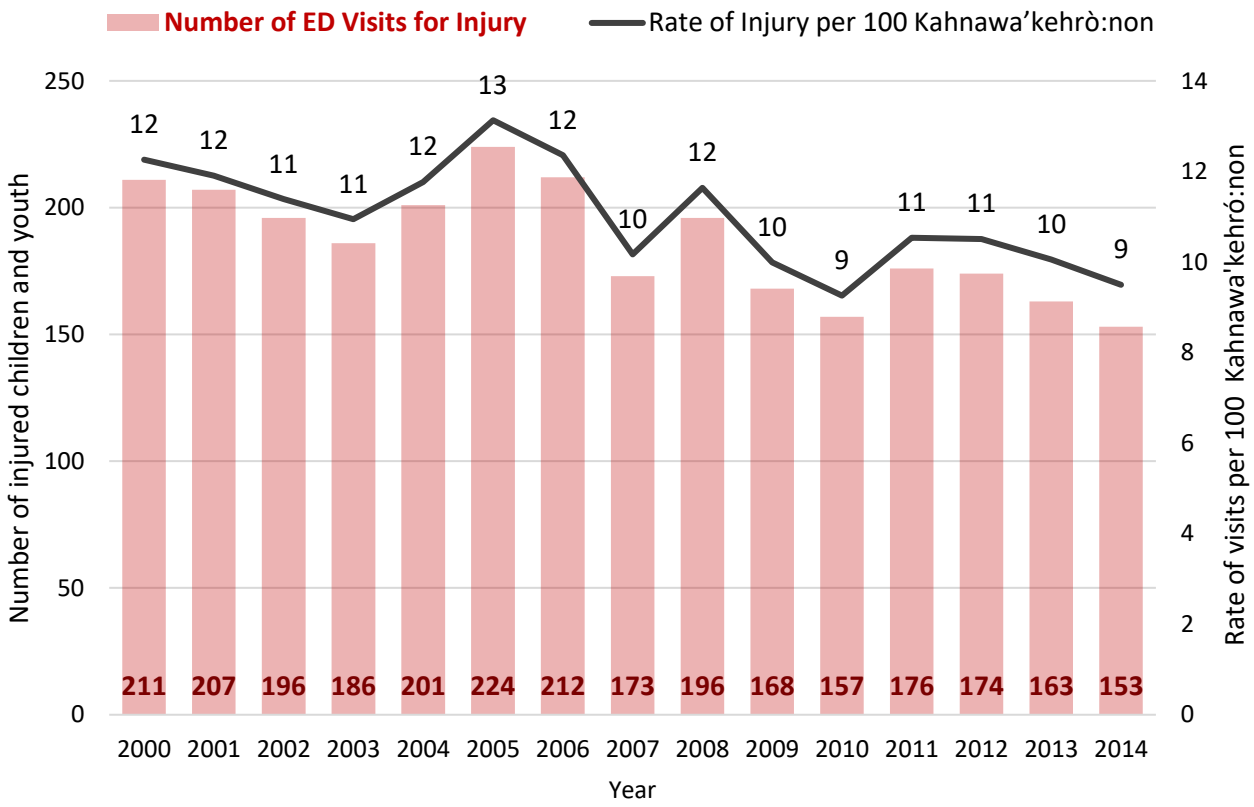
Unfortunately, we cannot obtain information about emergency department visits in other hospitals, so this data will somewhat underestimate the total number of injuries needing emergency department visits. Even so, we hear anecdotally from our clinical service providers and from parents, that most times when a child or teen from Kahnawà:ke needs to go to a hospital emergency department, they are taken to the MCH. We are confident that these numbers and trends give a reasonably accurate portrait of injuries needing emergency care among children and youth.

Figure 2.6 shows both the total number of times Kahnawa'kehró:non children and teens have gone to the MCH emergency department with an injury each year from 2000-2014 (in the bars of the graph), and the rate of visits (i.e. number of visits per 100 children and youth in Kahnawà:ke) in each year (in the line of the graph).

We see from this graph that the total number of injuries requiring an emergency department visit at MCH among Kahnawa'kehró:non children and youth has gone down over time, from 211 visits in 2000 to 153 visits in 2014. We also see the rate of injury per 100 community members decreasing, from 12 visits per 100 children and youth in 2000 to 9 per 100 in 2014.

Later in the chapter you will find similar graphs broken down by age groups, one for youth aged 12-17 years old (Figure 2.7) and one for children 0-11 years (Figure 2.8).

Figure 2.6. Number of emergency department visits (ED) and rate per 100 Kahnawa'kehró:non (0-17 years of age) at the Montreal Children's Hospital, for years 2000-2014



Data source: Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP), 2019

We know that, outside of Kahnawà:ke, there has also been a trend of a decreasing total number of injuries, and rate of injury per 100 children and youth.[68] These reductions could be related to many factors, such as:

- Increased focus on safety in schools and programs
- Use of more refined sports equipment
- Better use of common protective devices like seatbelts and helmets
- Changes to product designs that reduce potential dangers (e.g.; child car seats, the materials children's toys are made from, the types of landing surfaces under playground equipment)
- Improved safety protocols within community agencies
- Sports environments that are constructed with safety in mind

We should consider that it is also possible that part of these decreases could have been due to changes in health care accessibility over time. If, over the years, more of the injured children and youth began to go more often to other hospital emergency departments (like Anna Laberge Hospital or Ormstown Hospital), or be seen by their family doctor, or at walk-in clinics, the rate of emergency visits at MCH could have gone down even if the number of injuries for the

[68] Personal communication, MCH CHIRPP staff, Glenn Keys

community hasn't changed. Front-line care providers in Kahnawà:ke tell us that most children and teens still seek care at the MCH, so we suspect that at least a good portion of the decrease seen in the graph is because there is a true decrease in injuries among Kahnawa'kehró:non children and youth.

Self-report of where people went for treatment of an injury

In 2015, responses on the Regional Health Survey showed that:

- About 7 out of 10 (69%) injured children (0-11 years old) went to an emergency department for the injury
- About 4 out of 10 (44%) injured youth (12-17 years old) went to an emergency department for the injury

When Kahnawà:ke next participates in the Regional Health Survey, we will be able to have a better idea if there is a change over time in how often injured children and youth need to go to an emergency department or other services for care. For now, this information helps us confirm that the 153 MCH emergency department visits for injury that happened in 2014 (Figure 2.6) only shows us a portion of the total burden of injury in the pediatric population. This reinforces just how common injuries are in children and youth and leads us to ask what else can be done to prevent injuries in the community.

Injuries Among Children and Youth

Injuries among youth

A higher percentage of Kahnawà:ke's youth had injuries than in any other age category. In fact, 35% of surveyed youth (12-17 years old) reported an injury in the prior year (about 180 youths total). This is similar to the other First Nations in Québec, where 31% of youth reported an injury in 2015.

Information from CHIRPP (Figures 2.7) also showed that teens 12 to 17 years old have more injuries per capita requiring an emergency department visit compared to children 11 years or under. Happily, the rate of emergency department visits for injury has slowly been going down over time in this age range.

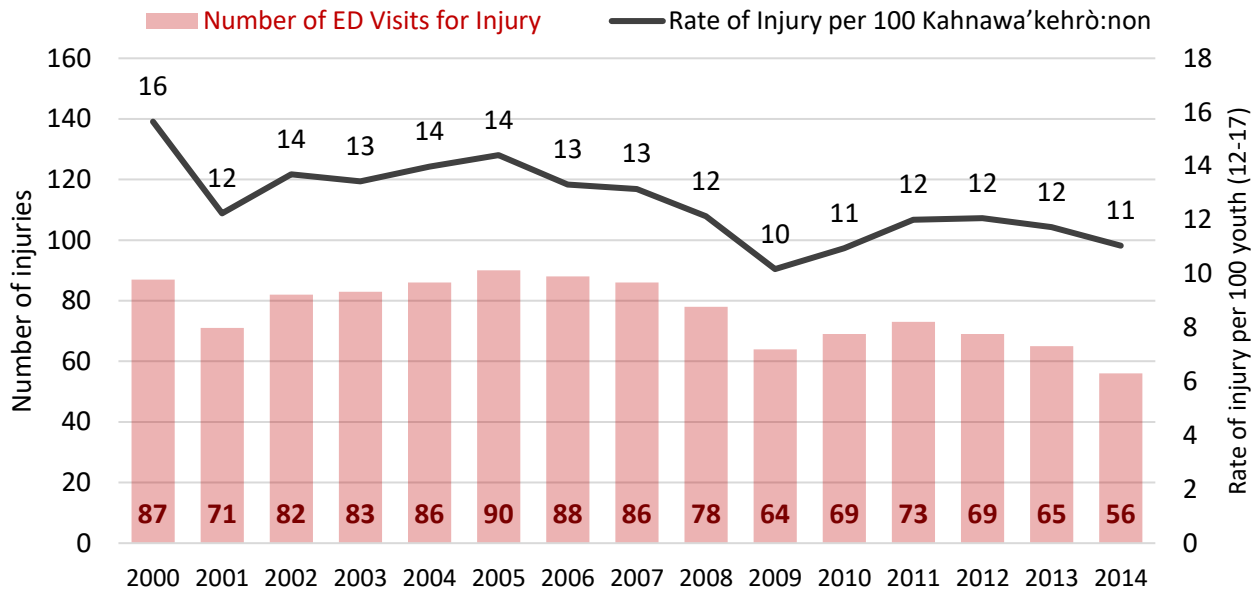
Injuries among children

According to parent survey responses, a little over 1 in 10 (11%) Kahnawa'kehró:non children (0-11 years old) had an injury in 2015. This represents a rough estimate of about 110* injured children in the whole community over the course of a year. Children could have been injured a single time or multiple times over the course of the year. Other First Nations within Québec reported similar rates of injury among children in 2015 (9% of children 0-5 years old; 11% of children 6-11 years old; RHS 2015).[67]

Data from CHIRPP at the MCH between 2000-2014 (Figure 2.8) show that in 2014, there were 97 emergency department visits by injured children. It is important to note that this number is for hospital visits, not number of children. So, if a single child had to go to the emergency department 5 times in one year, there would be 5 visits, even though only 1 child had those 5 injuries.

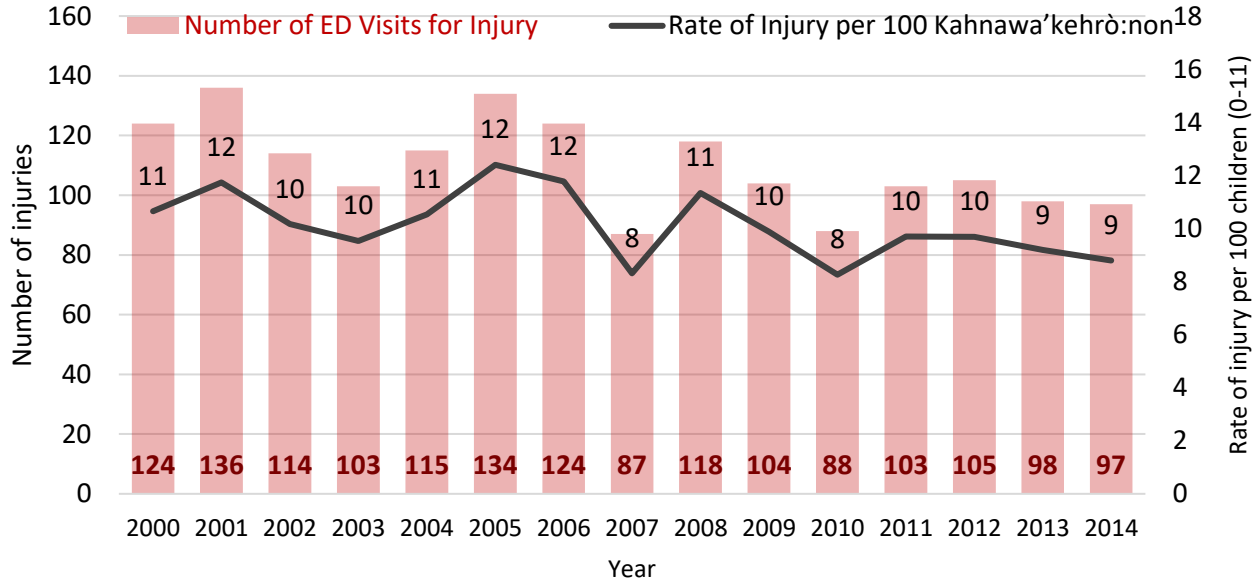
We see that the rate of emergency department visits for injury per 100 children has been slowly declining over the years, from 11 visits per 100 children per year in 2000, to 9 visits per 100 children per year in 2014.

Figure 2.7. Number of Emergency Department (ED) visits at Montreal Children's Hospital for injury and rate per 100 Kahnawa'kehró:non **youth** from 2000-2014



Data source: Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP), 2019.

Figure 2.8. Number of Emergency Department (ED) visits at Montreal Children's Hospital for injury and rate per 100 Kahnawa'kehró:non **children** from 2000-2014



Data source: Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP), 2019.

Circumstances of injuries and types of injuries among youth (12 to 17 years old)

According to RHS responses:

- 58% of injuries to youth occurred while playing a sport or exercising
- 51% of injuries to youth occurred on a sports field or in a sports facility and 12%* at school
- 8 out of 10 (81%) injured youths said they had sought some type of medical treatment
    - Most common was at the emergency room (44% of those injured)
    - 26% went to the doctor's office
    - 17% went to a walk-in clinic
    - 14% sought treatment at home
    - 29% sought treatment in 2 or more places
- The types of injuries reported included: broken bones, major sprains, concussions, scrapes, bruises, cuts and bites

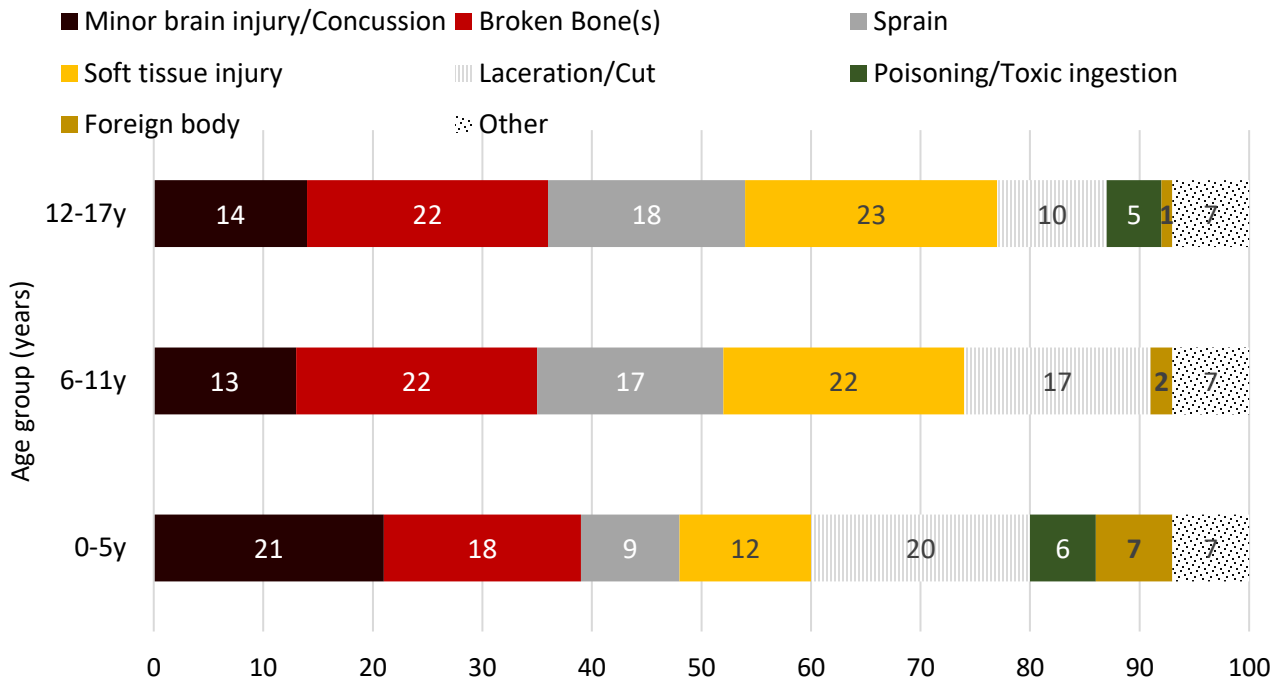
The most common types of injury for which youth were seen at the MCH emergency department (from 2014-2018) by age group are shown in Figure 2.9. Kahnawa'kehró:non youth most often had:

- Sprains, muscle or soft tissue injuries (41%)
- Broken bones (22%)
- Minor head injuries, concussions (14%)
- Cuts typically requiring stitches or glue (10%)

There may be many reasons why the youth age group is at higher risk – it is a time of life when people are generally growing in abilities, testing their limits and learning to take on higher risk activities. Much of the higher rate of injury in youth is explained by injuries that occurred during sports. From RHS responses, a much higher proportion of the youths' injuries occurred while playing sports or exercising (58% compared to 23% in adults). From emergency department visits, about 19 out of 100 injuries seen at MCH were directly related to some type of sport.

Nevertheless, we should remember that playing sports are great activities for promoting mental, physical and emotional well-being.

Figure 2.9. Percentage of injuries by type of injury and age group, for Kahnawa'kehró:non children and youth who went to the emergency department at the Montreal Children's Hospital for the combined years of 2014-2018 (CHIRPP)



Data source: Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP), 2019. *Note that "y" represents years.*

Youth involvement in sports and exercise

We know that Kahnawa'kehró:non youth are active; 69% reported they get at least 30 minutes of physical activity per day, and 44% of youth get at least 60 minutes of physical activity per day.[69] In addition:

- 90% had been involved in some type of sports activity in the last 3 months
- 59% were involved in 3 or more sports activities in the last 3 months
- 47% of youth reported they had been involved in competitive or team sports in the last 3 months

If these habits become life-long, this is a great protective factor for maintaining mental wellness, heart health and preventing diabetes. At the same time, competing and playing sports does come with some physical risks, like the chance of a broken bone, losing a tooth, or concussion. As teens progress at a sport they enjoy, they may be performing at a higher level with more physical contact than at younger ages (for example, when wrestling with the KSS team or playing lacrosse).

In many cases, the risks from sports can be reduced with appropriate training, well-designed sports facilities, access to quality protective equipment (like mouth guards, helmets, etc.) and effective sports safety protocols. There are many resources and tools to support efforts to ensure that the risks of potential injury are minimized.

[69] Onkwata'karitáhtshera. *Onkwaná: ta Our Community, Onkwatákarí:te Our Health* Volume 1. (2018). Kahnawà:ke. http://www.kscs.ca/sites/default/files/article/attachment/kahnawake_health_portrait_volume1_small.pdf

A number of programs for youth in Kahnawà:ke have already made safety part of their programming. For example, the Onake Paddling Club spends time teaching about safety on the water. Many of the summer camps have also integrated safety protocols and training for their staff.

Circumstances of injuries and types of injuries among children (0-11 years old)

In Kahnawà:ke, according to the 2015 Regional Health Survey:

- 7 out of 10 injured children (69%*) went to an emergency room for medical care. This would mean an estimated 75* children in the course of a year.
    - Smaller proportions of children received care at daycare/school, at home and at walk-in clinics
    - The types of injuries reported included broken bones, major sprains, concussions, scrapes/bruises/cuts and bites
- 68% of injuries suffered by children were to an extremity (arms or legs) and 32%** to a central part of the body (such as abdomen, torso, neck) or their head
- Falling was the most common cause of injury and accounted for 50%* of childhood injuries
- Other commonly reported causes included accidental contact with another person and bicycling
- 38%* of child injuries happened at home
- 44%* of child injuries occurred either at a school, sports field/facility or playground

Hospital data from CHIRPP from 2014-2018 (Figure 2.9) showed that, among children 0-5 years old, the most common types of injuries treated at the MCH emergency department were:

- Lacerations (cuts usually needing stitches or glue). These accounted for about 1 in 5 injuries (20%)
- Minor head injuries /concussions - accounting for about 1 in 5 injuries (21%)
- Broken bones - accounting for a little under 1 in 5 injuries (18%)
- Sprains or soft tissue injuries (21%)
- Foreign body removal, such as swallowing a plastic toy part (7%)
- Poisoning/toxic ingestion (6%), such as accidental swallowing of cleaning products, medications, or other substances.

For children 0-5 years old who went to the MCH emergency department between 2000-2014:

- 55% were for an injury to the head, neck or torso
- 36% were for an injury to an arm or a leg

This is the opposite of the 2015 RHS responses, where far more injuries occurred to arms and legs. This likely means that most injuries to the arms and legs at this age were minor and did not need emergency department care.

For children ages 6-11; data from CHIRPP from 2014-2018 (Figure 2.9) showed that the most common types of injuries treated at the MCH emergency department were:

- Broken bones (22%)
- Soft tissue injuries (22%)
- Lacerations (cuts usually needing stitches or glue) (17%)
- Sprains (17%)

For children 6-11 years old who went to the MCH emergency department between 2000-2014:

- 36% were for an injury to the head, neck or torso
- 61% were for an injury to an arm or a leg

Injuries Among Adults

Circumstances of injuries and types of injuries among adults

The 2015 Regional Health Survey showed the following:

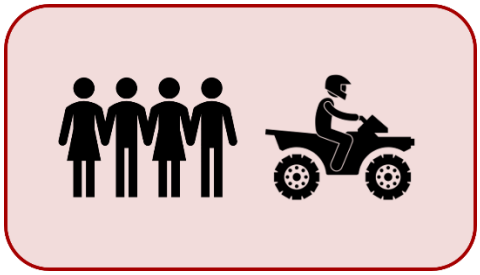
- About 1 in 5 (21%) adults said they had an injury in the prior year
- 77% of adults' injuries were to an extremity (arms or legs) and 23% to a central part of the body (such as abdomen, torso, neck) or their head
- 40% of injuries occurred in a home
- 21%* occurred at a sports facility or field
- The most common activities people were doing when injuries occurred were:
  - Playing a sport or exercising (23%*)
  - Walking (19%*)
  - Doing unpaid work or chores (14%)
  - Working (10%**)
- Falling was the most common cause of injuries, accounting for 35% of all injuries
- Other common reasons were accidental contact with another person or animal, overexertion, contact with a hazardous object (machinery, hot liquid) and physical contact in sports
- 83% of injured adults sought medical treatment
  - 49% went to the emergency room
  - 34%* went to the doctor's office
  - 28%* went to a walk-in clinic
  - 23%* saw a physiotherapist
  - 39% sought treatment in 2 or more places

Injury Prevention Behaviour

The 2015 Regional Health Survey asked some specific questions about how people protected themselves during a few activities that are especially injury-prone.

All-terrain vehicle (ATV) use

- Almost 1 in 5 (19%) of people said they sometimes ride on ATVs
  - 23% of children (0-11 years) ride an ATV
  - 37% of youth (12-17 years) ride an ATV
  - 15%* of adults ride an ATV

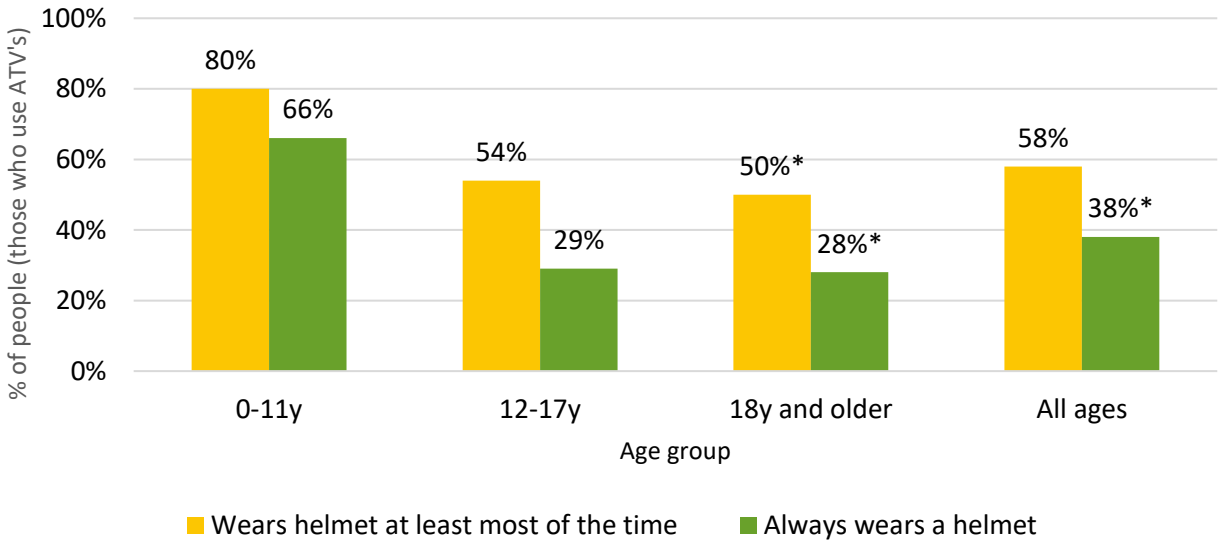


Helmets while riding ATV's

People were asked if they wore helmets "Always", "Most of the time", "Rarely", or "Never"

- Among children who ride:
  - 8 out of 10 (80%) children wear a helmet at least most of the time
  - Almost 7 out of 10 (66%) of them always wear a helmet
- Among youth who ride:
  - Only half (54%) of youth wear a helmet at least most of the time
  - Close to 1 in 3 (29%) always wear a helmet
  - 16% rarely wear a helmet
  - Close to 1 in 3 (29%) never wear a helmet
- Among adults who ride:
  - Only half (50%*) wear a helmet at least most of the time
  - Close to 1 in 3 (28%*) always wear a helmet

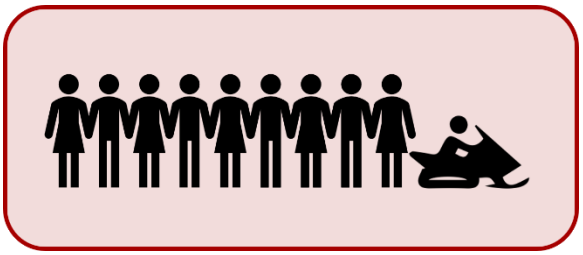
Figure 2.10. Percentage of people in Kahnawà:ke using helmets when riding ATV's, by age group (RHS 2015)



Data source: Regional Health Survey (RHS), 2015. *Note that "y" represents years.*

Snowmobile use

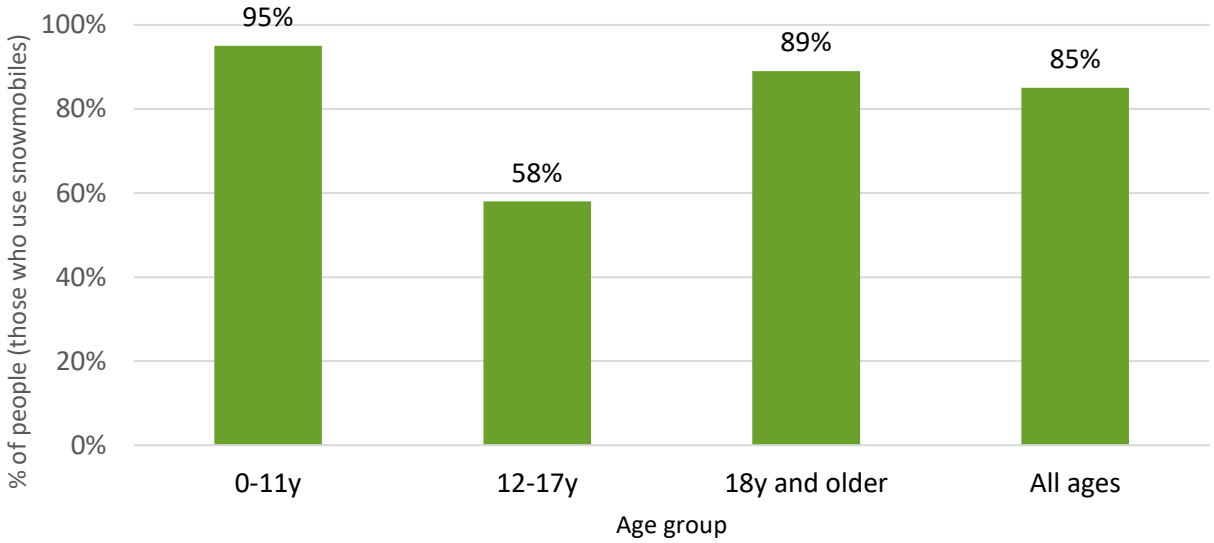
- 11% of people said they sometimes travel by snowmobile
  - 11%* of children ride snowmobiles
  - 19% of youth ride snowmobiles
  - 10% of adults ride snowmobiles



Helmet use while snowmobiling

- Children
  - 95% of children who snowmobile always wear a helmet
- Youth
  - 74% wear a helmet at least most of the time
  - 58% always wear a helmet
- Adults
  - 89% of them wear a helmet all of the time

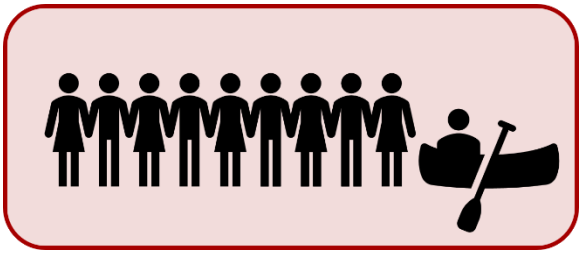
Figure 2.11. Percentage of people in Kahnawà:ke who always use a helmet when riding snowmobiles, by age group



Data source: Regional Health Survey (RHS), 2015. *Note that "y" represents years.*

On and in the water

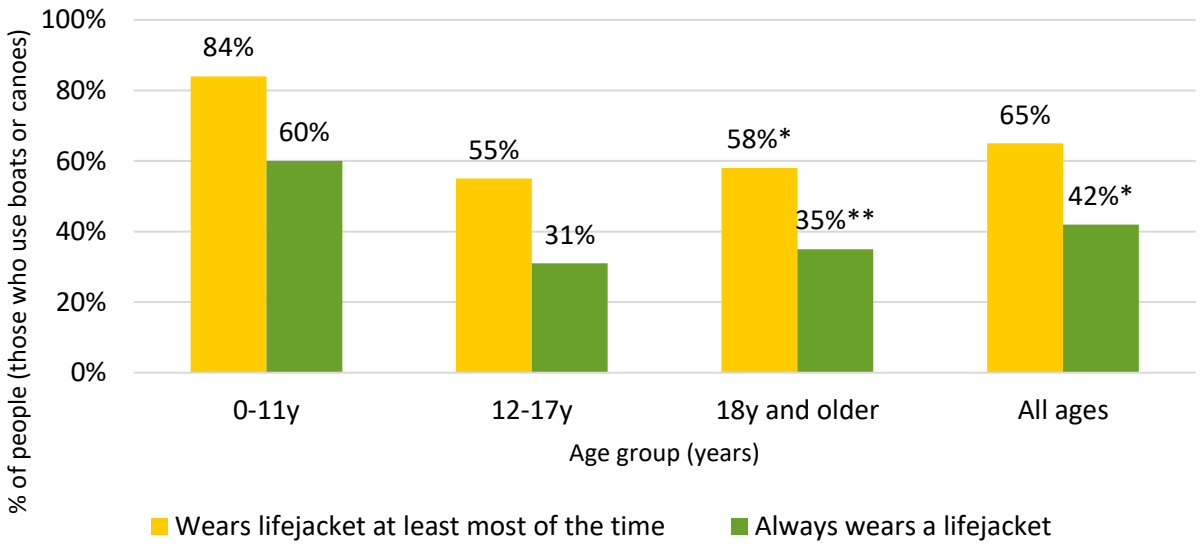
- About 1 in 10 (11%) people said they sometimes travel by boat or canoe
  - 16% of children sometimes travel by boat or canoe
  - 19% of youth sometimes travel by boat or canoe
  - 8% of adults sometimes travel by boat or canoe



Lifejacket use while in a boat

- Children:
  - Over 8 in 10 (84%) wear a life jacket at least most of the time
  - 6 in 10 (60%) children always wear a life jacket
- Youth:
  - Only just over half (55%) wear a life jacket at least most of the time
  - Just under 1 in 3 (31%) always wear a life jacket
  - Another 1 in 3 teens (28%) never wear one
- Adults
  - 58%* wear a life jacket at least most of the time
  - 42%* rarely or never wear one

Figure 2.12. Percentage of people in Kahnawà:ke using lifejackets while in a boat or canoe, by age group



Data source: Regional Health Survey (RHS), 2015. *Note that "y" represents years.*

Ability to swim

The ability to swim is intuitively thought to protect children and youth against drowning, although many other factors also affect this risk:[70]

- 99% of children (6-11 years old) were reported to know how to swim when surveyed
- 39% of children in this age range had gone swimming in the 3 months before the survey
  - 22% had gone swimming 10 times or more in those 3 months
- 97% of youth (12-17 years) surveyed said they know how to swim
- 26% of youth had gone swimming in the 3 months before being surveyed
  - 14% of youth had gone swimming 10 times or more in those three months
- Only 55% of adults surveyed (all ages) said they know how to swim. This represents:

- 21% of adults said they had gone swimming in the 3 months prior to being surveyed,
  - a little under half of them (9% of all adults) had gone swimming more than 10 times in those three months

While it is very encouraging to see how many children and youth say they can swim, it is important to note that these responses are to a very simple question "Do you know how to swim/Does the child know how to swim?" Unfortunately, this question does not provide more specific insight into quality of swimming skills (e.g.; How far/how many pool lengths can you swim without resting? Have you completed swimming lessons and to what level? For how many minutes can you tread water?). It also does not tell us about the risk level of swimming behaviors (e.g.; swimming in unsupervised environments, in pools vs open water). We could try to understand these elements better in future surveys, whether through adding questions to the Regional Health Survey, or through a more local and focused survey.

Home amenities for emergency response

- 93% of adults said they had a working smoke detector in their homes, while 7%* said they did not have one. This corresponds to:

- 63% of adults had a fire extinguisher in their homes
- 48% of adults had a carbon monoxide detector in their homes
- 86% of adults had a telephone with service

[70] Brenner RAG et al. *Association Between Swimming Lessons and Drowning in Childhood: A Case Control Study.* Archives of Pediatric and Adolescent Medicine. (2009) 163 (3): 203–10

Areas for Action on Injuries and Injury Prevention

We've learned in this chapter that injuries are common in Kahnawà:ke. We saw that the specific types and frequency of injuries are often related to age and the different activities at different life stages. However, we also saw that there are some common themes at all ages, such as:

- Falling being reported as the most common cause of injury
- Sports facilities being a common site of an injury event
- Injuries to arms and legs being more common, but typically less severe than injuries to other body parts
- Decreasing rates of emergency department visits for injury among children and youth

Given that injuries are common, largely preventable, and can have significant short-term and long-term impacts on individuals, families, and the community, we should add injury prevention to Kahnawà:ke's health priorities in the next Community Health Plan (CHP). In doing so, Onkwata'karitáhtshera can better support community members and organizations to coordinate their approaches to injury reduction in Kahnawà:ke, as well as develop and fund new projects and proposals that have this aim.

Kahnawà:ke already has an early childhood injury prevention working group, which has been championed by staff at KMHC, the Education Centre, the MCK and the Youth Center. We should work to expand or further develop this network and create projects that focus on different needs for various stages of life: children, adolescents, working-age adults, and elders. We can also explore additional collaborators within and outside of the community (e.g. occupational therapists, Mohawk Self-Insurance, FNQLHSSC, etc.) who have an important role to play in injury prevention and treatment. Helping an injury prevention working group or groups to make these connections could help create interventions aimed at helping people at different ages.

Universal design and accessibility also intersect with injury prevention through safe and healthy built environments in important ways. Universal design means creating places that can be accessed, understood, and used to the greatest extent possible by all people regardless of their age, size, ability or disability. This includes designing the environments where we live, work, and play to be safer[71].

Connecting Horizons is a community group that is working to identify and respond to the needs of individuals with special needs and their families living in Kahnawà:ke, ensuring inclusion of all Kahnawa'kehró:non living with disabilities. Although we were not able to look at rates of injuries specifically among people living with disabilities, it is important their needs be considered in injury prevention.

As discussed in the introduction to this chapter, injury prevention needs to be approached from many angles at once to be effective, and there is a role for everyone. In some areas this may mean continuing interventions and actions that are already underway, while in others we may need to start new activities. Below is a non-exhaustive list of areas to focus on (or continue to focus on as the case may be):

Fall prevention

- Building and maintaining safe environments, e.g.:

[71] Center for Excellence in Universal Design. Ireland National Disability Authority. *What is Universal Design?* (2020). Accessed at: https://universaldesign.ie/what-is-universal-design/

    - Salting and clearing built walking spaces, such as sidewalks outside of buildings
    - Enforcing building codes for stairs and railings in and outside of homes and offices
    - Safely and accessibly built playgrounds, recreational spaces, public places and workplaces
- Raising awareness and encouraging safer behaviours for higher risk activities, e.g.:
    - Wearing a bike helmet to reduce the impact of a fall off a bike
    - Wearing safety harnesses for construction workers
- Offering medical care to reduce fall risk, e.g.:
    - Vitality exercise program and chair exercises for elders to help keep muscle strength and stay active
    - Installing adaptive equipment like grab-bars, shower stools, etc. when needed
    - Improving access to physiotherapy after an injury

Sports-related injuries

- Building and maintaining safe environments, including sports facilities, playgrounds and green spaces
- Ensuring appropriate protective equipment is used (mouth guards, helmets, pads)
- Raising awareness and changing behavior, e.g.:
    - Appropriate warm-ups to prevent muscle strains and sprains
    - Non-contact versions of some sports
- Injury care, e.g.:
    - First aid preparedness of teams, and at tournaments, camps, schools, etc.
    - Access to prompt medical care after injury, such as physician assessment and physiotherapy
    - Ensuring appropriate recovery after initial injury to prevent re-injury

Swimming and water safety

- Holding campaigns to increase life jacket use and floatation devices on boats to raise awareness of these as a best line of defense against cold-water shock and drowning
- Increasing awareness and enforcement of boating laws, e.g.:
    - Aiming to prevent operating a boat in a careless manner
    - Aiming to prevent boating under the influence of alcohol or other substances
    - Gaining an understanding of when there can be higher risks when swimming or boating, e.g. faster currents and colder water at certain times of year
- Promoting water safety behavior among children and youth, e.g.:
    - Swimming in supervised areas
    - Supervising children around water (including while bathing)
    - Swimming with a friend or family member

Protective gear use for high-risk activities

- Holding campaigns to increase helmet use with ATVs and snowmobiles[72]
- Ensuring good protective gear such as life jackets and helmets are available. In some places, equipment like this has been given away or subsidized to reduce barriers related to cost[73]

[72] Community Preventive Services Task Force (CPSTF). *Motor Vehicle Injury – Motorcycle Helmets: Universal Helmet Laws* (2016) https://www.thecommunityguide.org/findings/motor-vehicle-injury-motorcycle-helmets-universal-helmet-laws

[73] CPSTF *Health Communication and Social Marketing: Campaigns That Include Mass Media and Health-Related Product Distribution.* (2011) https://www.thecommunityguide.org/findings/health-communication-and-social-marketing-campaigns-include-mass-media-and-health-related

Reducing occurrence of specific high-risk activities using multi-pronged strategies

- Strategies can include education, physical barriers, law enforcement, provision of an alternate activity, e.g.:
- Firing of guns at New Year's Eve (and ensuring hunting weapon safety more generally)
- Walking across the rail bridge due to lack of other transportation options

Access to care for injuries

We should consider the types of medical care and accessibility of these places of care in case of an injury. We saw in some of the CHIRPP data that many children and youth went to emergency departments for cuts, scrapes, bruises, muscle strains and sprains. Of course, sometimes an injury seems like it might be more serious than it turns out to be, and it is understandable that many people would go to an emergency department where X-rays, scans and specialists are readily available. On the other hand, many simple injuries such as lacerations that need stitches can be dealt with at KMHC instead of the emergency department, and some people might be going to the emergency department simply because they have a hard time accessing this care when a sudden need arises. This can be especially true if there are not enough doctors available for the clinic needs or if the injury occurs at a time when the clinic is not open. KMHC is committed to finding ways to improve care accessibility for people in Kahnawà:ke. Community members can help by responding to calls for more information about their care experiences with constructive and respectful comments

Designing workplaces and policies to prevent injuries

- E.g.: slipping, protective equipment, repetitive muscle strain injury, exposure to toxins

Improving motor vehicle safety

- Increasing seat belt use through awareness and Peacekeeper enforcement[74]
- Promoting proper use of child safety seats with education and subsidizing programs[75]
- Reducing driving under the influence of alcohol or other substances through education and publicized spot-checks[76,77,78]
- Enforcing road and ATV safety laws effectively[79]
- Having sidewalks to give pedestrians a safer space to walk than on the road
- Having effective transport options and walkable spaces

[74] CPSTF. *Motor Vehicle Injury – Safety Belts: Enhanced Enforcement Programs* (2013). https://www.thecommunityguide.org/findings/motor-vehicle-injury-safety-belts-enhanced-enforcement-programs

[75] CPSTF *Motor Vehicle Injury – Child Safety Seats: Distribution and Education Programs (2013)* https://www.thecommunityguide.org/findings/motor-vehicle-injury-child-safety-seats-distribution-and-education-programs

[76] CPSTF. *Motor Vehicle Injury – Alcohol-Impaired Driving: Publicized Sobriety Checkpoint Programs*. https://www.thecommunityguide.org/findings/motor-vehicle-injury-alcohol-impaired-driving-publicized-sobriety-checkpoint-programs

[77] Shults RA, et al. Task Force on Community Preventive Services. *Effectiveness of multicomponent programs with community mobilization for reducing alcohol-impaired driving*. Am J Prev Med (2009) 37(4):360-71

[78] Bergen G et al. Community Preventive Services Task Force. *Publicized sobriety checkpoint programs: a Community Guide systematic review.* Am J Prev Med (2014).46(5):529-39

[79] SAAQ. *All-terrain vehicles: what the law says.* https://saaq.gouv.qc.ca/en/road-safety/modes-transportation/all-terrain-vehicle/what-the-law-says/ Accessed January 2020.

Designing recreational spaces to be low risk

- E.g.: ensuring appropriate fencing where needed, such as to protect kids from water hazards, train tracks

Emergency preparedness

- Ensuring the community emergency response plan is kept up to date
- Ensuring community agency and program staff are trained in first aid care appropriate to their services and context
- Continuing to ensure a high quality first response system
- Improving emergency preparedness of individuals in their homes (e.g.: presence of a working smoke alarm, carbon monoxide detector, fire extinguisher, telephone)

Like with any analysis of data, this chapter also helps us to ask more questions – we can use these to suggest changes to the next Regional Health Survey, or to create smaller local surveys or focus groups. For example, there were no questions on the 2015 Regional Health Survey about whether people regularly use their seat belts, but this is worth knowing about. Related to this, we would also like to ask about differences in the use of seat belts when people are in Kahnawà:ke versus when they are driving further afield. Similarly, it would be useful to know about helmet use while bicycling, especially since this was a common activity to have been doing when people were injured. We have also heard community members express concerns about gun safety, which wasn't asked about on the 2015 survey. It would be helpful to understand what measures people who own and use guns take to ensure they safely store their firearms (e.g.: unloaded and locked away to prevent them from being accessed impulsively or by a child). Onkwata'karitáhtshera has already made many suggestions for new questions along these lines for the next RHS survey. Building an injury prevention network could help bring together more anecdotal evidence and insights in between survey cycles. This network could potentially identify local sources of data (e.g.: number of KFB responses to an injury, number of Peacekeeper ride-checks) to help understand these issues better. We encourage community members to continue to give feedback to help us identify and address community health and social service information needs.

Another way we could get more detailed injury data in the future is by encouraging more Kahnawa'kehró:non to complete the questionnaire they are asked to fill at triage when they go to the Montreal Children's Hospital emergency department for an injury. While CHIRPP was able to give us a lot of useful information about injuries among children and youth in Kahnawà:ke, it would have been able to give us even more if a larger percentage of parents and teens were willing to answer these questions. We understand that people can be reluctant to complete questionnaires if they don't think it is relevant to them. We also hope that as people see how the anonymized information generated by CHIRPP is used directly by the community through reports like *Onkwaná:ta* Our Community*, Ionkwata'karí:te* Our Health, more people will feel comfortable answering questions about injuries in the future. Onkwata'karitáhtshera invites community members and agencies to suggest other areas for action and further investigation to help the community make more informed decisions regarding injury prevention and how it should be addressed in Kahnawà:ke.

Onkwata'karitáhtshera will continue to work with its member organizations, and to support partners, to find ways to better address injury prevention in Kahnawà:ke.

Chapter 3

Mental Wellness & Mental Illness

80

[80] Graphic designer's note: Grandmother moon is always there spiritually looking over us and guiding us when we need. You're never alone and if you need answers, strength or guidance to ask her. The corn is nourishment mother earth provides - we are gifted this from the Creator. It is always a part of our ceremonies and is considered one of the sustainers of life along with beans and squash.

Mental Wellness and Mental Illness: Summary of Key Points

Positive Mental Health & Community Context

- **73% of people, 12 years of age or older, in Kahnawà:ke rated their mental health as excellent or very good in 2015**
  - This was similar to Québec (73.2%) and Canada (70.9%) in 2016[81] and better than other First Nations of Québec in 2015 (64%)[82]
- Self-rated mental health varied by age:
  - Fewer elders[83] and fewer youth[84] reported excellent or very good mental health compared to other age groups in Kahnawà:ke
  - Fewer elders and fewer youth reported excellent or very good mental health compared to the same age groups in Québec and Canada[81]
  - Youth reported higher levels of psychological distress than adults and also rated their sense of control over their lives, lower than adults
- **In general, adults in Kahnawà:ke rated their sense of belonging to the community very highly; 84% felt a strong sense of belonging**
  - This is higher than for adults in Québec and Canada,[81] and similar to other First Nations in Québec[2]
- **Almost all people (97%) reported feeling safe in Kahnawà:ke,** compared to 89% of First Nations individuals in Québec who said they felt safe in their own communities (2015)[82]
- Just over half of Kahnawà:ke's Regional Health Survey respondents (55%) felt social connectedness was a community strength
  - Only 37% of people in First Nation communities in Québec and Labrador felt social connectedness was a strength of their own community[82]
- **The vast majority (96%) of people, 12 and older, felt that, *at least some of the time,* they had someone they could count on for personal or social support in a time of need**
- 1 in 3 (34%) people, 12 years and older, said they had felt a need to talk to someone about their mental or emotional health in the last 12 months
  - Most of these people had connected with a friend (71%) or family member (61%)
  - About 28% had contacted either a doctor, mental health worker or social worker
  - About 12% contacted a traditional healer

[81] Public Health Agency of Canada (PHAC), Centre for Surveillance and Applied Research. *Positive Mental Health Surveillance Indicator Framework, 2018 Edition*. Data source: Canadian Community Health Survey (CCHS) 2016. https://health-infobase.canada.ca/positive-mental-health/.

[82] First Nations of Québec and Labrador Health and Social Services Commission (FNQLHSSC). Québec First Nations Regional Health Survey - 2015: *Individual wellness, mental health and elder abuse*. (2018). Wendake, Québec. http://cssspnql.com/docs/default-source/ERS-2015/bien-etre_mental_aines_ers_phase-3_eng.pdf?sfvrsn=0

[83] Elder is used to mean people 65 years and older throughout the report unless otherwise specified

[84] Youth is used to mean people 12-17 years old throughout the report unless otherwise specified

Risk Factors for Mental Unwellness - Intergenerational Trauma, Racism & Lateral Violence

- Despite nearly all survey respondents(15 years of age and older) saying they personally felt safe in Kahnawà:ke, 47% of community members, also thought violence was an important challenge for Kahnawà:ke as a community, with most people feeling it was staying the same over time, or even getting worse
- 41% of people (15 and older) thought racism was an important challenge for the community
  - Only 8% felt some improvement had been made
  - 50% felt there had been no change
  - 19% felt racism was worsening
  - 22% were unsure if any progress had been made
- 1 in 4 adults (25%) reported having a personal experience of racism in the last year
- Most adults who had a personal experience of racism said it happened outside of Kahnawà:ke (83%), while almost 1 in 4 of them said it had happened within the community (24%)[85]
- 6%*[86] of adults over 40 years old said they had personally attended residential school (this compares to 17% for all Québec First Nations in the 2015 RHS)
- 42% of adults said that at least one extended family member had attended residential school
- 33% of children (5-11 years old) had experienced bullying in the last year
- 28% of youth (12-17 years old) had experienced bullying in the last year

Mental Illnesses

- In 2014-15, approximately 490 Kahnawa'kehró:non had been diagnosed by a doctor with anxiety and/or depression; this is roughly 8% of the whole population
  - These diagnoses have decreased considerably from 2000/01, when almost 13% of Kahnawa'kehró:non had such a diagnosis
  - This most recent rate of diagnosis (8%) is quite close to the rates of Montérégie and Québec
- Women and girls in Kahnawà:ke are more commonly diagnosed with anxiety and/or depression than men and boys, with rates 2 times as high. This sex difference has been consistent across the years
- Other mental illnesses (such as schizophrenia, dementia, bipolar disorder) appear to be diagnosed at similar rates in Kahnawà:ke, Québec and the Montérégie region
- In 2015, 727 band members received at least one prescription for a medication typically used for depression and/or anxiety
  - Because these medications can also be used for other issues, we estimate that approximately 460 of these prescriptions were intended to treat depression or anxiety
- In 2015, 635 band members had received at least one prescription for a benzodiazepine (a sedative medication frequently used to treat more severe anxiety, but also used for other issues)
- In 2017-2018, 186 people had sought psychology services through KSCS; this number jumped to 310 in 2018-2019

[85] Note: some people said they had experienced racism both within and outside of the community

[86] Small numbers limit statistical analysis for less common conditions. Throughout the report, a single asterisk (*) indicates this is an imprecise estimate and results should be interpreted with caution (Coefficient of Variation (CV) greater than or equal to 16.6 and less than or equal to 33.3). Occasionally you will see two asterisks (**). In this case, the estimates are so imprecise that the number is almost always suppressed because of unacceptable quality (CV>33.3). In the occasional circumstance where the number is given with two asterisks (**), it should be interpreted cautiously, with an understanding it is imprecise.

Suicide and Suicidal Thoughts

- 54% of surveyed adults and 28% of youth (15-17 years of age) identified low rates of suicide as a community strength, while only 5% of adults and youth said that suicide is an important challenge for the community
- 13%* of youth (12-17 years of age) and 16% of adults (18 and older) in Kahnawà:ke reported having seriously considered suicide at least once in their life
  - For comparison, in other First Nation communities in Québec, 13% of youth and 20.7% of adults reported having seriously considered suicide at least once in their life[87]
- 1 in 5 of the Kahnawa'kehró:non adults who had ever considered suicide reported having had these thoughts within the past 12 months
  - This is about 3%* of all adults, representing approximately 220* individuals total
  - This mirrored what is seen in the general population of Québec, where 2.8% of adults said they had seriously considered suicide in 2014[88]
- 5%* of Kahnawa'kehró:non adults said they had attempted suicide at least once in their lifetime.
  - For comparison, 9.6% of adults in First Nations communities in Québec said they had attempted suicide at least once in their life when surveyed in 2015[87]

[87] Direct communication from Regional Health Survey analysis team at the FNQLHSSC (2019), RHS 2015

[88] Camirand H, Traoré I, et Baulne J. *L'Enquête québécoise sur la santé de la population, 2014-2015: pour en savoir plus sur la santé des Québécois. Résultats de la deuxième édition.* (2016) Québec, Institut de la statistique du Québec. http://www.stat.gouv.qc.ca/statistiques/sante/etat-sante/sante-globale/sante-Québecois-2014-2015.pdf

Introduction to Mental Wellness and Mental Illness Chapter

The World Health Organization (WHO) has stated "there is no health without mental health,"[89] but what does it mean to have ***mental health***? The WHO gives this brief definition:

> *"Mental health is a state of well-being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community."*

The First Nations Mental Wellness Continuum Framework[90] (see Figure 3.1 on next page) further recognizes how intricately related ***mental wellness*** is to all aspects of life, from core values like meaning, identity and sense of belonging, purpose and hope; to community-level factors such as economic opportunities, access to care, use of language, traditions and culture.

In keeping with these definitions, it is important to note that people living with specific ***mental illnesses*** (such as schizophrenia, attention deficit hyperactivity disorder, depression or dementia) can still have a spectrum of ***mental wellness*** – one can be thriving while living with schizophrenia or, on the other hand, they can be languishing. This is because mental wellness exists on a continuum, as does mental illness (see Figure 3.2 for a visual representation).[91]

Similarly, people who have no diagnosis of mental illness can also be at different points on this mental wellness continuum. Where a person is on the continuum can change over the course of their lives and even day to day.

In Kahnawà:ke, mental wellness and addiction issues were identified through community consultation as health priorities for Kahnawà:ke's 2012-2022 Community Health Plan (CHP). These issues have actually been community health priorities since the first CHP in 1998. This chapter on Mental Wellness and Mental Illness aims to give insight into the mental well-being of community members, the rates of common mental illnesses with trends over time, the services available, and the presence of both protective factors and risk factors related to mental health and mental illness. To do so, it draws on results from the 2015 Regional Health Survey (RHS), as well as some provincial medicare-based data sources, and medication information from the Non-Insured Health Benefits system of Indigenous Services Canada. Please see the methodology chapter of this document for further information on the specific data sources.

A portrait specific to substance use and addictions was already published as chapter 4 of the first volume of *Onkwaná:ta* Our Community*, Ionkwata'karí:te* Our Health*.*[92]

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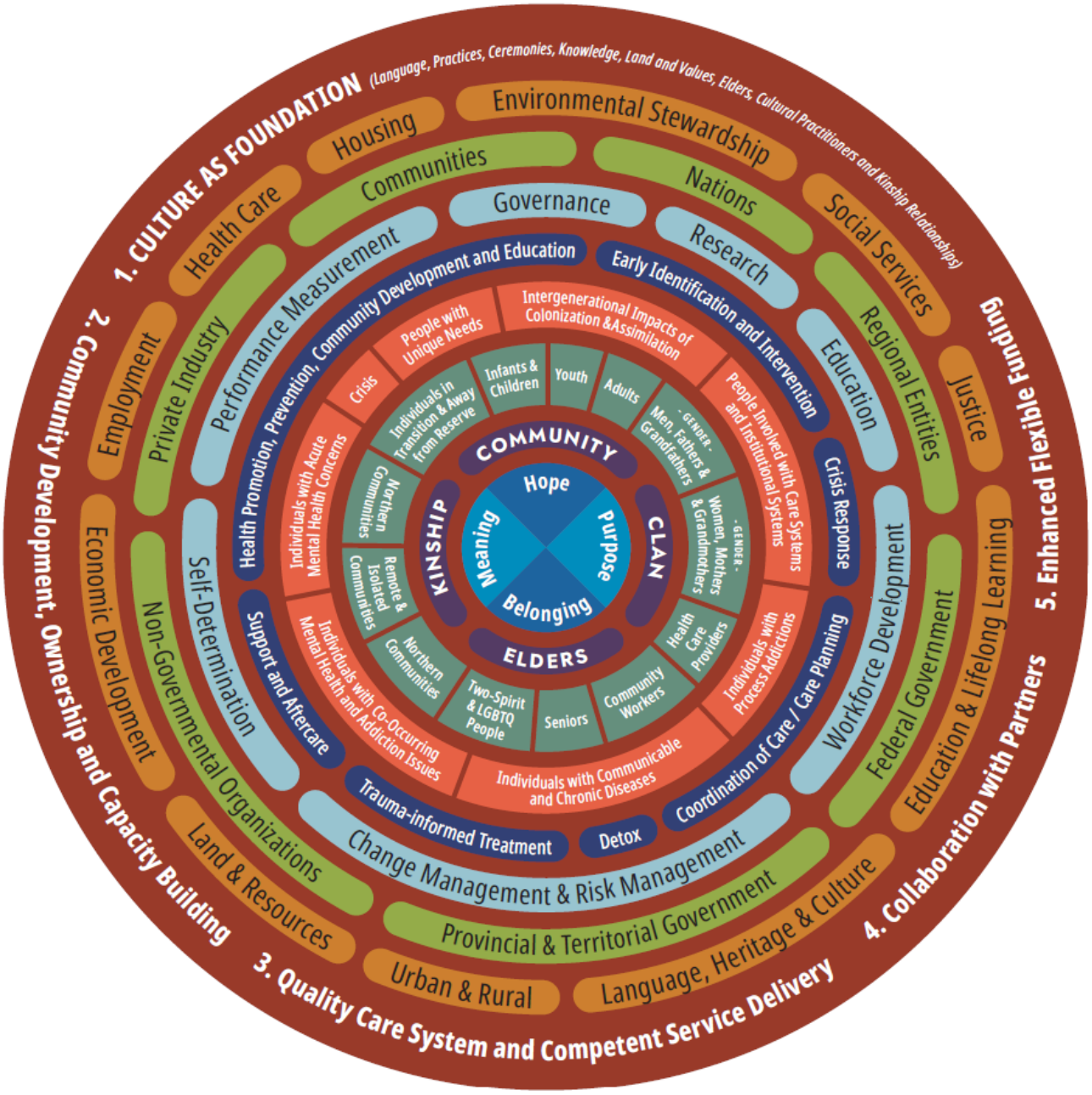
[89] World Health Organization (WHO). *Promoting mental health: concepts, emerging evidence, practice* (Summary Report) (2004). Geneva: World Health Organization. https://www.who.int/mental_health/evidence/en/promoting_mhh.pdf

[90] Health Canada. *First Nations Mental Wellness Continuum Framework Summary Report*. (2015). https://www.canada.ca/content/dam/hc-sc/migration/hc-sc/fniah-spnia/alt_formats/pdf/pubs/promotion/mental/2014-sum-rpt-continuum/2014-sum-rpt-continuum-eng.pdf

[91] Figure adapted from Keyes, C. L. M. (2005). *Mental Illness and/or Mental Health? Investigating Axioms of the Complete State Model of Health*. Journal of Consulting and Clinical Psychology, 73(3), 539-548

[92] Onkwata'karitáhtshera*. Onkwaná:ta Our Community, Ionkwata'karí:te Our Health* Volume 1. (2018). Kahnawà:ke. http://www.kscs.ca/sites/default/files/article/attachment/kahnawake_health_portrait_volume1_small.pdf

Figure 3.1. The First Nations Mental Wellness Continuum Model, which was created through teamwork between the Assembly of First Nations, the First Nations and Inuit Health Branch of Health Canada, the Thunderbird Partnership Foundation, the Native Mental Health Association, and other community mental health leaders in 2015. [93]



[93] Thunderbird Partnership Foundation and First Nations and Inuit Health Branch. The First Nations Mental Wellness Continuum Model. 2015. Accessed from https://thunderbirdpf.org/?resources=first-nations-mental-wellness-continuum-framework-2

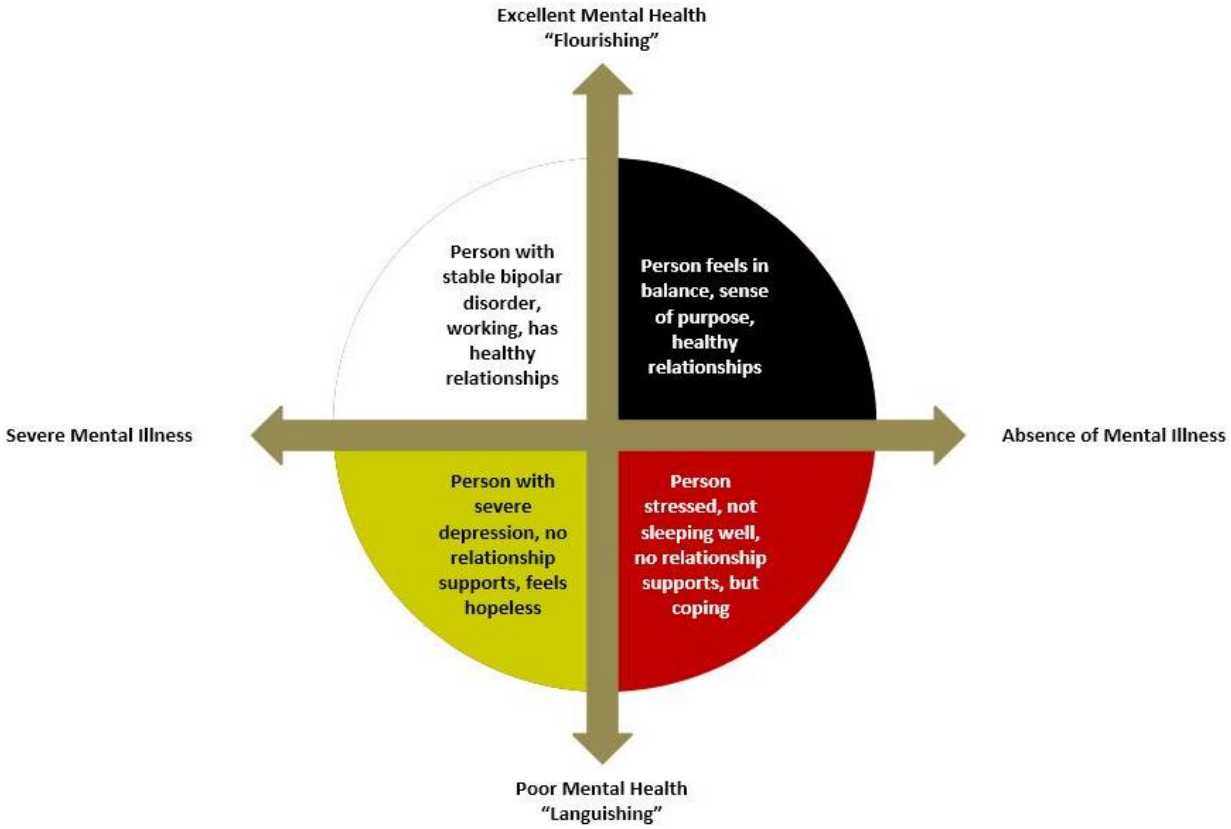
Table 3.1. First Nations Mental Wellness Continuum Model Legend, from center to outer ring

	Four directions (outcomes): hope, meaning, belonging and purpose	
	Community: Kinship, Clan, Elders; and Community	
	Populations: - Infants and children - Youth - Adults - Gender: men, fathers and grandfathers - Gender: women, mothers and grandmothers - Healthcare providers - Community workers	- Seniors - Two-spirit and LGBTQ people - Families and Communities: Remote and isolated communities, Northern communities, Individuals in transition and away from reserve
	Specific population needs: - Intergenerational impacts of colonization and assimilation - People involved with care systems and institutional systems - Individuals with process addictions - Individuals with communicable and chronic diseases	- Individuals with co-occurring mental health and addictions issues - Individuals with acute mental health concerns - Crisis - People with unique needs
	Continuum of essential services *Health promotion, prevention, community development and education – early identification and intervention – crisis response – coordination of care and care planning – detox – trauma-informed treatment – support and aftercare*	
	Supporting elements - Performance measurement - Governance - Research - Education	- Workforce development - Change management and risk management - Self-determination

Table 3.1. First Nations Mental Wellness Continuum Model Legend, from center to outer ring

	Partners in implementation - Non-governmental organizations - Provincial and Territorial governments - Federal government	 - Regional entities - Nations - Communities - Private industry
	Indigenous Social Determinants of Health - Environmental stewardship - Social services - Justice - Education and lifelong learning - Language, heritage and culture - Urban and rural	 - Land and resources - Economic development - Employment - Health care - Housing
	1. Culture as foundation - Language - Practices - Ceremonies - Knowledge - Land and values - Elders - Cultural practitioners and kinship relationships	2. Community development, ownership and capacity building 3. Quality care system and competent service delivery 4. Collaboration with partners 5. Enhanced flexible funding

Figure 3.2. Visual representation of mental illness and mental health as existing on different spectra from one another, with examples to better demonstrate these distinctions. Adapted from *Mental Illness and/or Mental Health? Investigating Axioms of the Complete State Model of Health*.



Influences on Mental Wellness

A person's state of mental wellness can be highly influenced by many factors, such as:

- One's own individual characteristics and behaviours
  - Physical activity levels and physical health
  - Mental health practices such as meditation
  - Anger management and coping skills
  - Personality traits
  - Sense of control and empowerment to direct one's life
- The effects of family dynamics and close relationships
  - Feeling supported, loved and accepted
  - Personal experiences of trauma, abuse or neglect
- The physical environment(s) one is in
  - Feeling safe in one's community
  - Access to built environments that promote wellbeing
  - Air quality
  - Sunlight exposure
  - Access to natural environments
- The social environments around individuals
  - Economic opportunities, financial difficulties
  - Sense of implication and belonging in one's society/community
  - Presence of stigmatizing attitudes
- The history and cultural context(s) the person is part of
  - Community sense of empowerment and autonomy
  - Effects of intergenerational trauma
  - Positive connection to community
  - Traditional practices
  - Spiritual wellbeing

Keeping such influences in mind, to help our community and the individual members within it to have flourishing mental wellness, we must take a balanced and holistic approach. By "balanced," we mean there is a need to focus on both promotion of protective factors and reduction of risk factors. By "holistic," we mean there is a need to consider the connections between spiritual, emotional, mental and physical dimensions of health and the relationship of individuals to the communities they are part of. There is a role for everyone in creating and maintaining the supportive social and physical environments, strengthening families and friendships, eliminating stigma, learning effective personal coping strategies, ensuring coordinated and accessible therapeutic services, and developing cohesive wellness-oriented policies within community agencies.

Measuring Mental Health & Mental Illness

Some measures of health can be recorded with physical instruments and by any observer. For example, blood pressure is measured with a cuff and a specific number is recorded; weight is measured with a scale and can be tracked over time. Similarly, some aspects of mental health of individuals and communities can also be measured, but in different ways. One of the best ways is through thoughtfully designed and validated surveys that ask people questions such as how they perceive their mental health, whether they feel a sense of belonging, or how well they sleep. We can also look at whether people feel adequately supported, their experiences of racism and their sense of control over their lives. These factors can give insight into how the mental health of a community and its members are doing, and it can also give a point of comparison to other communities, to Québec and Canada. We can use this insight to see where services might need to be adapted to specific needs in different places. In addition to survey responses, we can also use data that inform us about the number of people who seek certain medical or social services for mental illnesses, or how frequently people are dispensed medications that are most commonly used for mental illnesses like depression. Just like with blood pressure, measuring these indicators of mental health and mental illness can be useful tools to better understand the

community's strengths and challenges. Without question, these indicators must always be combined with knowledge and understanding of our community itself to fully understand the people affected and their stories of both mental wellness and mental illness.

As you read through this chapter, the Onkwata'karitáhtshera Mental Wellness and Addictions subcommittee encourages you to consider where you might contribute personally or professionally to create positive community mental wellness or to help improve the treatment of mental illness. Each year, there is a call for applications to help develop projects aimed at improving mental wellness; the subcommittee would be happy to assist in developing new ideas.

Mental Wellness

How do people in Kahnawà:ke self-rate their mental health?

On the 2015 Regional Health Survey, Kahnawa'kehró:non were asked how they would rate their general mental health (i.e. excellent, very good, good, fair or poor). Figure 3.3, on the next page, shows the responses by age group.

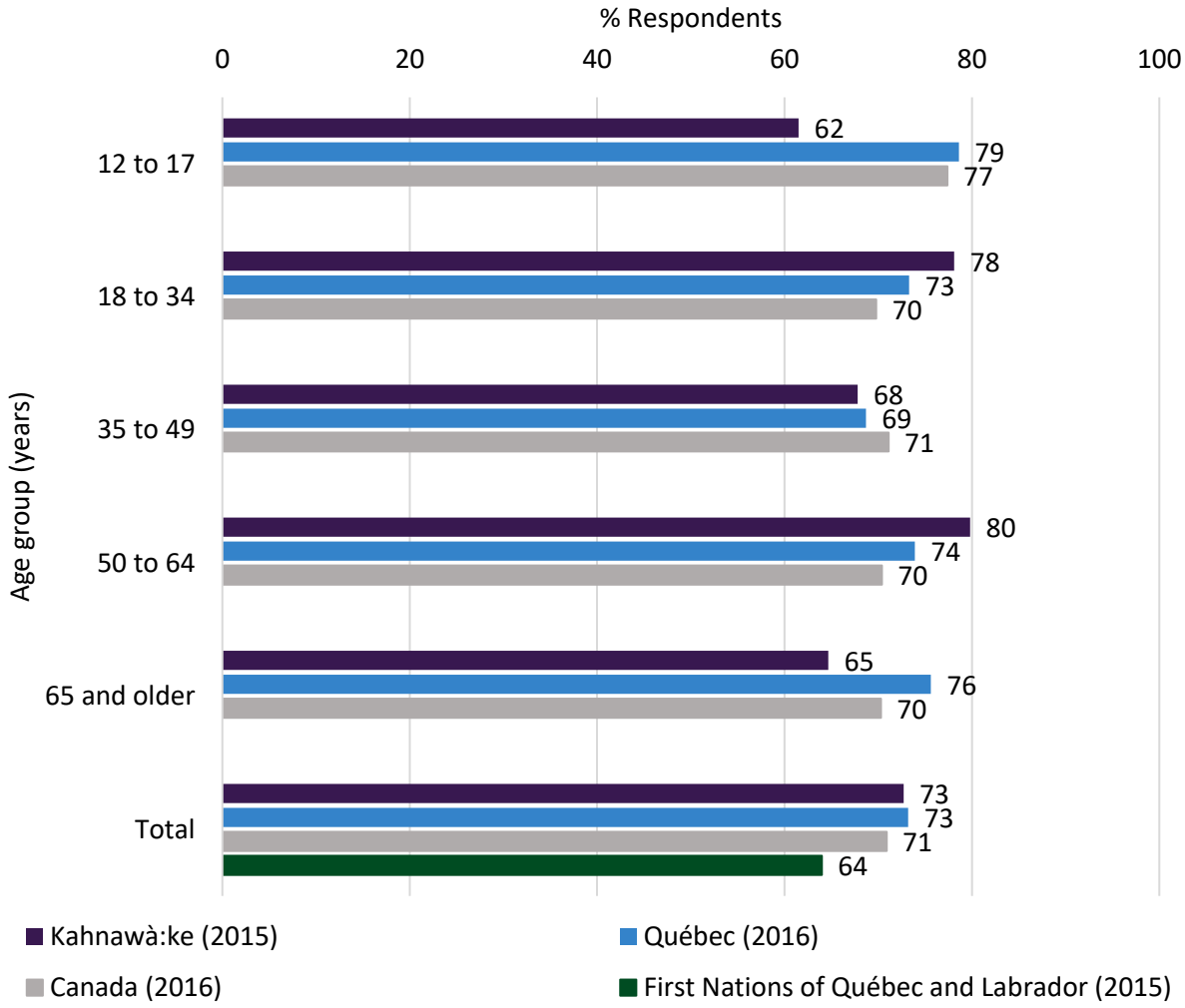
- **73% of people in Kahnawà:ke rated their mental health as excellent or very good**
  - This was higher than among Québec First Nations in 2015 (64%)[82] and similar to Québec (73.2%) and to Canada (70.9%) in 2016[81]
- The percentage of the population who self-rated their mental health as "excellent" or "very good" varied by age, with more elders and youth reporting lower ratings of their mental health compared to other ages
- Only 62% of youth (12-17 years of age) reported their mental health to be excellent or very good
  - This is lower than the overall proportion for Kahnawà:ke (as mentioned above, 73%) and lower than was reported by youth in Québec (75.4%) and youth in Canada (77.4%) in 2016
  - This was also notably less than the 74.8% reported among Québec First Nations youth from other communities in the 2008 Regional Health Survey[94] (the 2015 indicator was not available for this age group)
- Among Kahnawa'kehró:non youth, sex[95] differences were also evident: teen boys showed greater ratings of excellent or very good mental health than girls (68% vs 55%, respectively)
  - A further concerning finding was that 1 in 4 (27%) teen girls felt their mental health was fair or poor
  - More Kahnawa'kehró:non youth reported their perceived mental health as fair or poor (15%) compared to Québec (3.3%, 2016) and Canada (4.4%, 2016)[96]
- Only 65% of elders rated their mental wellness highly. This is lower than ratings reported by Québécois and Canadians in this age group (76% and 70%, respectively).
- In contrast, more Kahnawa'kehró:non adults between the ages of 18-64 years felt they had excellent or very good mental health compared to people of the same age in Québec and Canada[82]

[94] FNQLHSSC. *Québec First Nations Regional Health Survey 2008. Chapter 5 Personal well-being.* Wendake, Québec. http://cssspnql.com/docs/centre-de-documentation/chapitre-5---eng.pdf?sfvrsn=2

[95] Please see methodology section for note regarding use of biologic sex and gender in this report

[96] PHAC. Public Health Infobase. Data source: CCHS 2016. https://health-infobase.canada.ca/

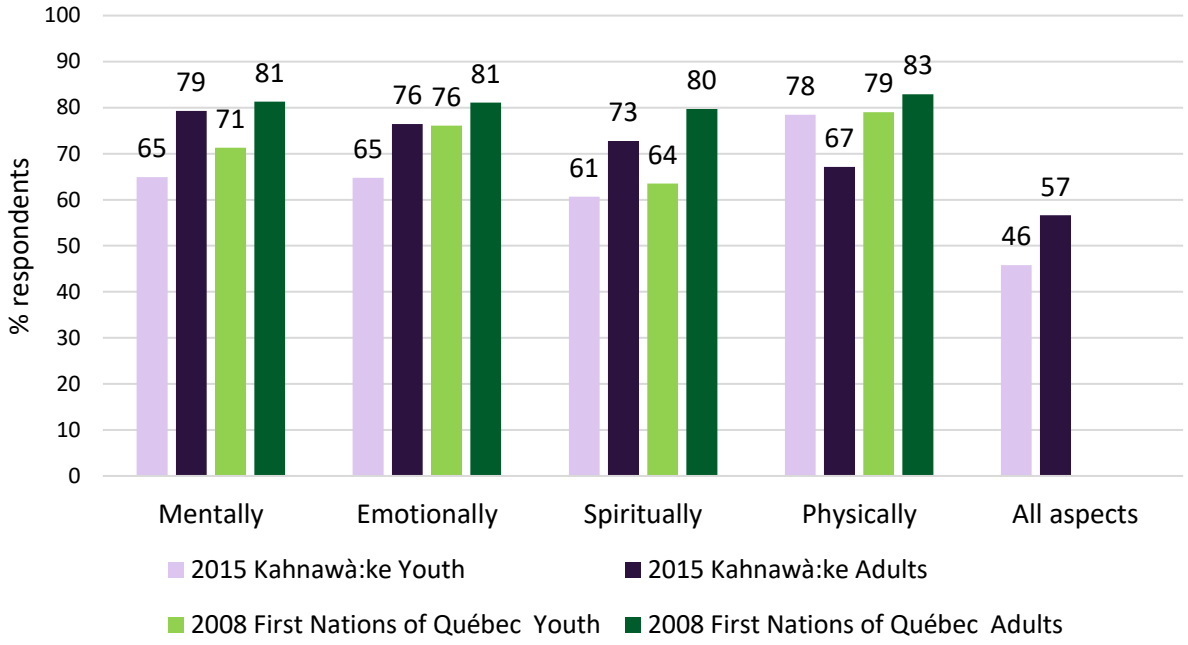
Figure 3.3. Percentage of people who self-rated their mental health as excellent or very good, Kahnawà:ke, Québec, Canada and First Nations of Québec and Labrador



Data sources: Regional Health Survey (RHS), 2015, and Canadian Community Health Survey (CCHS), 2016

Feeling in balance mentally, emotionally, spiritually and physically

Figure 3.4. Percentage of people feeling in balance "all" or "most of the time" by aspect (mentally, emotionally, spiritually and physically and in all aspects), Kahnawà:ke and First Nations of Québec



Data source: Regional Health Survey (RHS), 2015

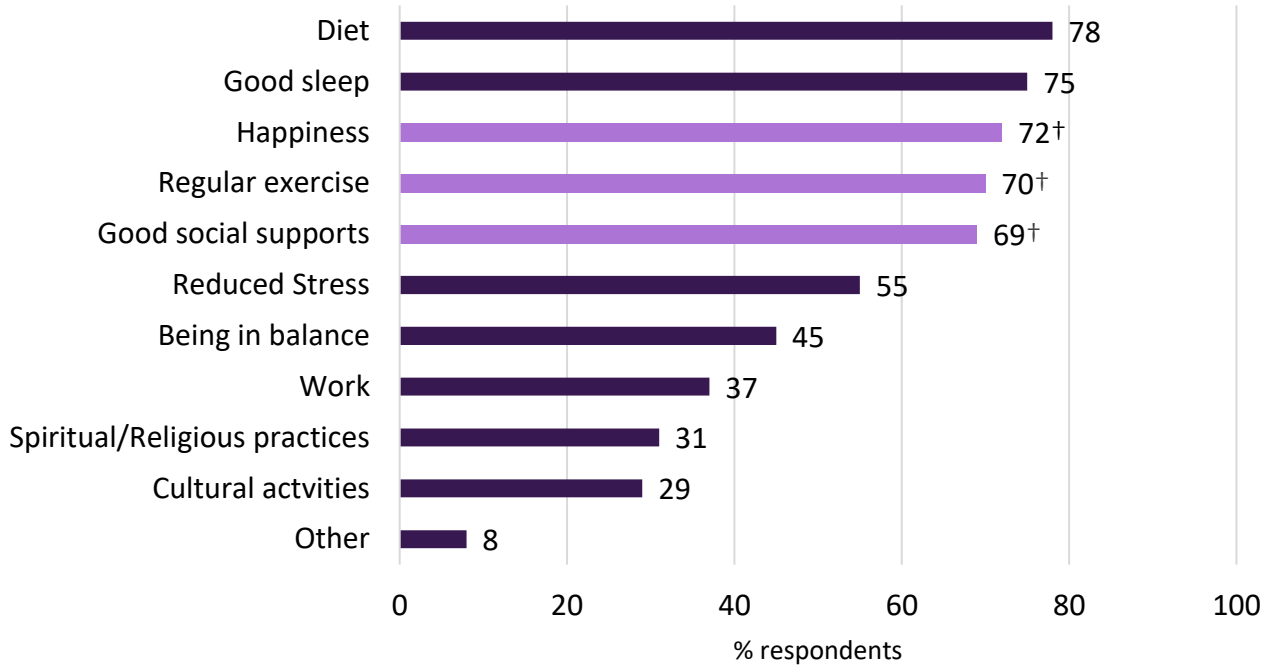
In 2015, Kahnawa'kehró:non were asked how in balance they felt mentally, emotionally, spiritually and physically (Figure 3.4).

- In the realms of mental, emotional and spiritual balance, between 61-65% of youth 12-17 years old reported they felt in balance all or most of the time. A much higher percent (78%) felt physically in balance
- Among adults (18 years and older), between 73-79% said they felt in balance at least most of the time in the mental, emotional and spiritual aspects of their lives. Only 67% felt they were in balance physically
- When asked the same survey questions in 2008, people in other First Nations in Québec generally reported higher feelings of balance in all four domains. We do not have the 2015 data for comparison to other Québec First Nations
- 56% of Kahnawa'kehró:non 15 years and older reported feeling that physical and mental health were community strengths, compared to only 36% of people in Québec First Nations who felt the same in 2015[97]

[97] FNQLHSSC. *Québec First Nations Regional Health Survey 2015: Mobility and community wellness*. (2018). Wendake, Québec.

Factors that make people feel healthy

Figure 3.5. Percentage of people 12 years and older who said the following factors make them feel healthy



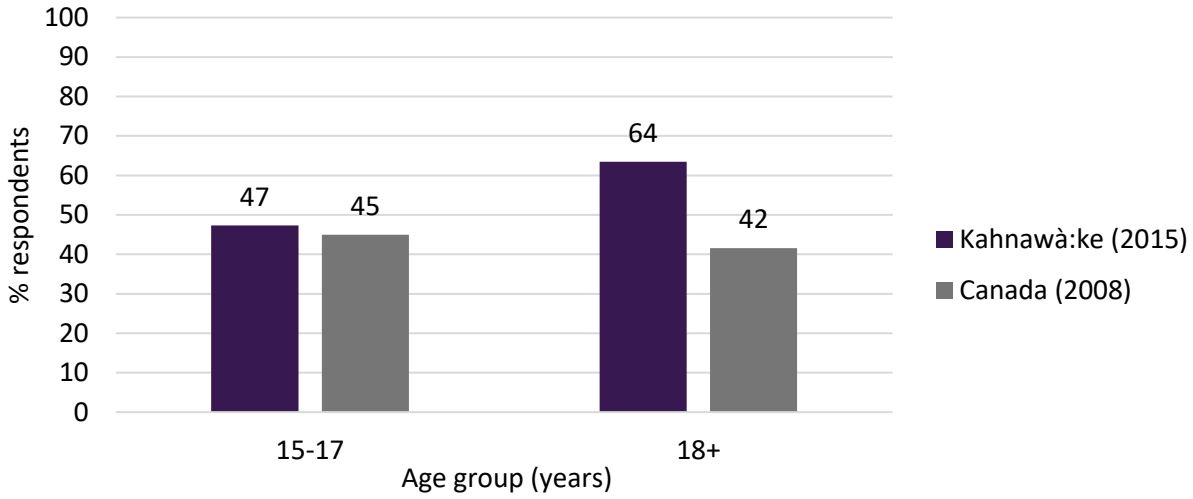
Data source: Regional Health Survey (RHS), 2015

† People who rated their mental health as "excellent" or "very good" rated these factors significantly higher than people who rated their mental health as "fair" or "poor"

When asked about their perception of what makes them feel healthy, a good diet and sleep were the most common responses (Figure 3.5). Happiness, regular exercise and good social supports were also highly rated – these three were also significantly higher among people who rated their mental health as excellent or very good, compared to people who rated their mental health as fair or poor.

Sense of control over one's life

Figure 3.6. Percentage of people who report a high level of perceived control over their life, by age group, Kahnawà:ke



Data sources: Regional Health Survey (RHS), 2015 and General Social Survey (GSS), 2008

Having a sense of control over one's life is linked to how mentally well individuals feel – responses for Kahnawa'kehró:non and Canadians are shown in Figure 3.6.[98]

Please keep in mind that for comparisons to Canada there is a seven-year difference in time (Canada has not published more recent measures since 2008).[99] Because of changes to political and economic context, it is likely that values for the general population of Canada may have changed; this data is only presented as a point of reference.

- Two thirds (65%) of adults in Kahnawà:ke reported feeling a high degree of control over their own lives
- Just under half (47%) of Kahnawa'kehró:non youth aged (15-17 years old) reported feeling a high degree of control over their lives

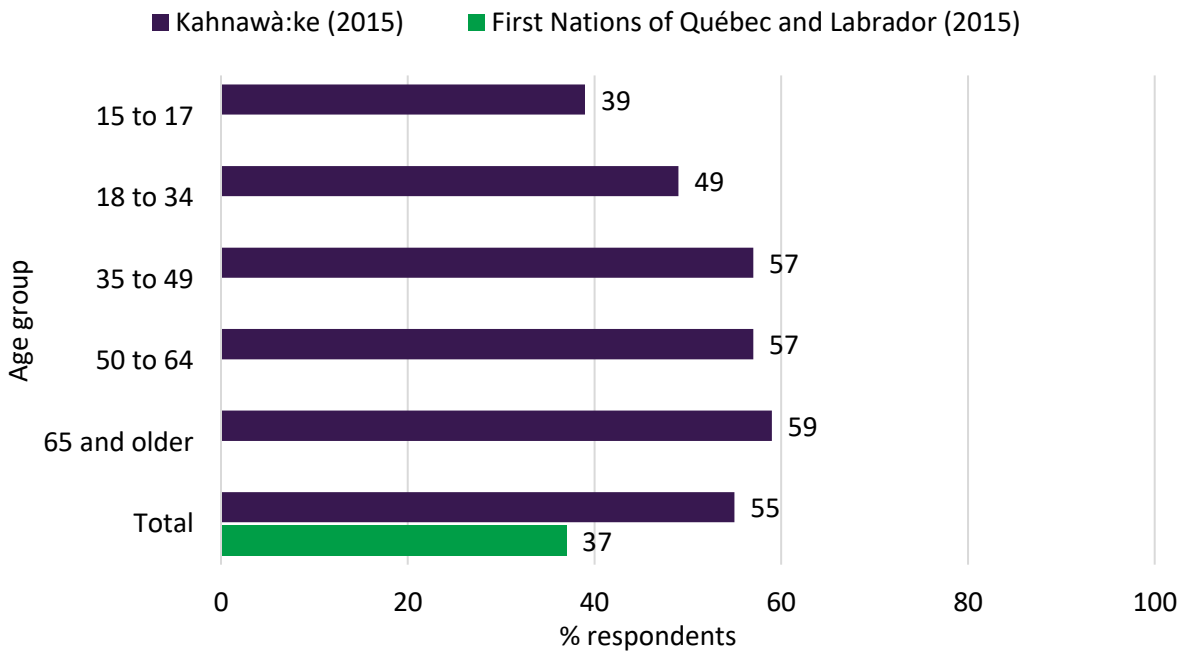
This difference fits intuitively with typical experiences of teenage years as a life phase. This is a typical time in which young people are starting to gain more independence, but nevertheless still tend to have a lot of structure applied to their lives through their families, schools and programs they may be a part of. Even so, it is possible to have structure but also a greater sense of age-appropriate personal agency. Since an important proportion of Kahnawa'kehró:non youth also reported their perceived mental health as fair or poor, we could ask ourselves how local programs and outreach could better help youth to develop a greater sense of control over their lives.

[98] Measure used: Pearlin's Sense of Mastery scale, mean score 3 or more.

[99] PHAC, Centre for Surveillance and Applied Research (2019). *Positive Mental Health Indicator Framework Quick Statistics, Canada, 2019 Edition*. Ottawa (ON): Data source: General Social Survey - Social Networks 2008 https://infobase.phac-aspc.gc.ca/positive-mental-health/

Sense of belonging to the community & social connections

Figure 3.7. Percentage of people who said they believe social connections are a community strength, by age group



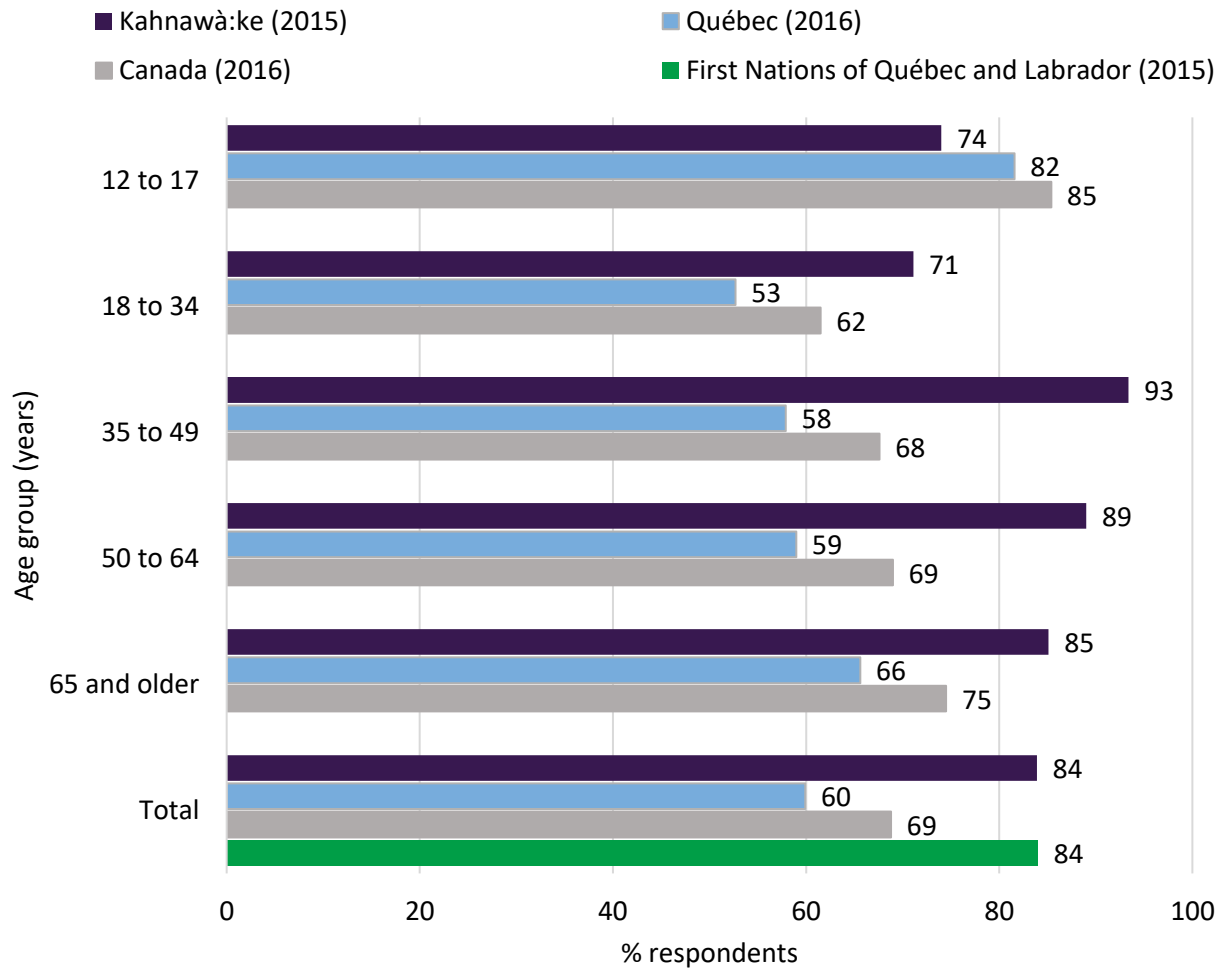
Data source: Regional Health Survey (RHS), 2015

Having a sense of belonging to the community and having social connections are also important influences on mental wellness.

According to the RHS 2015:

- 1 in 2 (55%) Kahnawa'kehró:non felt social connectedness was a community strength (see Figure 3.7, above)
  - In comparison, 1 in 3 (37%) people in First Nations communities in Québec felt the same way about their own community[97]
- This perception varied by age – it was more commonly believed among adults 35 years and older than among younger adults and among youth (15-17 years old)
- In general, adults in Kahnawà:ke rated their personal sense of belonging to the community very highly (see Figure 3.8), with 84% feeling a strong sense of belonging
  - This is much higher than for adults in Québec (60%) and Canada (69%),[81] and the same as other First Nations in Québec and Labrador (84%)
- However, fewer Kahnawa'kehró:non youth (12-17 years old) felt a strong sense of belonging (74%), lower than felt by youth in Québec (82%) or Canada (85%)
- Feeling a strong sense of community belonging was most common among adults 35-49 years old (93% of people this age)
- The percentage of women feeling a strong sense of community belonging was a little higher than men (87% vs 81%, respectively)

Figure 3.8. Percentage of people who rated their personal sense of belonging to community as "very strong" or "somewhat strong"



Data sources: Regional Health Survey (RHS), 2015 and Canadian Community Health Survey (CCHS), 2016

Availability of social supports

The variety of social supports an individual has in their life and, how accessible they find these supports, are important factors in their overall mental (and physical) wellness. The RHS 2015 has some encouraging findings in this area:

- The vast majority of Kahnawa'kehró:non reported having someone that they could count on when needed, at least some of the time, in all of the situations listed below:
  - to listen to them and to talk with them (95%)
  - to confide in (96%)
  - to help them (96%)
  - to show them love and affection (97%)
  - to take them to the doctor if they needed it (95%)
- Approximately 9 out 10 people (90%) felt that these supports were available to them most or all of the time

Youth-specific social supports

Youth (12-17 years) also reported to whom they would go for help first in a variety of possible difficult situations (e.g.: financial problems, romantic relationships, drug use). Although these were hypothetical questions put to youth, it tells us about the *perception* of social support, which is a good indicator of adolescent health and well-being. Understanding who youth feel they can trust and would help them, can give community members and agencies insight into where we can improve communication with youth and how we can try to enhance our availability and "youth friendliness" when offering support. Figures 3.9a to 3.9c describe, in detail, who youth said they would seek help and support from in several hypothetical scenarios. **In most of the situations posed, youth said they would *first* go to a parent or to a friend their age (60-70% would go to one of these two).** Depending on the situation, between 10-15% said they would *first* go to a teacher, principal, doctor, nurse, police officer or another adult.

Reports of youth having **no one** to go to when facing a difficult situation varied for each scenario. Between 6% to 13% said they would not go to anyone for help. For instance, 9% said they wouldn't seek help from anyone for problems related to birth control, and 8% said they wouldn't seek help from anyone for a physical assault.

Although a minority of youth thought they had no one to go to in each scenario, these numbers were still concerningly high. Many of the youth who didn't think they had support in one scenario felt this in multiple scenarios, indicating there is a subsection of youth who are particularly in need of supports.

- Youth were similarly likely to say they would first turn to a parent (25-35%) or to a friend their age (25-35%) for help with problems related to:
  - Drugs
  - Alcohol
  - Anger
  - Depression
  - Suicidal thoughts
  - Difficult relationships with family
  - Difficult relationships with friends
- For problems related to romantic relationships, more than 2 out of 3 youth (71%) stated that they would first go to a friend their age. A parent was the second most common person a teen would turn to (14%)
- For problems related to money, more than 2 out of 3 youth (68%) said they would first go to a parent)
- About 1 out of 2 adolescents (52%) reported they would go first to a parent for problems related to physical or sexual assault

WHERE KAHNAWÁ:KE TEENS TURN FOR HELP

Teens 12–17 years old were asked who they would seek support from in a variety of situations

Teens were most likely to rely on their **parents** first for difficulty with...

physical assault 55%
sexual assault 56%
pregnancy 40%

money 68%

Teens were most likely to go to their **friends** first for difficulty with...

romantic relationships 71%

family problems 43%
friend relationship 33%

Both **parents and friends** were most likely to be asked for help for problems with...

drugs/alcohol
36% parents/26% friends

anger friends 37% / parents 34%
depression parents 38% / friends 27%
suicidal thoughts parents 32% / friends 25%

Teens were most likely to go to their **parents or another adult** for problems with...

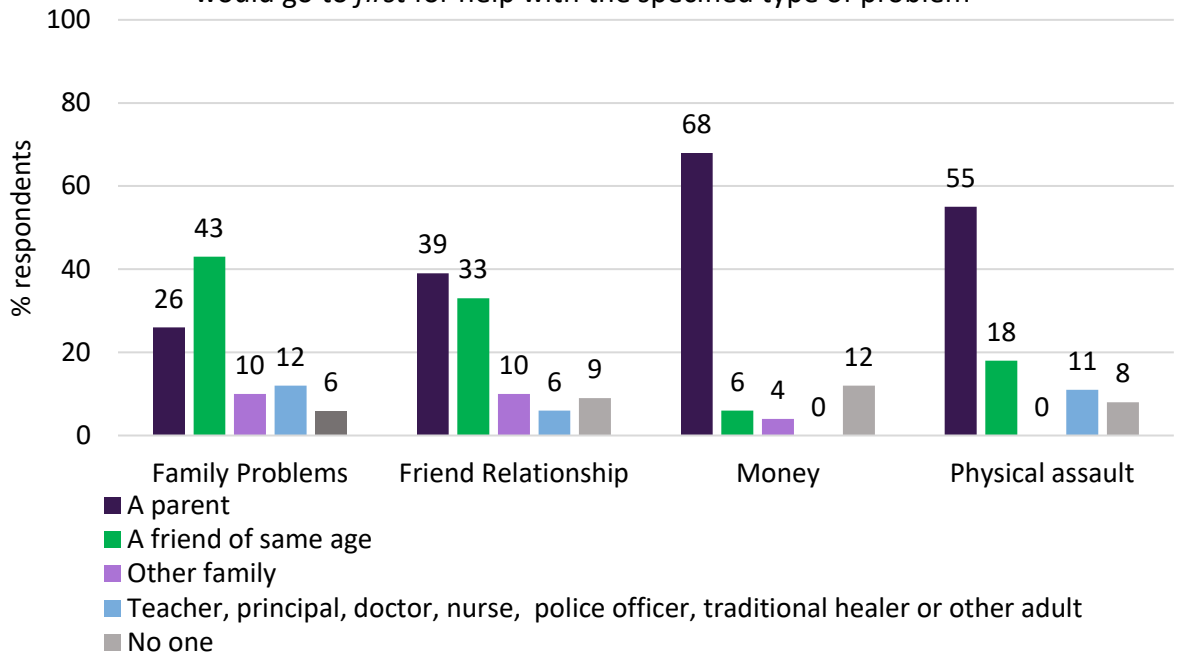
sexually transmitted infection another adult 48% / parents 35%
birth control another adult 41% / parents
pregnancy parent 40% / another adult 31%

An important minority of teens (about 10%) said they would not go to anyone for help in any of these situations.

MAKE SURE THE TEENS IN YOUR LIFE KNOW THEY CAN COUNT ON YOU

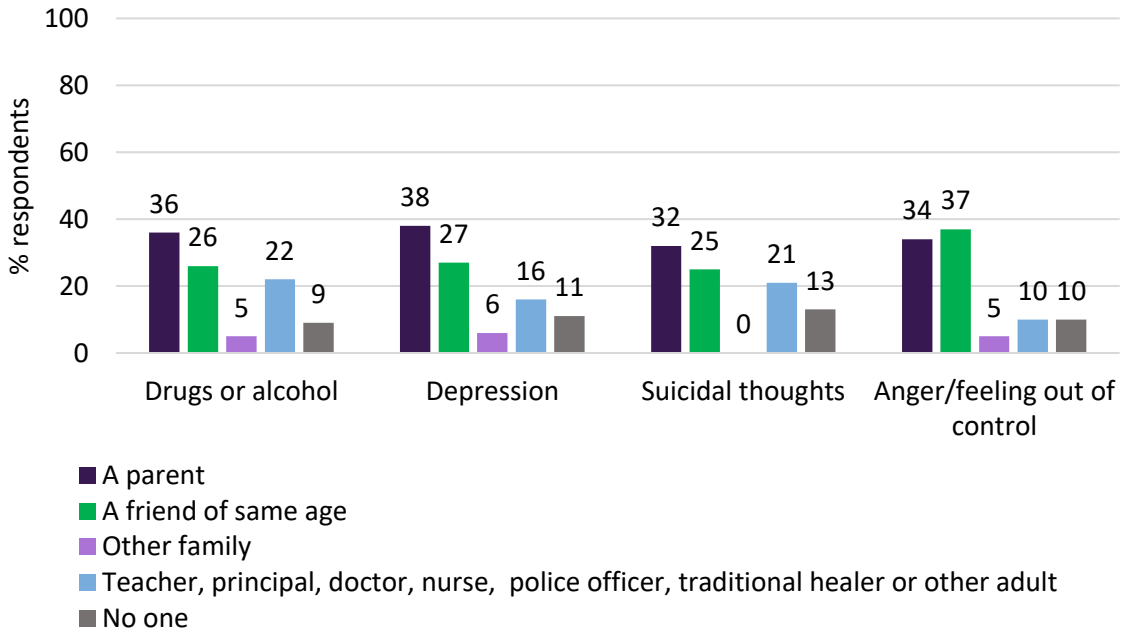
Onkwaná:ta Our Community, *Ionkwata'karí:te* Our Health
Kahnawà:ke's Health Portrait Volume 2. Data Source: Regional Health Survey, 2015.

Figure 3.9a. Percentage of youth (12-17 years) identifying whom they would go to *first* for help with the specified type of problem



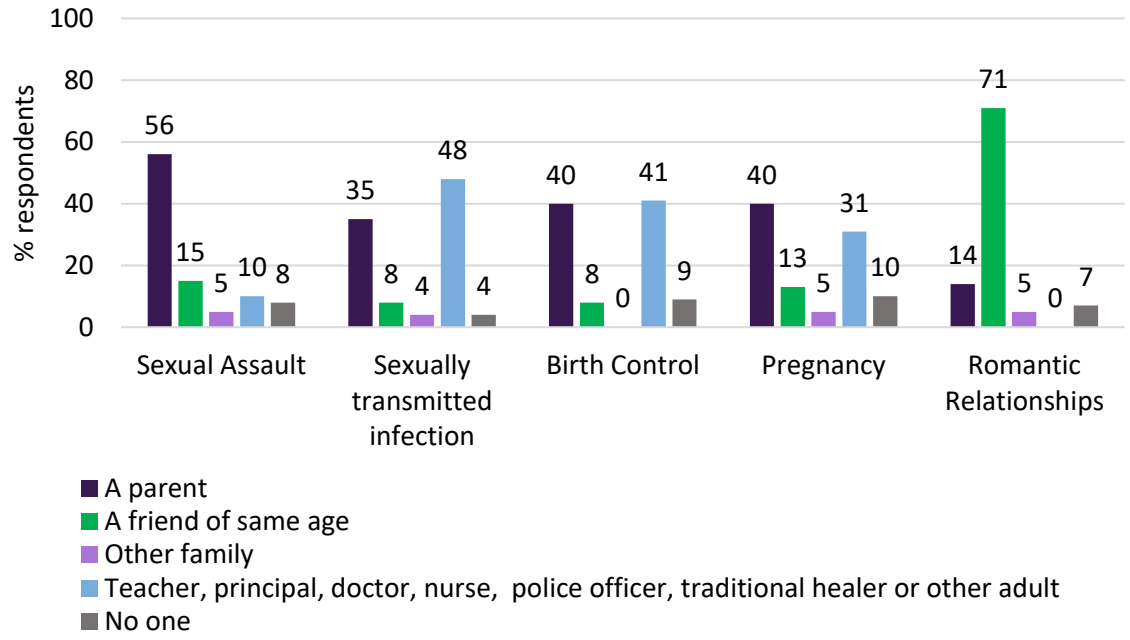
Data source: Regional Health Survey (RHS), 2015

Figure 3.9b. Percentage of youth (12-17 years) identifying whom they would go to *first* for help with the specified type of problem



Data source: Regional Health Survey (RHS), 2015

Figure 3.9c. Percentage of youth (12-17 years) identifying whom they would go *first* for help with the specified type of problem



Data source: Regional Health Survey (RHS), 2015

Social Determinants of Poor Mental Health

Although there are many factors that can be linked to poor mental health, we do not have data available for every factor we would want to know about. We are able to share what was asked about in the RHS, including experiences with residential school, with racism, with bullying, and community concerns about gangs and violence.

Residential School: personal and intergenerational experiences

The content of this section might cause triggering of some difficult or uncomfortable emotions and memories for some readers. If you find yourself in this situation, please reach out to someone you trust for support. If you find you need immediate crisis support, we encourage you to consider calling one of the following resources:

Hope for Wellness Help Line:
1-855-242-3310
Live chat: https://www.hopeforwellness.ca/

Indian Residential Schools Crisis Line:
1-866-925-4419 (English, French, Inuktitut)

KSCS Crisis Worker:
450-632-6880 (8:30-4:30 weekdays)
450-632-6505 (after hours or holidays)
Ask for the After Hours Response Worker

In Canada, the "Indian Residential School System" lasted more than a hundred years, and nearly 125,000 First Nations children attended. In Québec, the Fort George Anglican Residential School was the first to open in 1934, and La Tuque Residential School was the last to be closed in 1980. In all, there were six residential schools in Québec. Some First Nations children from communities in Québec were also sent to residential schools in other provinces.

In Kahnawà:ke, many people who did not attend residential school had to attend an "Indian Day School"; there were 11 Indian Day Schools in the history of Kahnawà:ke. Both Indian Residential Schools and Indian Day Schools were designed to assimilate Indigenous people into the general population of Canada and to eliminate Indigenous cultures and languages. Many people who attended these types of schools as children and youth experienced physical, sexual, mental, and emotional trauma. For many people, these traumas have stayed with them and greatly impacted the rest of their lives, as well as those of their children and family members. Even for people who did not personally attend residential school, knowing it had happened to others, may have led to a strong fear of possibly being taken away, a traumatizing influence that could have long-lasting impacts. There have also been many shared experiences of inter-generational trauma, as people who attended as children, grew up to be parents and grandparents. Further, there is the community level impact to consider, such as the effect on adults whose children were taken away, and this happening to whole communities at once. These direct and indirect experiences of individuals, their families and of the community can still significantly affect mental health and mental illness today.

The 2015 Regional Health Survey asked some questions about residential schools, but none about Indian Day Schools. The community will explore the impact of Indian Day Schools on individuals and on the community through the class action lawsuit launched in 2019.

Personal experiences with residential school

- 6%* of Kahnawa'kehró:non over 40 years old surveyed said they had personally attended residential school
    - This compares to 17% of adults 40 years and older of all First Nations in Québec surveyed in the 2015 RHS[100]
- In Kahnawà:ke, some participants who attended, said their overall health and wellbeing was not impacted by attending residential school, some said they were negatively impacted, and others said they were positively impacted
    - Among all participating First Nations in Québec in 2015, 33% of residential school attendees felt there had not been any impact on them, while 58% felt they had been negatively impacted, and 9%*felt that they had been positively impacted[101]
- Among Kahnawa'kehró:non 70 years of age and older, 22%* said they had personally attended residential school
    - This is similar to all Québec First Nations with 25% of elders (70 years and older) having attended a residential school (as of 2015)

Family member experiences with residential school

- 13% of adults 18 years and older said that at least one of their own parents (or guardians) had attended a residential school
    - This was most common for people who are themselves now elders (65 and older), 22% of whom had at least one parent or guardian who had attended residential school
- 42% of adults 18 and over said that at least one extended family member had attended residential school; this was more commonly the case amongst people who are now older than 65 themselves
    - 20% of adults 18 and over said at least one grandparent had attended residential school
- Among youth (12-17 years)
    - 6%* of youth said that at least one of their parents (or guardians) had attended residential school
    - 44% of youth said that at least one extended family member had attended residential school
    - 31% of youth said at least one grandparent had attended

Separation from immediate family

- 7% of adults reported that, when they were minors, they had been placed in care of a person other than one of their parents, at some point. In almost all cases, the person was another family member (kinship care).

[100] FNQLHSSC. *Québec First Nations Regional Health Survey – 2015: Indian residential schools and youth protection services*.(2018). Wendake, Québec. http://cssspnql.com/docs/default-source/ers-phase-3/pensionnats_ers_phase-3_eng.pdf?sfvrsn=2

[101] FNQLHSSC. *Québec First Nations Regional Health Survey – 2015: Indian residential schools and youth protection services*.(2018). Wendake, Québec. http://cssspnql.com/docs/default-source/ers-phase-3/pensionnats_ers_phase-3_eng.pdf?sfvrsn=2

Sense of safety and perception of violence

- Most people (97%) reported feeling safe in Kahnawà:ke, compared to 89% of First Nations individuals feeling safe in their own communities in Québec and Labrador (2015)[97]
  - 36% of people said they felt "very safe"
  - 52% said they felt "reasonably safe"
  - 9% felt "somewhat safe"
- 47% of community members (15 years and older) thought violence was an important challenge for Kahnawà:ke:
  - 36% of people felt violence was worsening in the community
  - 27% felt there had been no change
  - 30% were unsure whether any progress had been made
  - Less than 5% felt at least some progress had been made to reduce violence
  - A similar proportion of people in other First Nations communities in Québec (50%) felt violence was an important challenge for their respective communities
- More than 1 in 4 (28%) adults said they had experienced verbal aggression in the last 12 months; this is roughly 1800 adults
- 1 in 9 (11%) said they had experienced physical aggression in the last 12 months
  - Almost all adults who had experienced physical aggression had also experienced verbal aggression
- 43% of those who had experienced verbal or physical aggression said it happened to them within Kahnawà:ke
  - 26%* said it happened at home
  - 26%* said it happened at work or school
- While 1 in 5 (20%) community members (over 12 years old) reported having some type of injury in the past year, only a very small number of individuals reported these injuries to be the result of a physical assault (domestic or otherwise).

Bullying

- 33% of children (5-11 years old) surveyed had experienced bullying in the last year
- 28% of youth (12-17 years old) had experienced bullying in the last year
  - 19% of youth (12-17 years old) reported having experienced cyber-bullying in the last year
  - These bullying experiences are virtually the same as the percentages reported by other First Nations youth across Canada[102]
- 4 out of 10 (40%) Kahnawa'kehró:non youth said they would go first to their parents for support if they had a problem with bullying while about 3 out of 10 (29%) would turn to a friend their age
  - Another 1 in 10 (10%) said they would seek help from a principal or teacher and a little over 1 in 8 (13%) said they would not go to anyone for help
- 6% of adults (18 years and older) reported experiencing cyber-bulling in the last year (adults were not asked specifically about other forms of bullying)

[102] First Nations Information Governance Centre (FNIGC), *National Report of the First Nations Regional Health Survey Phase 3*: Volume Two, (Ottawa: 2018) https://fnigc.ca/rhs3report

Experiences of racism

Experiences of racism can lead to negative psychologic reactions, reduction in personal self-esteem, feelings of victimization, and stress levels that link both directly and indirectly to someone's state of mental wellness and mental illness.

First Nations people and communities have long experienced racism and exclusion, both on a systemic level and on an individual level. Systemic racism and exclusion are linked to many colonialist practices and policies; among them, forced relocation, restrictions on following a traditional way of life, the residential and day school systems, and present-day legislation that puts First Nations people at a disadvantage. The experience of colonialism is a fundamental determinant to consider when understanding a complex issue such as racism.

On the 2015 RHS, among adults, 18 years and older:

- 1 in 4 Kahnawa'kehró:non adults (25%, corresponding to an estimated 1600 people) reported having had a personal experience of racism within the last year
    - Reports of racism were similar for First Nations adults across Canada (24.2%)[103]
- Of the Kahnawa'kehró:non affected, 70% said it did not affect their self-esteem, while 27% said it had at least some effect on their self-esteem
- Among adults who had experienced racism in the last year, more than 8 out of 10 (83%) experienced it outside of Kahnawà:ke
- Also, about 1 in 4 (24%*) said they had experienced racism within the community

Perception of racism as a community challenge

- 41% of people (15 and older) thought racism was an important challenge for the community
    - Only 8% felt some improvement had been made
    - 50% felt there had been no change
    - 19% felt racism was worsening
    - 22% were unsure if any progress had been made

Perception of gang activity as a community challenge

Among survey respondents, aged 15 and older:

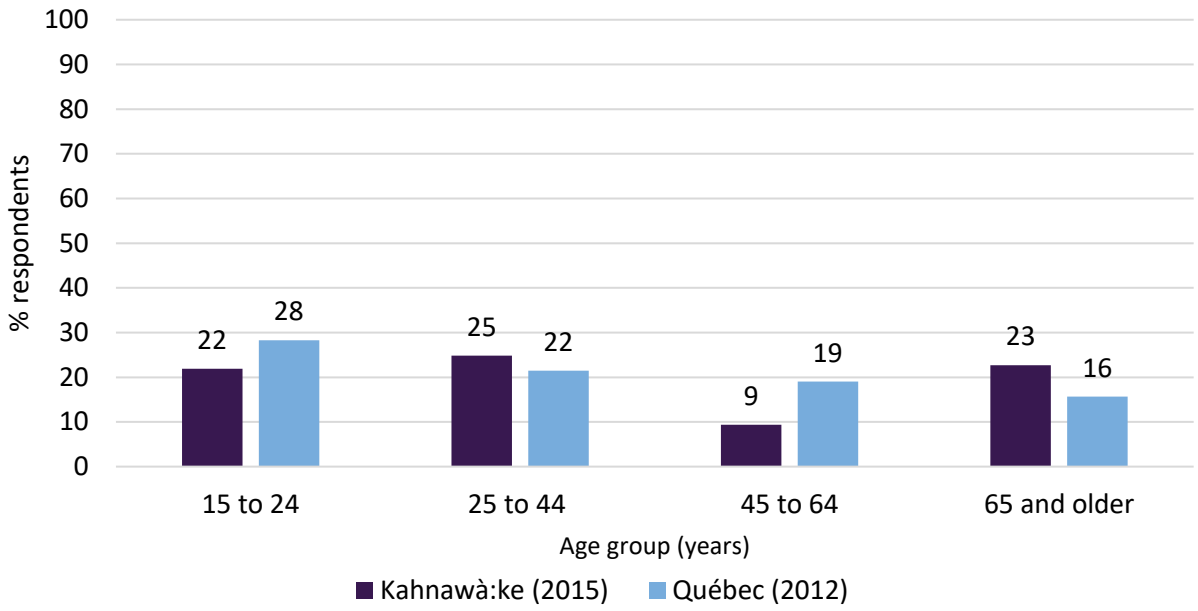
- The majority of people (70%, or about 7 out of 10 individuals) felt gang activity was <u>not</u> an important challenge for Kahnawà:ke
- Even so, about 1 in 5 Kahnawa'kehró:non (22%) thought it <u>was</u> an important challenge:
    - 31% of respondents felt no change or progress had been made with respect to gang activity in the last year
    - 18% felt things had worsened
    - 46% of people said they did not know if progress had been made

[103] First Nations Information Governance Centre, National Report of the First Nations Regional Health Survey Phase 3: Volume Two, (Ottawa: 2018) https://fnigc.ca/rhs3report

Mental Illness

Experience of psychological distress

Figure 3.10. Percentage of people indicating they feel *any* amount of psychological distress in the last month, by age, Kahnawà:ke



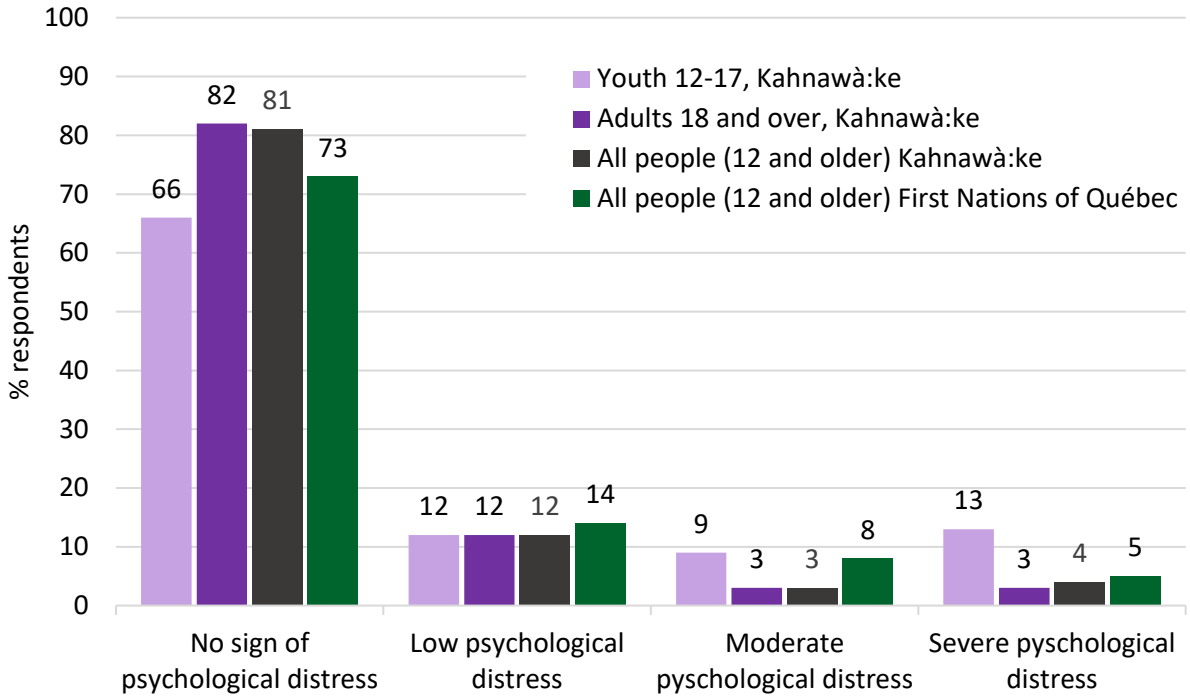
Data sources: Regional Health Survey (RHS), 2015 and Canadian Community Health Survey (CCHS),
Note: Psychological distress scores were drawn from the Kessler Psychological Distress Scale (K10) and, in this figure, refer to a score of > 9, consistent with a cut-off derived from the highest quintile of the Québec population when measured in 2002 and used as a benchmark in 2012.

The Regional Health Survey asked about individual's experiences of psychological distress through 10 questions[104] about symptoms of mental stress in the month before the survey (e.g. How often did you feel nervous? How often did you feel that everything was an effort?). In Figure 3.10, the percentage of respondents who reported *any* amount of psychological distress is shown by age, compared to the Québec population in 2012.[105]

[104] Kessler, RC et al. *Short screening scales to monitor population prevalences and trends in non-specific psychological distress.* Psychological Medicine. (2012) vol. 32, no 6, p. 959-976

[105] Baraldi, R et al. *Portrait statistique de la santé mentale des Québécois*, *Résultats de l'Enquête sur la santé dans les collectivités canadiennes – Santé mentale 2012.* Institut de la statistique du Québec (ISQ) (2015). Data source: CCHS 2012. http://www.stat.gouv.qc.ca/statistiques/sante/etat-sante/mentale/portrait-sante-mentale.pdf, cutoff score on Kessler Psychologic Distress Scale is > 9 for this comparison

Figure 3.11. Self-reported psychological distress among Kahnawa'kehró:non by age group, and among First Nations of Québec



Data source: Regional Health Survey (RHS), 2015

Note: In this figure, cut-off scores for the Kessler index are: ≤ 9 no distress, 10-14 low distress, 15-19 moderate distress and ≥20 high distress, consistent with clinical usage of the index.

Figure 3.11 shows the percentage of people in Kahnawà:ke reporting different levels of psychological distress, in relation to other First Nations of Québec (2015).[106] We see that people in Kahnawà:ke generally reported lower levels of psychological distress compared to other First Nations in Québec, except among youth.

In contrast with other First Nations in Québec, greater proportions of Kahnawa'kehró:non youth (12-17 years old), indicated moderate to severe levels of psychological distress. This is in keeping with the lower ratings of subjective mental wellness and lower sense of control in one's life reported by youth, seen earlier in this chapter. Again, it suggests that mental health interventions, supports and prevention activities adapted to youth are needed.

[106] First Nations of Quebec and Labrador Health and Social Services Commission. (2018). *Quebec First Nations Regional Health Survey – 2015: Individual wellness, mental health and elder abuse*. Wendake: FNQLHSSC.

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https://files.cssspnql.com/index.php/s/Dh423MD1Xg6FXLI#pdfviewer

Anxiety and depression

Worldwide, major depression and anxiety disorders are the two most commonly diagnosed mental illnesses for adults in every age group and across cultures.[107] Both of these issues can vary in how severe they are and how long they last; some people are affected for only weeks to months while, for others, symptoms can persist for many years and be totally disabling. Similarly, the need for treatment varies; some people recover well with talk therapies and lifestyle changes like increased physical activity, getting more sleep and connecting to their culture and traditions. For others, short or long-term medications might be an important part of getting to a better state of mental health, and for still others, hospitalization can be necessary. Many people who suffer from depression and anxiety symptoms do not seek out professional care or treatment, whether medical or social, often because of stigma they feel from those around them, or from self-stigmatization. They may also avoid health and social service professionals because of discomfort with seeking the services available to them.

Depression and anxiety disorders significantly diminish the quality of life of those affected. They can also lead to negative effects on the physical health of individuals and increase risk of suicidal thoughts and attempts. Like other mental health issues, depression and anxiety diagnoses also have repercussions on family members, friends and the broader community – these people can sometimes struggle to support someone who is severely affected by illness.

While anyone can be affected by these mental health conditions, they are more common among people who have less robust social networks, those who have experienced traumas early in their lives, and those who are facing economic disadvantages. People who suffer from mental health disorders are also more likely to face difficulties with substance use, and vice versa.

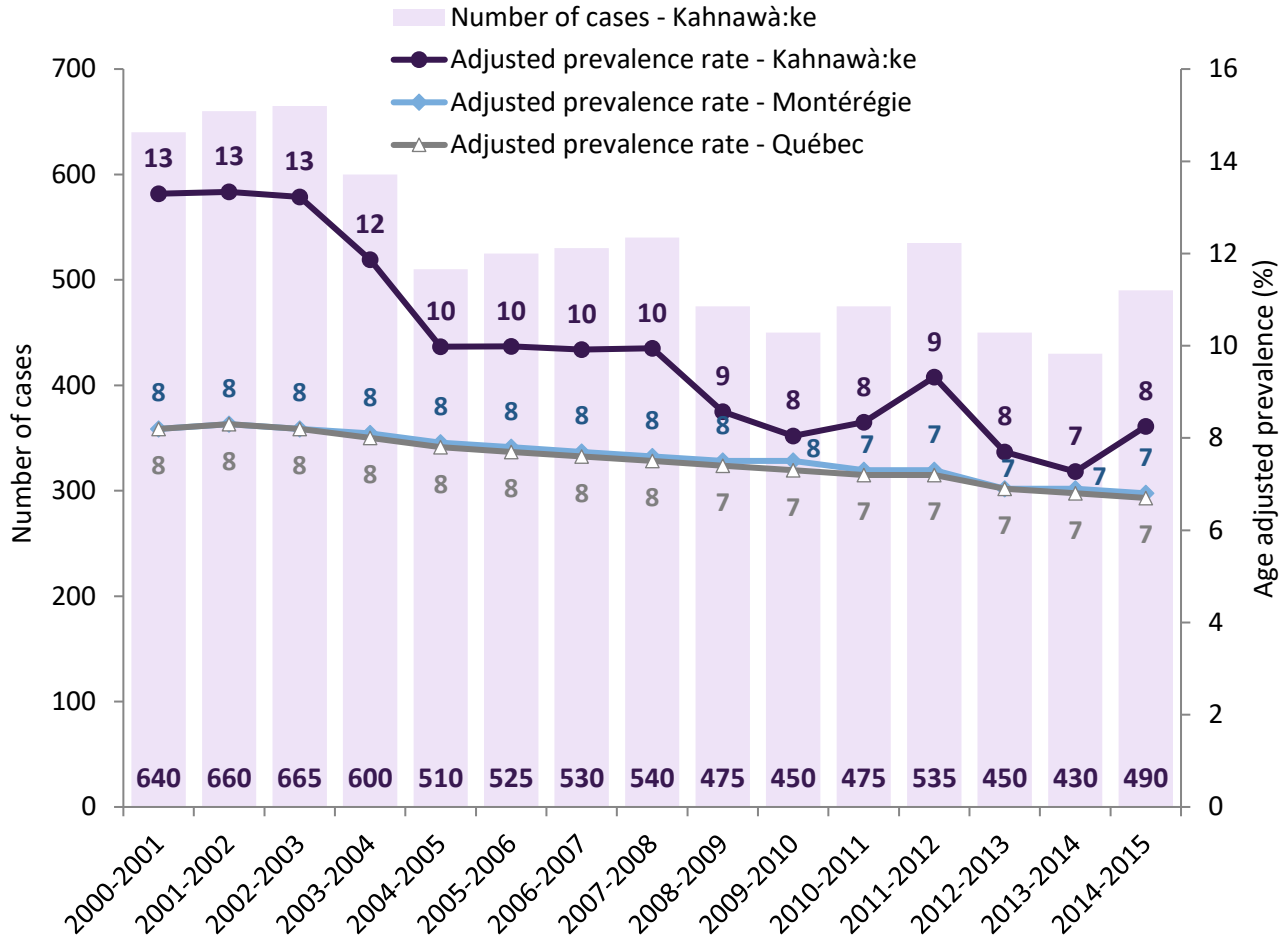
When looking at medical visits via the Québec Integrated Chronic Disease Surveillance System (QICDS/*SISMACQ*), we see that from 2008 to 2015, between 7% and 9% of people in Kahnawà:ke had a medical diagnosis of anxiety and/or depression. This was approximately 490 people total in 2014-2015. Importantly, this number and percentage decreased over the 15 years from 2000 to 2015. In 2014-2015, 150 fewer community members had a medical diagnosis of anxiety and/or depression than in 2000-2001 (Figure 3.12). Although the rate of these diagnoses is still a little higher in Kahnawà:ke than in both Québec and Montérégie, it is important to note that this gap has been getting smaller over time. This is a trend we hope to see continue, even though we recognize the major stresses related to the pandemic and other recent events are likely to have had an impact on these diagnoses everywhere.

We also need to remember that, in this data source, only people who see a medical professional will be counted. Because of this, the true numbers of people affected by depression and anxiety in any given year are likely somewhat higher in Kahnawà:ke as well as in Montérégie and Québec. The limitation of only representing medical visits also means it is possible that part of the decline seen in Kahnawà:ke could mean that fewer people are seeking out medical care rather than fewer people living with depression and anxiety symptoms. Key informants among clinical providers in Kahnawà:ke do not think this is the case, but it is a difficult thing to know for sure.

[107] WHO. *Depression and Other Common Mental Disorders: Global Health Estimates* (2017). Geneva. https://www.who.int/mental_health/management/depression/prevalence_global_health_estimates/en

We believe there was a true decline and that it could be indicative of improved community support, prevention activities, healing from prior traumas and better socio-economic opportunities (e.g. income, employment, and education). Unfortunately, many of these services have met unprecedented challenges since the onset of the COVID-19 pandemic, and the community need has also increased as individuals and families experienced significant stressors. There will be work to do for a long time to come as we continue to recover from this unparalleled event.

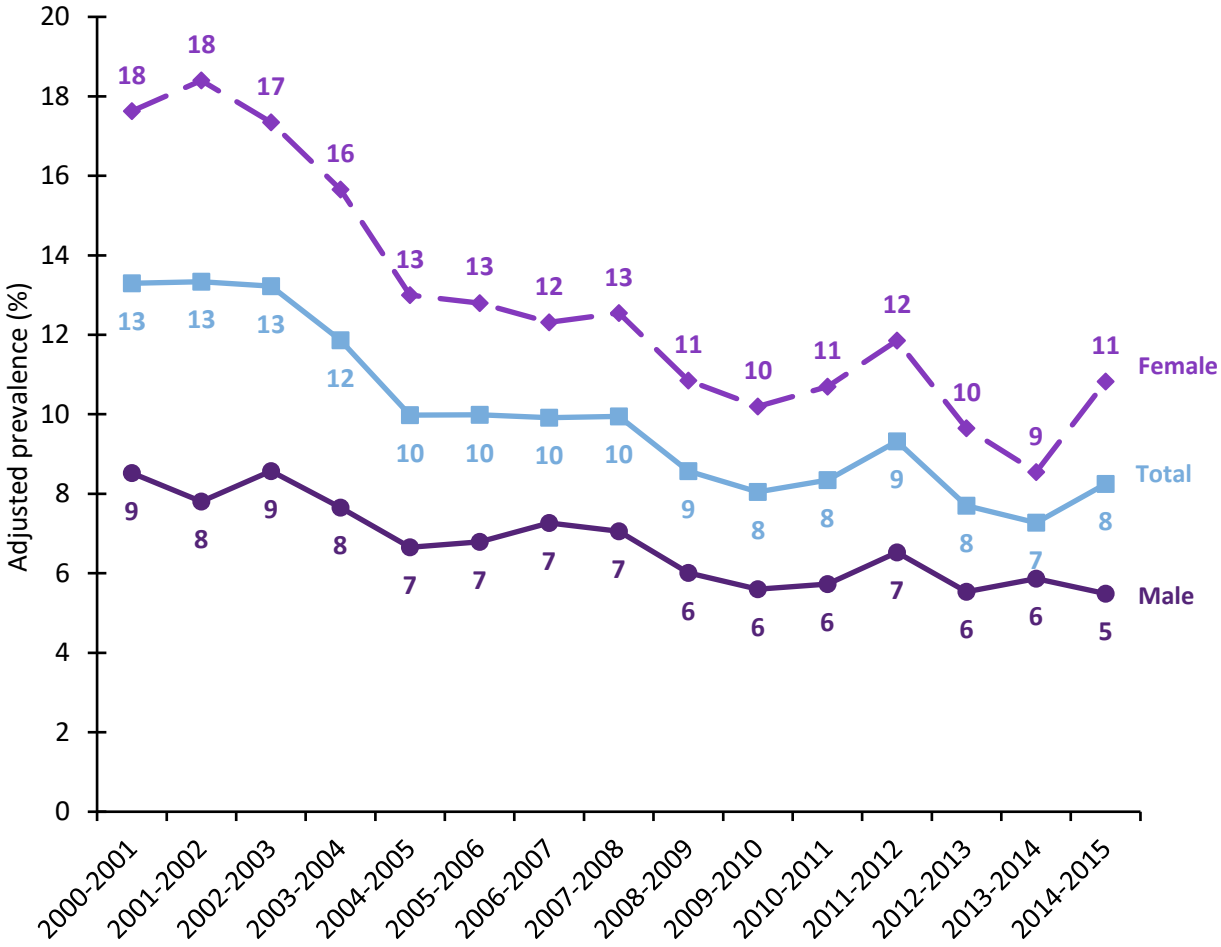
Figure 3.12. Percentage and number of people with a medical diagnosis of anxiety and/or depression in Kahnawà:ke, Montérégie and Québec 2000-2001 to 2014-2015



Note: Figure is age-adjusted and inclusive of the population 1 year old and older
Source : INSPQ, Système intégré de surveillance des maladies chroniques du Québec (SISMACQ).
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, février 2017.

Differences in experiences of anxiety and depression by biological sex and between genders

Figure 3.13. Percentage of people in Kahnawà:ke with a medical diagnosis of anxiety and/or depression by biologic sex, 2000-2001 to 2014-2015



Note: Figure is age-adjusted and inclusive of the population 1 year old and older
Source : INSPQ, Système intégré de surveillance des maladies chroniques du Québec (SISMACQ).
Data availble in the SISMACQ system did not allow for non-binary sex identifiers
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, février 2017.

We also see that females have higher rates of anxiety and/or depression diagnoses than males in every year – in fact, almost double (Figure 3.13). This gap is persistent despite steady declines in rates for both sexes over time. This difference between males and females is mirrored in other populations and seen all over the world. This sex difference is not seen in other mental illnesses like schizophrenia and bipolar disorder, which are thought to have a greater genetic component.[108] We should ask ourselves why females would experience depression and

[108] World Health Organization. *Gender disparities and mental health: The Facts.* https://www.who.int/mental_health/prevention/genderwomen/en/

anxiety problems so much more often than males, and what we might do locally to change this. For example, do women experience different social circumstances and social expectations that may have greater impacts on their mood? It is clear that over many years of recent history, women have experienced more domestic violence, suffered systemic disempowerment, had fewer career opportunities and faced many other social injustices, all of which may contribute to higher rates of depression and anxiety among women. These social determinants of mental health and mental illness that are intertwined with gender and biological sex are seen across the world to varying degrees.

Seeing the biological sex-based differences in depression and anxiety diagnoses in Kahnawà:ke is particularly striking when we consider the traditional roles played by women as respected leaders in the community and in families. This discrepancy may speak to the ongoing impacts of colonialism. We should look for action we can take locally to improve women's social determinants of mental health at all ages and promote protective factors for well-being.

In addition to the social determinants of mental health tied strongly to gender, biological sex and the experiences of women, a portion of the differences could be related to variation in access to and use of medical care according to sex. One example might be post-partum depression (a type of depression that occurs after giving birth when both biological factors, like hormone changes, and social factors, like decreased sleep and increased stress, may be at play simultaneously). Because moms are often going to the clinic to help ensure their baby is healthy and growing well, there are many opportunities for her to explain to a health care provider if she is not feeling well emotionally. Kahnawà:ke's community agencies have also taken action to better screen for and address this specific type of depression. Dads, in contrast, typically do not undergo this type of screening and even though many do come to the clinic with their babies, moms quite often come alone.

Even outside of the context of post-partum depression there has been long-standing recognition of unintentional biases of health care providers in diagnosing depression and anxiety in women more often as compared to in men with similar symptoms.[108]

Still another reason to account for part of the sex difference seen in anxiety and depression diagnoses, is that some men may be less willing to seek out health care for mental health concerns. This could be related to social expectations around "being a guy," another way that gender and biological sex can both be social determinants of mental health. Some men may instead suffer in silence, while others may turn to unhealthy coping mechanisms such as outbursts of anger, alcohol or substance misuse. This hesitancy to seek care could also be related to social roles and expectations that men were raised with, and their perceptions of stigma.

Here too we should ask-- how can we adapt local services to ensure the men of the community feel free and comfortable to seek mental health care?

We recognize there is a notable deficit in detail in this section, as non-binary definitions of biological sex have not been included. Gender and sex are also conflated with one another, despite being distinct concepts. This is a limitation that has been built-in to the way statistical information has been collected and classified historically (since we are looking at a time period starting over 20 years ago in 2000).

We have seen it in other areas of this report, as well as the first volume of *Onkwaná:ta* Our Community, *Ionkwata'karí:te* Our Health. It is an important reminder that numbers are helpful, but never represent the full spectrum of experiences. While the way data has been collected for years limits our ability to quantify the gaps in experience for a diverse set of people, we can still rely on the stories of people (qualitative information) to know that the experience of depression and anxiety has often been much more pronounced among people who self-identify in a way that is diverse from these binary classifications. Similarly, neither self-identified gender nor sexual orientation could be considered in looking at these diagnosis rates. We hope to work with our various partners towards more inclusivity in health-related data as we move forward. Community agencies have already been taking steps to improve the services they provide to people in a way that is inclusive of the spectrum of identity and expression.

Life-time experiences of depression and anxiety

In contrast to the above rates, which show an active medical diagnosis of anxiety and/or depression in any given year, the Regional Health Survey asked participants questions about their lifetime experiences of mental illnesses (i.e.: including people who may now feel well, or who never sought medical care). These responses are reported below.

Among adult survey respondents

- 6%* of adults said they had been told they had a mood disorder at some point in their lives (depression is the most common mood disorder, but there are others, like bipolar disorder), corresponding to an approximate total of 405* adult community members
    - 2 out of 3 of these people said they were currently undergoing treatment for a mood disorder. This represents about 4%* of all adults, or about 235* people altogether
- 9%* of adults said they had been told they had an anxiety disorder at some point in their lives, corresponding to an approximate total of 565* adult community members
    - About 1 in 2 of these people said they are currently undergoing treatment for an anxiety disorder. This corresponds to about 4.5%* of all adults, or roughly 285* people altogether
- 4% of adults said they had been told they had <u>both</u> anxiety and depression at some point in their lives. This corresponds to about 230* adults
- 87% of adults said they had never been told they had an anxiety or a mood disorder

Though these survey questions look at a different time period and specific experience, we still see they paint a similar overall picture of how depression and anxiety affect people in the community.

In youth survey respondents (12-17 years old)

- 9%* of youth had ever been told they had a mood disorder, corresponding to about 45* individuals
    - This was similar to youth in other First Nations in Québec (7% in 2015)[82]
    - Almost none of the youth in Kahnawà:ke, who said they had been diagnosed with a mood disorder, reported currently receiving treatment
- 10%* of youth had ever been told they had an anxiety disorder, corresponding to a total of about 50* youth
    - This is similar to youth in other First Nations of Québec (9% in 2015)
    - Almost none of the youth in Kahnawà:ke, who said they had been diagnosed with an anxiety disorder, reported currently receiving treatment
- 6%* of youth had been told they had <u>both</u> anxiety and depression at some point

- Much like the pattern found among adults, 82% responded they had never been told they had an anxiety or mood disorder

What we learn from these responses is that there is a relatively large number of youths who are struggling with mental health conditions and who don't seem to be accessing mental health care therapies and treatments. One possible cause for this could have been how youth specifically interpreted "treatment" when answering the survey. If they were more likely to have thought of "treatment" as equal to "medication," the survey may not have captured treatments like counselling through school and participation in group activities.

We also must consider that this may be a true reflection of greater barriers for youth in getting mental health care. We should carefully listen to what youth have to say about what they experience and evaluate our care processes to see if we can find ways to reduce or work around potential barriers to care. For instance, are there adequate programs and interventions for the early identification of mental health problems in schools? Do youth have access to transport to care when needed? Does the timing of available services fit around school schedules? Are we able to provide access to community-based services where young people can feel comfortable and safe discussing issues regarding mental health? Is the experience of stigma around mental health issues different at this age? Gathering other types of information, such as through focus groups and talking to key health providers, may help us better understand how to adapt preventive programs and treatment services to youths' needs.

Treatment of Mental Health Issues

Perceived need for mental health supports

- In 2015, about 1 in 3 (34%) Kahnawa'kehró:non (aged 12 years and older) said they had felt a need to see or talk to someone on the phone about their mental or emotional health in the last 12 months
  - Most of these community members had connected with a friend (71%) or family member (61%)
  - About 1 in 3 (28%) had contacted either a doctor, mental health worker or social worker
  - About 12% contacted a traditional healer

Use of KSCS Psychological Services (including external services accessed through KSCS)

Due to some changes in how KSCS services are organized over the last few years, it is difficult to gather precise numbers to tell us how many people have been seeking counselling, psychology assessments or other social services aimed at treating depression or anxiety. Work is being done within the organization so that, in the future, it will be able to better track how services are used, and whether these services are meeting the needs of the community.

Table 3.1. Number of people having accessed psychological services through KSCS, by year and sex

	2017-2018	2018-2019
Total	186	310
Female	128 (69%)	201 (65%)
Male	58 (31%)	109 (35%)

In the 2017-2018 fiscal year, 186 people had sought psychological services via KSCS (see Table 3.1). This number rose to 310 in 2018-2019 (about a 66% increase). These numbers include people that were referred to counsellors or psychologists internal to KSCS, as well as external to KSCS but still paid for via Non-Insured Health Benefits. Not included are people who paid directly themselves to see a private counsellor or psychologist, or those who might have insurance for this through their workplace. These numbers are also not specific to depression and anxiety, although these are among the most common reasons people sought services through KSCS; some of these people have sought services for other needs, such as grief, anger management or attention deficit disorder. Nonetheless, it gives us a good sense of how many community members are struggling with mental health issues on a daily, weekly, and monthly basis. In both years, we see approximately two-thirds of clients were female, consistent with the biological sex differences seen earlier in the report.

Although there is limited data, it remains striking that, despite numbers of between 430 to 535 individuals per year having a medical diagnosis for depression or anxiety in the most recent years (see Figure 3.12), not even half of this number appeared to seek psychological services through KSCS in 2017-2018.

The higher numbers in 2018-2019 might indicate improved accessibility to this type of care, and if they are maintained in the longer term, would seem to indicate that somewhere around one half to two-thirds of people with medical diagnoses seek local psychological care services.

The Community Perception and Satisfaction survey conducted by KSCS in early 2019 is aimed at giving the organization further insight into ways they may improve the accessibility of services, and the approaches used.

Home and Community Care Mental Health Nursing

The number of clients followed by mental health nurses through Home and Community Care Services is shown in Table 3.2. Many of the patients followed by homecare mental health nurses are individuals with persistent and severe mental illnesses. Crisis intervention and prevention are common services for this group of clients. The service also receives a steady number of short-term referrals for such issues as depression, anxiety, adjustment disorder & post-partum depression.

The service notes that many of the clients followed by the mental health nurses may be "discharged" and "readmitted" to care throughout the year, sometimes linked to the client's state of readiness to participate in care.

Table 3.2. Number of new referrals to, and clients followed by, mental health nurses per year.

	2016-2017	2017-2018	2018-2019
New referrals	21	19	14
Clients followed	54	54	55

Medical treatment with antidepressant medications and anti-anxiety medications

For many people suffering from anxiety, depression and other mental illness, medication can be an important part of getting well. Some people use these medications for a short period of time, while others may use them for many years. There are also many different types of antidepressant medications. In addition to being used for both anxiety and depression (like Sertraline/Zoloft or Bupropion/Wellbutrin), some of these medications can also have a role in treating other mental illnesses such as attention deficit disorder, post-traumatic stress disorder and obsessive-compulsive disorder. Because of the way they work, quite a few of these medications can also be used to treat other health conditions outside of mental health, particularly conditions that affect nerves. These other conditions include: insomnia, chronic pain, neuropathic (nerve) pain from diabetes, hot flashes in menopause,smoking cravings and fibromyalgia.

Table 3.3 shows the total number of individuals who received various antidepressant medication prescriptions in 2015 under the Indigenous Services Canada NIHB insurance program. In 2015, a total of 727 individuals received a prescription for one or more of these antidepressant medications, where some received more than one medication in the course of the year. Of those who claimed any of these medications, 2 out of 3 were female and 1 out of 3 were male. This is in keeping with the biological sex difference we have seen in the other data presented here.

A recent study of electronic medical records in Québec done over a 10-year period estimated that **only about 55% of antidepressants that were prescribed were given specifically to treat depressive disorders and 18% were used to treat anxiety disorders.**[109]

If we were to assume that the antidepressants dispensed to people in Kahnawà:ke in Table 3.3 were being prescribed in patterns similar to what was seen in this 2016 Québec study, it would mean that of the 727 individuals who received one of these medications in 2015, about 460 people would have received it for

[109] Wong J, Motulsky A, Eguale T, et al. *Treatment indications for antidepressants prescribed in primary care in Québec, Canada, 2006-2015*. JAMA. (2016). 315(20):2230-3

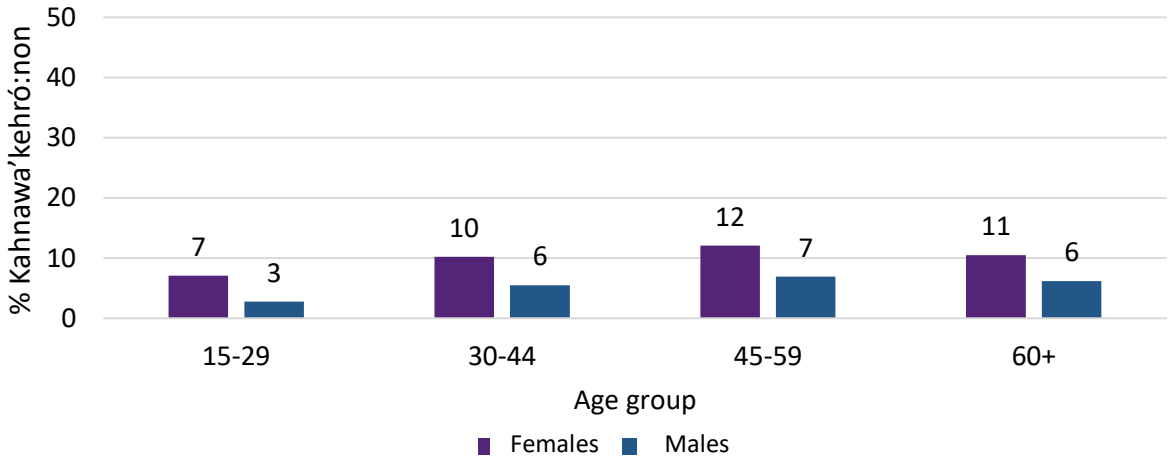
the purpose of treating depression and/or anxiety. This compares to 490 people in 2015 having a medical diagnosis of depression or anxiety, as we saw earlier in this chapter (Figure 3.12). Seeing this rough matching of source of data with another shows how multiple sources of information triangulate to give us a clearer overall portrait of how the community is doing.

Figure 3.14 shows the percentage of band members (registered with Indigenous Services Canada) in different age groups who received a prescription for an antidepressant in 2015 broken down by sex in each age group. We see higher percentages of females receiving prescriptions compared to males at all ages. We see the highest percentages of people of both sexes receiving prescriptions between the ages of 45-59.

Table 3.3. Common Antidepressants/Anti-anxiolytics dispensed to Kahnawà:ke band members under Indigenous Services Canada's Non-Insured Health Benefits program, 2015

Generic Name	Brand Name(s)	Distinct claimants	Common Medical Uses
Citalopram	Celexa	151	Depression, obsessive compulsive disorder, generalized anxiety, panic disorder, hot flashes, pathological gambling
Escitalopram	Cipralex	28	Depression, generalized anxiety, panic disorder
Paroxetine	Paxil	73	Depression, generalized anxiety, panic disorder, social anxiety, hot flashes
Sertraline	Zoloft	41	Depression, generalized anxiety, panic disorder, post-traumatic stress disorder, obsessive compulsive disorder
Fluoxetine	Prozac	34	Depression, generalized anxiety, panic disorder, fibromyalgia, eating disorder, obsessive compulsive disorder
Venlafaxine	Effexor	139	Depression, generalized anxiety, panic disorder, social anxiety, hot flashes, attention deficit disorder
Duloxetine	Cymbalta	34	Depression, generalized anxiety, neuropathic pain, fibromyalgia
Amitriptyline	Elavil	122	Depression, neuropathic pain, chronic pain, fibromyalgia, insomnia
Bupropion	Wellbutrin, Zyban	67	Depression, anxiety, smoking cessation (Zyban)
Mirtazapine	Remeron	29	Depression, insomnia, anorexia
Trazadone	Trazorel	140	Insomnia (majority of use), depression

Figure 3.14. Percentage of Kahnawa'kehró:non with at least one antidepressant prescription reimbursed by NIHB in 2015, by biologic sex



Data source: Non-Insured Health Benefits claims (NIHB), 2015

Sedatives – a specific type of anti-anxiety medication

Benzodiazepines are another class of medications that are commonly used in the treatment of anxiety disorders, particularly for panic attacks and for generalized anxiety disorder. They are also frequently used to treat insomnia (severe sleep difficulty), though not always the first-line treatment for this. In addition, they can be used to treat seizures, and in some circumstances, to sedate aggressive individuals (e.g.: due to acute psychosis or very advanced dementia) and for reducing symptoms of alcohol withdrawal.

Benzodiazepine medications all have some potential to lead to physiologic dependence when used repeatedly, to be abused, and to cause overdose (alone, or, more commonly, in combination with other medications, illicit drugs or alcohol). These medications are also sometimes sold illegally, whether originally obtained from a prescription or manufactured illegally.

The following information about prescription benzodiazepine use in Kahnawà:ke comes from the Non-Insured Health Benefits (NIHB) database. It is not possible to tell directly from the NIHB data, the reason(s) for which the medication was prescribed, or even if it was taken at all; only that the medication was prescribed and then dispensed by a pharmacist.

Table 3.4 shows the most common benzodiazepine medications and the number of people who received one of these medications in 2015:

- The percentage of Kahnawa'kehró:non dispensed at least one benzodiazepine via NIHB, has been stable at around 5.9% in any given year between 2011 and 2015
    - This has been about 1.0-1.5% lower than in other First Nations within Québec
    - In 2015 in Canada, 10% of people (15 years and older) reported using sedative medications,[110] with 3% of

[110] Statistics Canada. *Canadian Tobacco Alcohol and Drugs (CTADS): 2015 summary* https://www.canada.ca/en/health-canada/services/canadian-tobacco-alcohol-drugs-survey/2015-summary.html

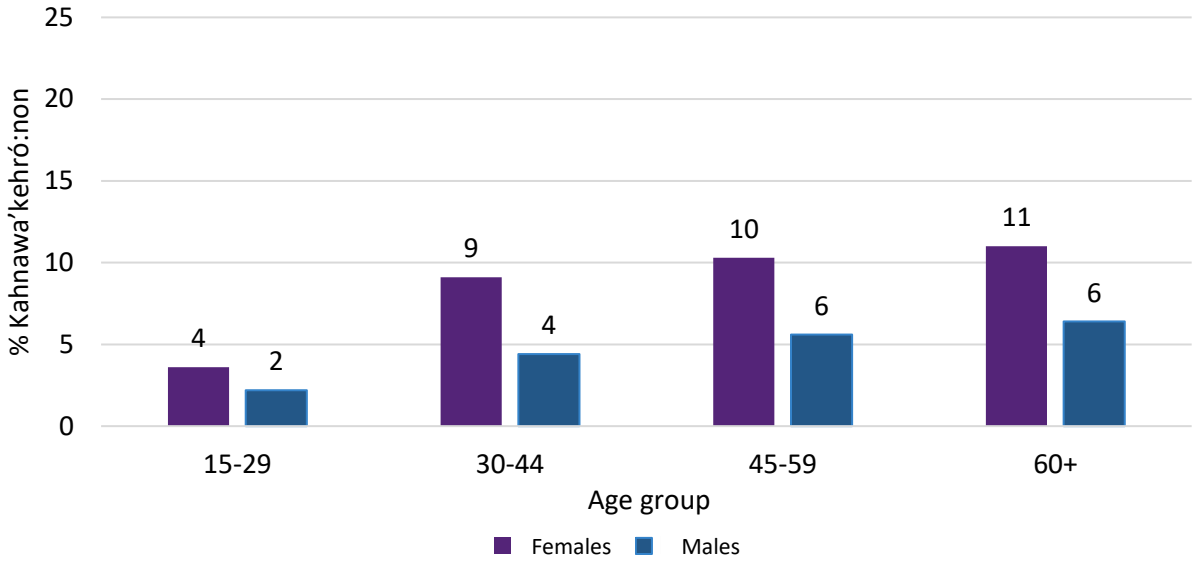
these (i.e.: 0.03% of the general population) reporting having abused these medications (taken more than prescribed or not for medical reasons). We do not have numbers specific to Kahnawà:ke about the abuse of these medications.
    - In 2015, a total of 635 people in Kahnawà:ke received at least one benzodiazepine prescription
- The proportion of women receiving prescriptions for benzodiazepine medications was twice that of men
    - 427 women and 204 men received a prescription for one of these medications in 2015

Figure 3.15 shows the percentage of male and female band members (registered with Indigenous Services Canada), in different age groups, who received a prescription for one of these medications in 2015. We see higher percentages of women receiving prescriptions compared to men at all ages. This is consistent with the higher rates of diagnoses seen earlier, but as discussed, this likely reflects, at least in part, a variety of social factors related to gender and society.[108]

Table 3.4: Benzodiazepine medications dispensed to Kahnawà:ke band members under Indigenous Services Canada's Non-Insured Health Benefits program, 2015

Generic Name	Brand Name(s)	Distinct claimants	Characteristics	Common Medical Uses
Alprazolam	Xanax	49	Short-acting	Anxiety, panic attack
Bromazepam	Lectopam	5	Short-acting	Anxiety
Clobazam	Frisium	5	Intermediate-acting	Epilepsy
Clonazepam	Rivotril, Klonopin	98	Long-acting	Anxiety, panic attack, insomnia, epilepsy
Diazepam	Valium	21	Long-acting	Alcohol withdrawal, acute seizures
Lorazepam	Ativan	413	Short-acting	Anxiety, panic attack, sedation for medical procedure, insomnia, acute seizure
Oxazepam	Serax	108	Short-acting	Anxiety, insomnia, alcohol withdrawal
Temazepam	Restoril	14	Short-acting	Insomnia, anxiety

Figure 3.15. Percentage of Kahnawa'kehró:non with at least one benzodiazepine prescription reimbursed by NIHB in 2015, by biological sex



Data source: Non-Insured Health Benefits claims (NIHB), 2015

Suicide and suicidal thoughts

The content of this section might cause triggering of some difficult or uncomfortable emotions and memories for some readers. If you find yourself in this situation, please reach out to someone you trust for support. If you find you need immediate crisis support, we encourage you to consider calling one of the following resources:

Hope for Wellness Help Line:
1-855-242-3310
Live chat: www.hopeforwellness.ca

Centre de prévention du suicide de Québec
1-866 277-3553

Kids Help Phone
1-800-668-6868 or by text at 686868

KSCS Crisis Worker:
450-632-6880 (8:30-4:30 weekdays)
450-632-6505 (after hours or holidays) Ask for the After-Hours Response Worker

If you are worried or believe that someone is in immediate danger, please contact emergency services:
Peacekeepers (in Kahnawà:ke):
450-632-6505
Ambulance (in Kahnawà:ke):
450-632-2010
or use 9-11 in other areas

Suicide is an important cause of preventable death at an early age across the world.[111] Losing someone in this way causes terrible grief to families and often to entire communities. Sadly, some Indigenous communities have been suffering with high rates of death from suicides, particularly among youth, compared to non-Indigenous communities in Canada.[112] The legacy of colonization and colonialism, intergenerational trauma, and access to culturally safe care are important social determinants of suicide and mental wellness for Indigenous communities.

Death from suicide is an alarming and devastating issue for many Indigenous groups across the country. It has also been shown to be particularly high in geographic areas (outside of First Nation communities) that have a high concentration of Indigenous people compared to areas with low concentrations of Indigenous people, and with rates consistently higher among men than women.[113] At the national-level, in areas with a high concentration of First Nations, suicide mortality was almost 4 times that of areas with low concentration of people identifying as Indigenous – representing 29 more deaths by suicide per 100,000 people.

Even so, research has also shown that the rates of suicide among youth can vary largely between First Nations communities. Communities with greater self-governance, control over services and cultural continuity were found to have lower youth suicide rates compared to communities that did not have these elements.[114]
On an individual level, people with untreated depression, other mental illnesses, strong

[111] WHO. *Suicide Fact Sheet* https://www.who.int/en/news-room/fact-sheets/detail/suicide. Accessed January 2020.
[112] Inuit Tapiriit Kanatami. *National Inuit Suicide Prevention Strategy.* (2016) https://www.itk.ca/wp-content/uploads/2016/07/ITK-National-Inuit-Suicide-Prevention-Strategy-2016.pdf
[113] PHAC. *Key Health Inequalities: A National Portrait.* (2018). https://www.canada.ca/en/public-health/services/publications/science-research-data/key-health-inequalities-canada-national-portrait-executive-summary.html
[114] Chandler M and Lalonde C. *Cultural Continuity as a Hedge Against Suicide in Canada's First Nations* Transcultural Psychiatry, 1998, vol. 35, 2: pp. 191-219

feelings of psychological distress, experiences of trauma, important financial difficulty, pathological gambling behaviours, alcohol and drug use disorders, and lack of support and control in their lives, are at higher risk of seriously considering and attempting suicide. Biological sex is also a risk factor – in Canada, men are three times more likely to die by suicide compared to women, although women have a higher rate of hospitalization for self-inflicted injuries.[115] As has been discussed throughout this report, the impacts of colonization and colonialism on individuals and communities are also important underlying determinants for many of these risk factors.

Effective prevention can be done by having helpful and accessible crisis supports; reaching out as soon as possible to people who have attempted suicide or who have indicated they are thinking of it; reducing the accessibility to lethal means (e.g. physical barriers on high bridges, storing guns unloaded and locked away); and having accessible non-crisis community supports. Moreover, it is also important to ensure people have good access to health care and therapy services. Underlying all of this, reversing the impacts of colonialism and developing greater positive community mental health, cohesion, belonging, and community empowerment are key to improving the social determinants that are behind suicide.

Community perception of suicide as an issue

- In Kahnawà:ke, 54% of surveyed adults and 28% of youth (15-17 years only) identified low rates of suicide as a community strength
- Only 5% of people (15 years and older) identified suicide as an important challenge facing Kahnawà:ke
    - This compares to 27% of individuals (15 years or older) in other First Nations communities in Québec who felt suicide was an important challenge facing their own community

Rates of suicide in Québec and Montérégie

In Québec, approximately 12 people out of 100,000 die of suicide each year (2016).[116] Canada-wide, the most recent reported statistic is 10.4 deaths by suicide per 100,000 people (2012).[115] Figure 3.16 shows the suicide rates in Québec and in the region of Montérégie, both of which have been decreasing slowly over time. This information is provided as a reference point. In Kahnawà:ke there were very, very few suicides from 2001-2012. We cannot present the actual number, since it is so low, it would be possible for people to identify specific individuals and families affected. It is therefore suppressed to protect and respect the privacy of personal health information. We acknowledge that this data is for a time period that ends, now 10 years ago, and that the community and families have experienced the impacts of suicide in recent years.

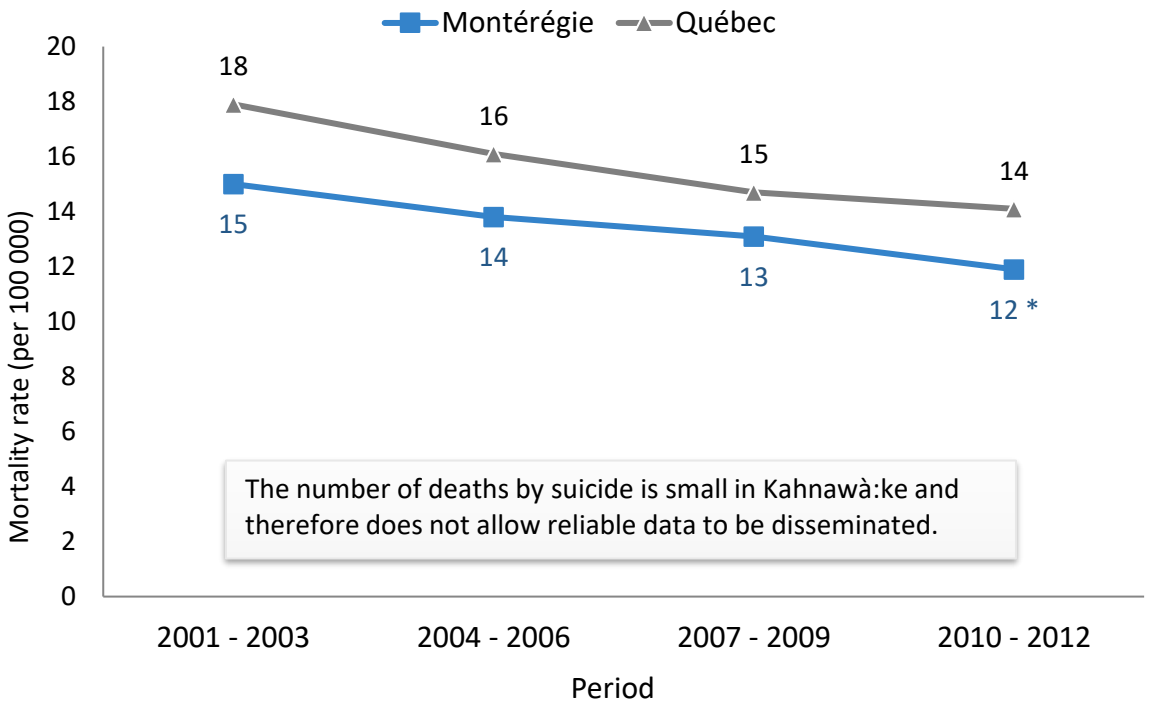
Additionally, because the total population of Kahnawà:ke is small (relative to the millions of people in the province and region), any graph that could be generated for the community, would be very erratic (i.e.: it would swing up and

[115] PHAC. *Progress Report on Suicide Prevention* (2018). https://www.canada.ca/content/dam/hc-sc/documents/services/publications/healthy-living/64-03-18-2232-ProgressReport-SuicidePrevention_EN-06-eng.pdf

[116] Levesque, P., Pelletier, É. & Perron, P. A. (2019). *Le suicide au Québec : 1981 à 2016 — Mise à jour 2019.* Québec, Bureau d'information et d'études en santé des populations, Institut national de santé publique du Québec (INSPQ) https://www.inspq.qc.ca/sites/default/files/publications/2497_suicide_quebec.pdf

down considerably in each time period) and it would not give reliable information for the community. Even so, there is some reassurance found in the fact that the numbers are too low to be reported, and this fits with the data regarding community perception of low rates of suicide as a community strength.

Figure 3.16. Adjusted mortality rate for suicide, Montérégie and Québec, 2001-2003 to 2010-2012



Sources: MSSS, Fichier des décès; Régie de l'assurance maladie du Québec (RAMQ), Fichier d'inscription des personnes assurées (FIPA).
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, février 2017.

Report of suicidal thoughts

Although it is very good that the suicide rate in Kahnawà:ke is low, we also know that many more people consider suicide than attempt it, and this can still stem from, and cause, important distress. In the 2015 Regional Health Survey, individuals (12 and older) were asked about whether they had ever seriously considered suicide and whether this led them to seek help.

Youth (12-17 years)

- 13%* of youth in Kahnawà:ke reported having seriously considered suicide at least once in their life
  - More than half of these said they had felt this within the previous year
  - About 1 out of 3 youth with suicidal thoughts had spoken to a health professional about these thoughts
  - A similar proportion (13%) of First Nations youth across Québec reported having seriously considered suicide at least once in their life[87]
- 8%* of all youth respondents reported having made a suicide attempt at least once in their life
  - A similar proportion (8.6%) of youth in First Nations in Québec reported having made at least one attempt in their lifetime[117]**Error! Bookmark not defined.**

Adults (18 and older)

- 16% of adults in Kahnawà:ke reported having seriously considered suicide at least once in their life
  - This is lower than among all First Nation adults in Québec in 2015 (20.7%)**Error! Bookmark not defined.**[118]
  - 16% of adults corresponds to approximately 1110 adults in the community
  - Only 1 in 5 of the adults, who had considered suicide, had these thoughts in the past 12 months when surveyed. This is about 3%* of all adults, representing approximately 220* individuals
    - This is similar to the proportion of Québec adults who said they had considered suicide in the prior year (2.8%, 2014)[88]
  - Just under half of the adults, who had ever had suicidal thoughts (about 8%* of adults), had also sought out care with a health professional for this reason
- 5%* of adults said they had attempted suicide at least once in their lifetime, either as a youth or as an adult. This corresponds to roughly 330 adults in the community
  - This is lower than the 9.6% of First Nations adults in Québec who said they had attempted suicide at least once in their life when surveyed in 2015**Error! Bookmark not defined.**[119]

Comparisons to Canada

- Among those 15 and older, 17% of people in Kahnawà:ke said they had seriously considered suicide at least once in their life; compared to 12.3% in Canada and 11.2% in Québec (CCHS 2015) [115,120]
- Among those 15-24 years old, 14% of Kahnawa'kehró:non had considered suicide in the last year (2015), similar to 14.1% throughout the general population of Canada in this age group in 2012[121]

[117] Direct communication from Regional Health Survey team of the FNQLHSSC, RHS 2015

[118] Direct communication from Regional Health Survey team of the FNQLHSSC, RHS 2015

[119] Direct communication from Regional Health Survey team of the FNQLHSSC, RHS 2015

[120] PHAC. *Suicide Surveillance Indicator Framework Quick Statistics, Canada, 2017 Edition.* Source CCHS 2015. https://health-infobase.canada.ca/ssif/data-tool/.

[121] Statistics Canada. *Description of depression and suicidal ideation, household population aged 15 to 24, Canada excluding territories.* Data source*:* CCHS 2012. http://www.statcan.gc.ca/pub/82-003-x/2017001/article/14697/tbl/tbl01-eng.htm

- 5%* of people (15 and older) in Kahnawà:ke said they attempted suicide at least once in their entire lives, which is somewhat higher than, though not statistically different from, the 3.3% of people aged 15 and over in the general population of Québec, and 3.1% of Canadians who said they had attempted suicide at least once in their lifetimes (CCHS 2015).[120]

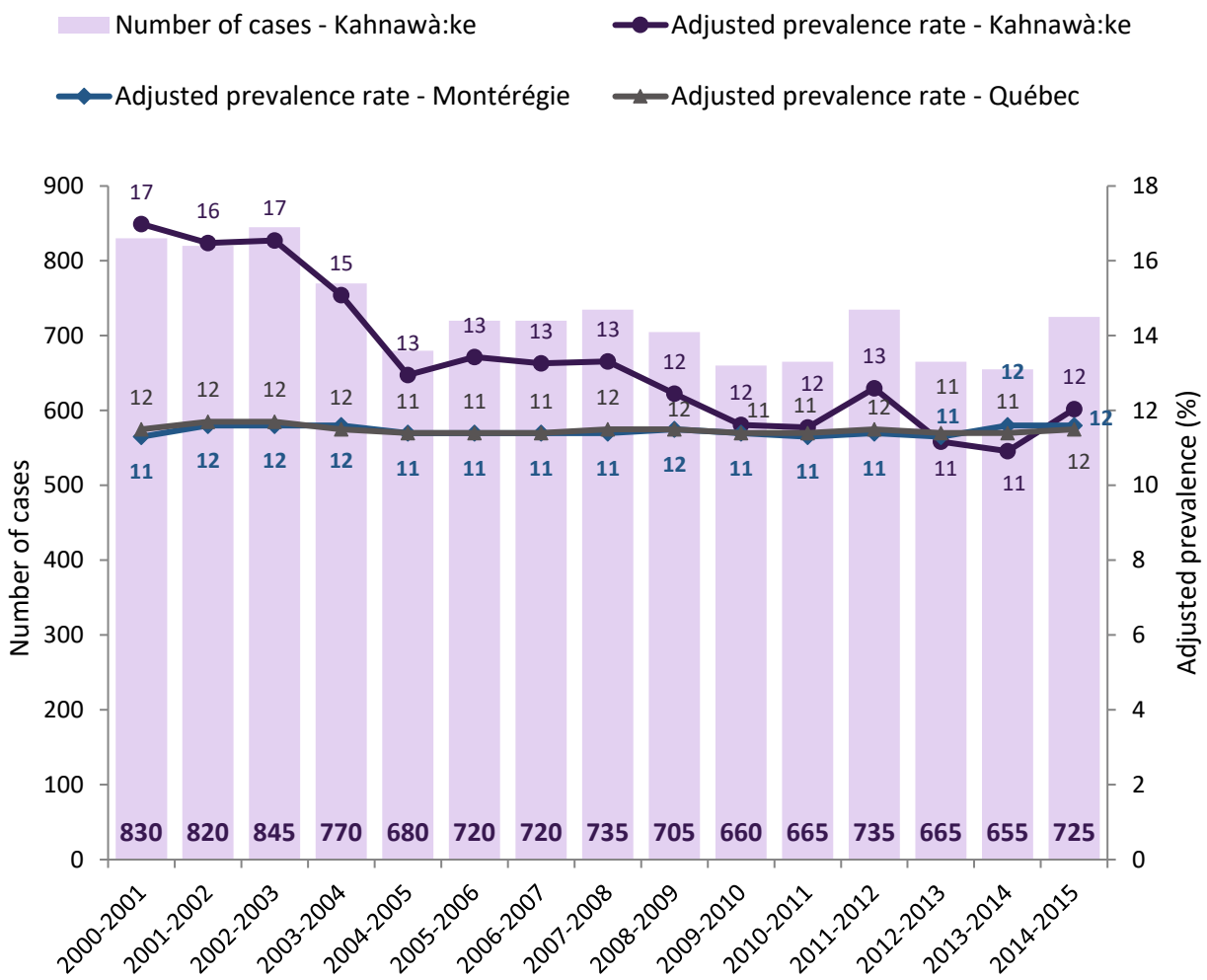
Other Mental Illnesses

There are many other mental illnesses apart from depression and anxiety, such as schizophrenia, other forms of psychosis, personality disorders, bipolar disorder, substance dependencies and dementia.

If we put all medically diagnosed mental illnesses together, including depression and anxiety, and account for age differences, we see that the percentage of people affected by any mental illness in Kahnawà:ke has been roughly similar to what is seen in Québec and in the Montérégie region in the last few years (Figure 3.17). Because the population is relatively small, we cannot subdivide this information to get reliable data on the rates of each individual mental illness in Kahnawà:ke (e.g.; rates of schizophrenia only, rates of bipolar disorder only). Even so, by comparing the trends seen earlier in Figure 3.12 (anxiety and depression rates) and the following Figure 3.17 (all mental illness rates) we see that the lines mirror each other, with notably higher rates in the community from 2000-2008 and the lines coming together in 2008-2015, showing rates that are now similar to the region and province. This strongly suggests that anxiety and depression account for the gap seen in Figure 3.17 between 2000-2008, and that the underlying rates of the other mental illnesses (like schizophrenia and personality disorders) in Kahnawà:ke were likely similar to that of the region and the province throughout all of the years.

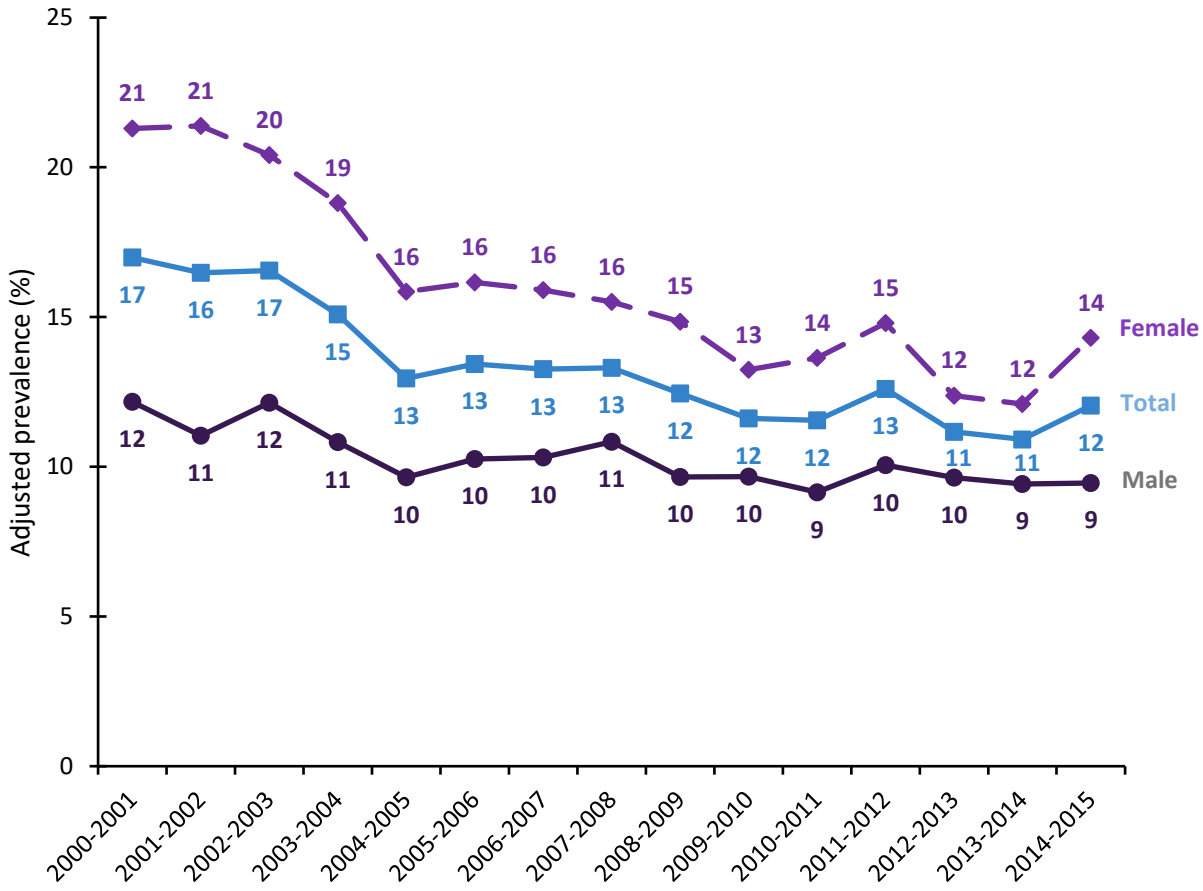
Figure 3.18 shows us the difference in rates of diagnosed mental illness between males and females. Although there is a gap between the sexes, we saw the same gap earlier in this report in diagnoses of depression and anxiety (Figure 3.13, anxiety and depression rates by sex). This indicates that the sex difference here is driven by the difference in diagnoses of anxiety and depression, and that the other mental illnesses are diagnosed at similar rates between males and females, which is consistent with what is seen elsewhere in the world.

Figure 3.17. Number and prevalence rate of people diagnosed with a mental illness (any), Kahnawà:ke, Montérégie and Québec 2000-2001 to 2014-2015



Source : INSPQ, Système intégré de surveillance des maladies chroniques du Québec (SISMACQ).
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, février 2017.

Figure 3.18. Prevalence rate of mental illness (any diagnosis) by biological sex, Kahnawà:ke, 2000-2001 to 2014-2015



Source : INSPQ, Système intégré de surveillance des maladies chroniques du Québec (SISMACQ).
Production : équipe Surveillance de l'état de santé de la population, DSP de la Montérégie, février 2017.

Areas for Action on Mental Wellness and Mental Illness in Kahnawà:ke

This portrait on mental wellness and mental illness in Kahnawà:ke highlights some important areas for focus going forward and confirms mental wellness and mental illness to be key health priorities for the community. Organizations and individuals in the community are encouraged to use this information when applying for funding to develop new programs, and when adapting existing services to better address these health needs.

Among adults, we saw many positive indications of the community's mental well-being, including high perception of subjective mental wellness, community belonging and social connectedness. Although these positive indicators were not universal, they do show considerable strength and resiliency at a community level.

In contrast, we saw several areas where youth seem to be struggling. These include low perception of feeling in balance mentally, emotionally and spiritually, and a greater proportion feeling moderate to severe psychological distress. There was also a significant minority of youth who felt they would not be able to turn to anyone for support if faced with a difficult situation.

There is a clear need for programs and activities aimed at helping youth/teens to improve and maintain emotional well-being and mental balance.

As many readers can no doubt relate to, the transition through adolescence is often a tough time. Teens can struggle to feel like they belong, begin to experience more complexity in their emotions, and work hard to develop their independence and individuality. Those with mental health concerns may be met with stigmatizing attitudes from peers. Many teens will find support and chances to learn soft skills and coping mechanisms through participation in sports teams, arts clubs, traditional dancing, and other activities. Many such activities are already well-established in Kahnawà:ke. However, sometimes the way these activities are designed or run leads to higher participation among the teens that are already thriving, and lower participation among the teens that aren't doing as well. Teens often need the support of an organized adult in their life to meet registration timelines and pay fees associated with different programs, and for transport to and from the activity.

While we do want to help the teens who are already doing well to continue on their paths to success, it is worth asking how we can adapt existing programs, or develop other new types of support to make sure there are good options for more vulnerable youth. This might mean breaking down some of the existing real or perceived barriers that get in the way of some teens participating. For example, some extracurricular activities can be costly, so clubs and programs that don't require the teen's family to pay, or provide cost-covering for families receiving social assistance, could make a difference. Other barriers could be the physical location of the activity and the availability of transportation to it, or even the logistics of needing to sign up on a certain day in order to get a spot.

There are many great programs available in Kahnawà:ke already. It is important that within these areas we find ways to see how they could better reach the youth who really need it most and set a different path for long-lasting health and positive social outcomes. Moving forward, we could also use focused evaluations of some of the existing community programs to ask ourselves if school-based and extracurricular activities are truly achieving their goals of

empowering youth and helping them build appropriate coping skills to use throughout life.

The Regional Health Survey data shows that there are important community concerns about violence and racism, and that a considerable number of people experienced racism both in and outside of the community. The data also provides a preliminary measure of how many people were affected directly and indirectly by the legacy of Indian Residential Schools, a subject that many may not have talked about openly. Although addressing and acknowledging this history can be healing, it can also bring fresh irritation to the emotional wounds and scars that have been survived. The Truth and Reconciliation Commission from 2007-2015, the discovery of several mass grave sites at former Residential School grounds starting in 2021, the Indigenous delegation visit to the Vatican in 2022 and the Indian Day School settlement process are just a few of the events that have impacted the community and mental well-being in individuals in a multitude of ways. Understanding these impacts and ongoing concerns can be helpful for mental health professionals within Kahnawà:ke and outside of the community to better meet community members' needs, and for families to better understand themselves. Through collaboration on mental wellness, we should seek to better understand ways of healing from these experiences, the importance of trauma informed approaches, and efforts to prevent all forms of violence and racism.

In this chapter, we also saw some important differences in mental illness rates between males and females, with higher rates of anxiety, depression, medication and psychological services use among females. While this inequity is not unique to Kahnawà:ke, components of the solutions could be. Looking to traditional Kanien'kéhaka roles as a way to respect and restore the strength of women, to enhance opportunities and reduce constraining gender-based expectations, could help to reduce the burden of mental illness among women in particular. On the other hand, this divide between the sexes also tells us that some men may be less comfortable to seek medical and social services. We should work on ways to ensure there is accessibility and engagement of men in mental health treatment. Looking at this further, with initiatives like the KSCS Community Perception Survey, can also help us work on eliminating stigma, overcoming barriers and finding methods of becoming mentally well that work for men. Enhancing collaboration and coordination between medical services, therapy services, and social programs is an ongoing focus for the Onkwata'karitáhtshera Mental Wellness and Addictions subcommittee, and should further help in access to care.

In understanding the burden of mental illness, we saw that we need to develop better ways to keep track of how many people we are providing mental health care services to through our local agencies. By doing so we will be better aware of what needs are going unmet, and we will be in a better position to seek new funding and collaborations to fill these gaps.

Suicidal thoughts were commonly reported in Kahnawà:ke. Although they were not higher than seen in Canada and Québec, they are high enough to remain an important concern. We should ask how we can improve on suicide prevention, awareness and crisis intervention. This implies action well beyond the health and social services sectors.

At a prevention level, improving the social determinants of mental wellbeing and reducing specific risk factors requires a broad range of actions and partners. For example, given the role of financial stress in leading to crisis situations, the Kahnawà:ke Social Assistance Program and Tewatohnhi'saktha are key collaborators.

A variety of community supports are critical to help people know and feel that they belong, and they have someone or somewhere to turn to. This could happen in schools, the youth center, a planting group, a longhouse, a church, in the library, or through supportive online groups. Reducing bullying, which we saw was commonly experienced by children and youth, is another way to prevent suicidal thoughts and actions.[122]

Organizing basic suicide awareness and prevention training for staff and volunteers in multiple organizations and in the community at large, could make a big impact in helping people, who are at high risk, connect with help when it matters most. Several interveners in the community have already taken such training. We can also make use of the many existing resources like anonymous hotlines and chat services to make it as easy as possible for people to find help when they are in need.

Another risk factor for suicide is alcohol abuse behaviour, which can be significantly impacted by community laws and policies to appropriately regulate alcohol distribution and sales. Adequately enforced laws and public education can also reduce access to dangerous means, like improperly stored guns, pesticides or medications. These can protect people when someone may be feeling very impulsive. Incorporating physical barriers into how places are built (e.g. protective bars on high bridges) can essentially eliminate access to other means and lead to reduced suicide attempts.[122]

Onkwata'karitáhtshera will continue to work with its member organizations on improving healthy outcomes related to mental wellness. It also encourages community members and agencies to use this portrait to develop initiatives aimed at this same goal and would be happy to consider any proposals for project funding in this regard.

[122] Centre for Suicide Prevention, Canadian Mental Health Association. *Bullying and Suicide*. 2017. https://www.suicideinfo.ca/wp-content/uploads/2017/11/Bullying-Fact-Sheet.pdf

Conclusion

The information presented in this portrait adds to our overall understanding health and wellness in the Kahnawà:ke community.

Chapter 1 helps us understand the community's demographics, including the size of different age groups and how many babies are born. We explored data on home and learning environments, family circumstances, pregnancy, and early childhood infections and health conditions.

Based on 2014 figures, about one in five (18%) of Kahnawa'kehró:non are children under the age of 11. According to the Regional Health Survey (RHS), most children live with one or both of their biological parents. Nine in ten children have some knowledge of Kanien'kéha, however still speak primarily English. The vast majority of children 3 years and older go to school.

We have further questions about economic and educational status of parents, which are very personal topics. We did learn that most parents work, with both parents working for more than half of children 0-5 years old. As a group, parents have diverse educational backgrounds.

In some areas we confirm insight that existed in the community (e.g., higher pregnancy rates among young mothers) and give greater precision on the trends over time. In other areas, it gives greater clarity on the impacts to date of health and social programs and services being offered (e.g., the high rates of breastfeeding and childhood immunization seen in the community).

In Chapter 2, Injury and Injury Prevention, we asked about how common injuries are in Kahnawà:ke, and considered injuries among different age groups (children, youth and adults). We learned that injuries are common among Kahnawa'kehró:non, with 1 in 5 reporting an injury in the 2015 Regional Health Survey. A third of these injuries were caused by falls, and three-quarters of injuries affected arms or legs.

We learned about Kahnawa'kehró:non practices to prevent injuries, including wearing helmets while riding ATVs or snowmobiles, and wearing lifejackets while traveling by boat or canoe. We also learned about safety at home. The majority of Kahnawa'kehró:non have working smoke detectors, while less than half have carbon monoxide detectors.

In Chapter 3, Mental Wellness and Mental Illness, we described how people in Kahnawà:ke rate their own mental wellness and feeling of balance, control over their lives and belonging. We looked at some social determinants of mental health and wellness, including residential schools and intergenerational trauma, sense of safety and perceptions of violence, experiences of bullying and racism, and gang activity. Next, we showed some data on mental illnesses, including experiences of distress, anxiety and depression, medical and psychological treatment of some issues, and suicide or suicidal thoughts.

We found many community strengths reflected in the data: in 2015, almost three in four teens and adults in Kahnawake rated their mental health as very good or excellent. Most adults also rated their sense of belonging to the community as strong. The vast majority of Kahnawa'kehró:non said they felt safe in the community, and had someone to count on for support at least some of the time.

Some areas to focus on, challenges and risk factors we highlighted were youth support, violence prevention (including bullying), racism, and intergenerational trauma linked to Indian Day School and Residential School.

We explored diagnoses, use of psychological services and prescriptions for anxiety,

depression, schizophrenia, dementia and bipolar disorder, among others, and validated the perceived need for ongoing strong services in these areas.

The insights in this document can be used to support community health and social services planning efforts (e.g., allocation of resources and application for funding). We can also set a benchmark that we can look back to in five, ten and twenty years to help measure our progress with ongoing initiatives.

Onkwata'karitáhtshera will continue to work with its member organizations on improving health outcomes related to early childhood development and family wellness, injuries and injury prevention, and mental wellness. We also encourage community members and agencies to use this portrait to develop initiatives aimed at this same goal and would be happy to consider any proposals for project funding in this regard.

Chapter 4

Methods & Data Sources

Understanding the data sources used in this report, as well as their different strengths and their limitations

This community led health portrait draws on a number of different data sources (Figure 4.1). These include the Regional Health Survey, several provincially or federally administered health systems and administrative databases, and local information sources from agencies in the community. By bringing these different pieces of information together, we can add to the many stories and experiences we have had over the years to come to a more complete understanding of the health and well-being of Kahnawa'kehró:non and of Kahnawà:ke as a community. Putting this all together is a big step forward in helping to fill health information gaps within the community, and in beginning to use this data to adapt our actions and decision-making in our community.

In creating the portrait, a lot of effort has gone into developing good and valid methods to collect and analyze the data and to ensure that these meet scientific standards. However, we are conscious that data is never perfect and numbers can never tell us the entire story. Each source of information has both strengths and limitations we need to consider as we interpret what the numbers mean. Understanding these elements is just as important as the data itself. These are detailed as follows .

Figure 4.1 Summary of key data sources included in Volume 2 of *Onkwaná:ta* Our Community, *Ionkwata'karí:te* Our Health

2015 Regional Health Survey (RHS)

Obtained through collaboration with the First Nations of Québec and Labrador Health and Social Services Commission (FNQLHSSC)

In 2015, Kahnawà:ke took a big step towards a better understanding of local health issues by participating for the first time in the Regional Health Survey. For this survey, 616 community members (a sample representing approximately 7900 people, answered questions about a wide range of health and social issues, such as: whether they had ever been diagnosed with any chronic diseases, what they do to stay healthy and what they feel the biggest health and social challenges to the community are. Thanks to the hard work and participation of so many people, Kahnawà:ke now has a much clearer picture of the health status across the community. The survey results give unprecedented insight into the habits, behaviours, feelings, experiences, support networks, community connectedness and other root causes that can lead to health or to illness for individuals, and that can influence their quality of life**.** This is incredibly important for decision-making by Onkwata'karitáhtshera committees, organizational leaders, front-line workers and for program development in the community by everyone aiming to prevent diseases and promote health. As the community participates in future cycles of the RHS, we will be able to use this information to look at trends, new health and social issues, and to better evaluate our present-day actions.

Even so, the RHS, like all surveys, is only as good as the questions that were asked, and the responses people were willing to give.

Advantages of the survey data:

- Insight into root causes of health issues
- Greater understanding of habits, behaviours and context
- Ability to link information from multiple questions to achieve a more complex understanding of health issues
- Survey design incorporates both traditional First Nations and Western concepts of health and wellbeing
- High quality statistical information and repeated measures of health behaviour, personal and community wellness, as well as physical and social environments
- Opportunity to repeat participation over time to be able to compare the community today to the community in several years
- High levels of participation in Kahnawà:ke means the response results can be generalized to the whole community for most items

Limitations of the survey data:

- So far, data specific to Kahnawà:ke are only available for the 2015 cycle
    - The community will need to participate in the survey regularly in order to keep information up to date to see if improvements are being made through community actions
- There isn't always something to compare survey results to
    - Many questions can be compared directly to those asked to the general population of Canada or Québec on national and provincial surveys, or to the other First Nations of Québec, but some

specific questions asked by the survey have not been asked before, so there is nothing to compare to yet
    - Other times we might have wanted to look at certain age groups in Kahnawà:ke, and this specific age group might not have been reported on for other populations
- Possible under-reporting of some conditions/characteristics
    - For some people, subjects like mental illness, gambling, and violence can be sensitive, stigmatized and uncomfortable to talk or think about. This could affect how some people answer the survey questions. Despite the fact that the survey is anonymous, which helps reduce this issue, there is a general tendency across similar surveys for people to under-report some mental health and other issues. This can also be seen in the fact that many people did not feel comfortable to answer questions about their income
    - Sometimes the most unwell individuals are the least willing to participate in a survey, or they may even be unable to do so because of the severity of their illness. In this case survey results may sometimes not fully capture the true burden of an illness or behaviour
    - Sometimes people do not accurately remember if, or when, they last had a test for some conditions, or whether they were given a diagnosis of a particular condition
    - Some less common situations (like adoptive households) are not represented well in the data. Since the participant pool for the survey was based on the Kahnawà:ke Kanien'kehá:ka Registry, some adopted children may not have been eligible to participate in the survey (for example, children who have been adopted from other communities)

Québec provincial medical care databases

a. **Québec Integrated Chronic Disease Surveillance System, (*Le Système Intégré de Surveillances des Maladies Chroniques du Québec; SISMACQ*)**
b. **RAMQ registration (*Fichier d'inscription des personnes assurées*; *FIPA*)**
c. **Vital Statistics - Canadian Birth Database and Canadian Mortality Database (*Base canadienne de données sur les naissances, Base canadienne de données sur les décès)***

Obtained through collaboration with *la Direction Régionale de Santé Publique de la Montérégie, Centre intégré de santé et des services sociaux de la Montérégie-Centre*

For almost all healthcare visits, like going to an emergency room or getting a blood test at Kateri Memorial Hospital Centre (KMHC), we have to show our healthcare cards – this is how the hospitals keep track of how many patients they have seen and what types of health needs people were seen for. This same information can also tell us how common certain medical diagnoses are; for example: depression and diabetes. In 2017, Onkwata'karitáhtshera gained access to certain data connected to medical care usage by forming a collaboration with la *Direction Régionale de la Santé Publique de la Montérégie*. This information gives us one of the clearest pictures we have to date about trends in diagnoses over time.

Advantages of the Québec medical care databases:

- Accuracy:
    - These measures are the "gold standard" for measuring how common certain medical conditions are (i.e. the best way possible to measure these)
- Allows us to track trends and changes over long periods of time:
    - We can compare these measures locally over time over many years to see if certain conditions are trending upwards or downwards (i.e. improving or worsening)
    - There is ongoing yearly data collection so this information can be accessed periodically. This is crucial to allow us to monitor progress (or lack of progress) in each health area going forward
- Allows for comparisons to the general population measures in the Montérégie region and in Québec to help us understand how we are doing relative to the communities that surround us

Limitations of the Québec medical care databases:

- Uses a geographic definition of the community. In order to be as specific as possible to Kahnawà:ke, these measures only include people with an active *Régie de l'Assurance Maladie du Québec* (RAMQ) medicare card associated with the J0L 1B0 postal code:
    - This means that the data may not include some community members living in Chateauguay, Mercier, LaSalle, USA, etc. even if they come to Kahnawà:ke for their services. Reassuringly, such area-based measures represent a valid, consistent and reliable approach and are commonly used to guide effective action to improve health and wellness
- Only includes people who get medical services
    - For example, we know that many people with depression, anxiety, and addictions never go to see a doctor about these conditions, even though they might see a psychotherapist, counsellor or seek other types of services or help. These people will not get counted in the medical care databases

Community-based programs and services data

Many of our local programs and services e.g.: Kateri Memorial Hospital Centre (KMHC), Kahnawà:ke Shakotiia'takehnhas Community Services (KSCS), and the Step by Step Child and Family Centre keep track of the number of people they see each year and for what types of services.

Advantages of community-based programs and services data:

- When we put this together with the other data sources, we can see where there are matches between the services we are providing and how common certain health and childhood development concerns are
- Provides the ability to create ongoing yearly data collection of local systems and adjust ways of gathering such information

Limitations of community-based programs and services data:

- Only includes people who seek these services
    - This data cannot tell us about the unexpressed need, such as those who do not feel comfortable enough to seek out local services, or those who seek out services outside of the community
- These sources were not designed to be comprehensive in data gathering and, sometimes, information that would be useful is not routinely recorded
    - This can lead to variation from one year to another because the recording process has changed
    - This could be improved in the future by carefully looking at how local programs capture and track data, and better designing them to capture the statistics that would be helpful to complement the other data sources

Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP)

Obtained in collaboration with the Canadian Hospitals Injury Reporting and Prevention Program (a program of the Public Health Agency of Canada) at the Montreal Children's Hospital

CHIRPP routinely collects information from all people who go to the emergency department with an injury, at eleven pediatric hospitals across Canada, as well as eight general hospitals[123]. The Montreal Children's Hospital is a participant site for CHIRPP, which is a program of the Public Health Agency of Canada.

The program addresses all types of injury, including but not limited to: cuts, sprains, broken bones, poisoning, intoxication, drowning/near-drowning, burns, concussions, self-injury, and motor vehicle accidents. Information is gathered during the emergency department triage process, by a questionnaire about what the person was doing when the injury occurred, and from medical documentation related to the visit. By collecting data on the types of injury and the causes of them across the country, the program sheds light on patterns, which in turn help prevent other people from suffering similar injuries. This information can be used to identify products that may pose a particular risk for injury (for example, ingestion of laundry detergent pods related to bright colours and being confused for candy), and to better understand the ways injuries might be prevented through changes to things like product design & packaging, playground equipment, staff training, physical space design and policies.

By partnering with CHIRPP, Onkwata'karitáhtshera has been able to access summary data on the types of injuries that required hospitalizations or emergency room visits for Kahnawa'kehró:non children and youth, 0-18 years of age, and over a number of years. This allows us to see the most common types of injury that brought children and youth to the emergency room and trends over time.

Advantages of CHIRPP Data:

- A comprehensive data-gathering system allows for high-quality, reliable and validated data[124]
- Ability to observe trends over many years
    - We can compare these measures locally over a 20-year period and see if injuries are trending upwards or downwards
    - There is ongoing yearly data collection so this information can be accessed periodically going forward

Limitations of CHIRPP Data:

- Like with Québec medical care databases detailed above, CHIRPP relies on a geographic definition of the community, meaning only community members with an active RAMQ card associated with the J0L 1B0 postal code will be counted

[123] PHAC. Canadian Hospitals Injury Reporting and Prevention Program. https://www.canada.ca/en/public-health/services/injury-prevention/canadian-hospitals-injury-reporting-prevention-program.html (accessed January 2020)
[124] Pickett W et al. *Youth injury data in the Canadian Hospitals Injury Reporting and Prevention Program: do they represent the Canadian experience?* Injury prevention (2002), 6(1), 9-15.

    - This means that the information captured does not include community members residing outside of this postal code area (e.g. Chateauguay, Mercier, LaSalle, USA, etc.) even if they come to the Montreal's Children's Hospital (MCH) for care. Reassuringly, such area-based measures represent a valid, consistent and reliable approach and are commonly used to guide effective action to improve health and wellness
- Many injuries are not severe enough to require an emergency department visit; we need to keep in mind that these figures do not represent all injuries
- Fatal injuries are not fully captured in the CHIRPP database[125] mainly because the emergency department data does not include information about people who died before they could be taken to hospital, or those who died after being admitted to hospital
- Patients who bypass the emergency registration desk for immediate treatment may not be captured, and some people do not complete a CHIRPP form in the emergency room when they are asked to[3]
- Cases may be under reported due to delays in data entry. Periodic service interruptions required to update the CHIRPP network may have missed injured patients[3]
- We are only looking at one hospital (i.e. MCH), so if a higher percent are of injured children and youth tend to go to other hospitals over time (like going to Anna Laberge Hospital or KMHC), we might not get the full picture of injury
    - We hear anecdotally from our clinical service providers and from parents that most times when a child or teen from Kahnawà:ke needs to go to a hospital emergency department, they are taken to the MCH, so we are confident these numbers give a reasonably accurate picture of emergency department use
- Kahnawa'kehró:non parents, children and youth at the MCH emergency department do not complete the injury questionnaire about the circumstances of the injury as often as people from other areas.[126] While CHIRPP was able to give us a lot of useful information about injuries in Kahnawà:ke, they would have been able to give us even more about the type of activity people were engaged in and whether they were wearing helmets, etc. if the surveys presented at triage in the emergency department were more commonly filled out by parents and teens

[125] Crain, J., et al. *The Canadian Hospitals Injury Reporting and Prevention Program: a dynamic and innovative injury surveillance system*. Health promotion and chronic disease prevention in Canada: research, policy and practice 36.6 (2016): 112.
[126] Personal communication, MCH CHIRPP staff, Glenn Keys

Dispensed Prescriptions covered by the Non-Insured Health Benefits (NIHB) program

Obtained through collaboration with Indigenous Services Canada, First Nations and Inuit Health Branch (FNIHB)

Thanks to a partnership between Onkwata'karitáhtshera and the First Nations and Inuit Health Branch of Indigenous Services Canada (formerly part of Health Canada), for the first time we are able to explore the general picture of medication use and trends over time for the community. In this volume we have looked at how often certain medications used for treatment of mental illness conditions are dispensed. It is important to remember that many medications used for mental illnesses can also be used for multiple conditions, so trends must always be interpreted cautiously with contextual knowledge of changes in the community, services, and medical practices being considered. Much of this context is explained in Chapter 3, Mental Wellness and Mental Illness.

Advantages of NIHB data:

- For some health problems, this data can give insight into how many people are using pharmacy treatment and how severe some of those conditions could be
- Allows us to look at trends over time to be alert to big changes occurring
- Ongoing yearly data collection; this allows us to revisit this information in the future and see changes over time
- High quality information in terms of completeness, consistency and timeliness
- Provides comparable data for all other "non-agreement"[127] First Nations communities across the Québec Region

Limitations of NIHB data:

There are some very important reasons to be cautious when interpreting the dispensed prescription information:

- The NIHB data is based on registration as a Band member with the "Indian" registry of Indigenous Services Canada (formerly known as INAC; Indigenous and Northern Affairs Canada), so it may include many people who may not currently live in Kahnawà:ke, and even some who may never have lived in Kahnawà:ke
    - For example, if someone from Kahnawà:ke moved to another place in Québec twenty years ago, any prescription they received today would still be counted in this data. We have tried to minimize this limitation by only counting prescriptions given out by a pharmacist in Québec, not ones dispensed by pharmacists in other provinces
    - Sometimes there is a delay in registrations for newborns and notices of death for people who have recently passed away. If there are many births or deaths, this could affect some measures (e.g. the percentage of band members who have received a certain medication)
    - Because of these concerns, we generally use the percentage and number of people dispensed a medication only to cross-validate our understanding of an issue with our other sources of information (e.g. the RHS survey, local data, provincial health system records,

[127] I.e.: communities not participating in the James Bay and Northern Quebec Agreement

etc.). Since these limitations tend to remain stable over time, we can also look at whether use of certain mediations is trending upwards, downwards or remaining stable

- Not everyone who has a health condition will be taking a medication (quite a few people with mental health conditions receive counselling and/or traditional therapies, do exercise, practice mindfulness, etc.), so the medications dispensed are not fully representative of the burden of illness that exists
- Some of the medications analyzed can be used for other purposes and the reason why a medication was prescribed is unfortunately not recorded by NIHB. This can muddy the waters in trying to interpret the trends. Some examples are:
    - Many antidepressants are also useful for anxiety, nerve-related pain, obsessive compulsive disorder
        - e.g. Prozac, Zoloft, Amitriptyline
    - One antidepressant is also prescribed to help people quit smoking
        - e.g. Zyban is the same molecule as Wellbutrin/Bupropion
    - Some antidepressants can even be used to control menopausal symptoms like hot flashes, although this is not very common
        - e.g. Venlafaxine/Effexor
    - Some antipsychotic medications are also used as mood stabilizers or sedatives for insomnia
        - e.g. Quetiapine/Seroquel

  Explanations about medications that are used for many purposes are given in the text of the health portrait chapters, where it is relevant. There are some areas where we can use research studies on typical use of these medications to try to get an idea of how many of them were likely meant for treatment of a mental health issue
- The NIHB data will also miss medications that are claimed from other types of insurance, e.g.:
    - Medication paid by private insurance through a job (like Desjardins or Sunlife)
    - Medication paid by *Commission des Normes, de l'Équité, de la Santé et de la Sécurité du Travail* (CNESST) or Mohawk Self Insurance (MSI) after a work injury
    - Medication paid by the *Régie de l'Assurance Maladie du Québec* (RAMQ) for those who are admitted to hospital or receiving Québec disability insurance or Québec social insurance

  Even so, our local pharmacists tell us that the vast majority of the medications they dispense are covered by the NIHB program
- For medications that can be addictive and abused, such as benzodiazepines (a powerful type of sedative), prescription trends only tell us part of the story, and it is hard to tease out specifically, misuse of these medications from the dispensing data. It is important to remember that:
    - Most people who take these medications take them <u>appropriately</u> for medical conditions that they need help with (e.g. panic attacks, severe anxiety)
    - People who misuse these medications sometimes get them by prescription. They also sometimes obtain them illegally by borrowing or stealing from family members and friends who themselves are prescribed these medications and sometimes they are purchased from "black market" sources.

Comparisons to other populations

Where possible, we try to show the comparison of Kahnawà:ke-specific data of the rates of illness and behaviours to those in the province of Québec and in the region of Montérégie. These comparisons are adjusted for age differences in the population whenever possible in order to make sure they are comparable. Sometimes we are also able to compare to results from other First Nations within Québec and to the general population of Canada. Sometimes we do not have another group to compare to and the Kahnawà:ke data are presented alone.

Special Note on data reportability and confidentially practices

- Small numbers limit statistical analysis for less common conditions. Throughout the report, a single asterisk (*) indicates this is an imprecise estimate and results should be interpreted with caution (Coefficient of Variation (CV) greater than or equal to 16.6 and less than or equal to 33.3). Occasionally you will see two asterisks (**). In this case, the estimates are so imprecise that the number is almost always suppressed because of unacceptable quality (CV>33.3). In the occasional circumstance where the number is given with two asterisks (**), it should be interpreted cautiously, with the understanding that it is imprecise
- When the number of people with a particular condition, or who received a particular medication was less than 5, the measure is not shown, to protect confidentiality
- For some of the provincial data sources, numerators and denominators were subject to random rounding to the nearest 5 in accordance with Statistics Canada disclosure rules – meaning they will end in either 0 or 5 to further prevent a breach of confidentiality

Note on biological sex and gender

- Biological sex (or sex at birth) and gender (self-identity and physical expression on continuums of femininity and masculinity) are important determinants of health and wellness[128]
- There are several places in this report where data is analyzed to point out where there are differences in health outcomes or behaviours between “men and women” or “boys and girls.”[129] Because of the way the health information is collected in the various administrative and survey databases listed above, we were limited in this report to looking at differences in health indicators according to biological sex (i.e. male or female), and we sometimes used the terms “man/men” and “woman/women” interchangeably with “male” or “female”
- We recognize that these comparisons and terminology are reliant on a dichotomous, binary biological sex identification (i.e. “male” or “female”). They are not differentiated by gender identity or expression (shaped by social and cultural circumstances), and that this is not in keeping with the diversity and continuum of gender expression, gender identity and anatomical sex that exist across a population[130]
- Data permitting, future health reports could include not only biological sex-differences between women and men, but also an additional level of distinction, by taking into account differences and similarities from a diverse gender perspective

[128] Solar O, Irwin A. *A Conceptual Framework for Action on the Social Determinants of Health. Discussion Paper Series on Social Determinants of Health, no. 2*. (2010) Geneva, Switzerland: WHO.
[129] Heidari S et al. *Sex and gender equity in research: rationale for the SAGER guidelines and recommended use.* Research Integrity and Peer Review. (2016), 1(1), 2.
[130] The Genderbread Person. https://www.genderbread.org/resource/genderbread-person-v4-0 (accessed January 2020)